CRH gideon lens

CRH (CRH) - Gideon-Lens Equity Research

Date: 2026-04-26 Analyst: Codex ER2 / Gideon workflow Price: $118.00, from live FMP stable quote/profile pulled on 2026-04-26; latest trading timestamp was 2026-04-24 20:00:02 UTC Market cap: $78.848B Fiscal year end: December 31

VERDICT BLOCK

Verdict: WATCH

Scorecard:

Gate	Result	Notes
Management	PASS	Deep internal succession; return-linked incentives; M&A ROIC must prove out
Moat	YELLOW	Physical moat passes 2046 test, but returns are low-teens
P/E <= 15 on confident EPS at TTM + 5 calendar years	PASS	Base cushion +12.0%; probability-weighted cushion +9.4%
Compounder Score	Audited 59 / 100	Audited 59/100. CRH has real physical advantages and strong cash conversion, but missing acquisition-inclusive ROIIC and weak 20% return math keep it below the diagnostic compounder threshold.
Business Quality Score	Audited 57 / 80	Audited 57/80. The moat, runway, management and cash quality are credible, but full credit is capped by low-teens adjusted ROIC, undisclosed acquisition returns and segment-profit gaps.
20% Return UW Score	Audited 2 / 20	Audited 2/20. The base 2030 EPS case at 15x produces only a mid-single-digit IRR from the low-$100s price anchor, and the 20% case needs a much lower entry price or materially better assumptions.

One-line thesis (or reason to pass): CRH is a durable, well-run infrastructure materials compounder whose base-case 2030 EPS clears the 15x hurdle at $118, but the low-teens ROIC profile and thin cushion make it a watchlist name rather than a clean Gideon BUY.

Kill / trigger criteria:

- BUY trigger: price below $105, assuming no deterioration in FY2026 AMS margin, ROIC, leverage, or acquisition integration; this would imply about 26% upside to 15x base-case 2030 EPS of $8.81 and about 23% to probability-weighted 15x EPS of $8.61.
- PASS triggers: AMS Q2 plus Q3 FY2026 adjusted EBITDA margin below 25.5%, adjusted ROIC failing to recover above FY2024's 13.4% by FY2027, or net debt / adjusted EBITDA moving above 2.5x without a clearly high-return acquisition bridge.
- Upgrade to BUY conditions: price at or below the trigger, AMS seasonal margin resilience, Eco Material / Adbri synergy evidence, operating income growing at least in line with adjusted EBITDA, and adjusted ROIC visibly moving back toward the mid-teens.

Position sizing if bought: 0% today. If upgraded, 2% of equity book maximum until acquisition-level ROIC and segment profit conversion are clearer.

Stage 0 - Time Anchor

Today is 2026-04-26. CRH's fiscal year ends December 31. The most recently reported period is Q4 FY2025 / FY2025, period ended 2025-12-31; CRH published and filed its 2025 Form 10-K on 2026-02-18, and Q1 2026 results are scheduled for 2026-04-30, so Q1 2026 is not yet reported for this run. The TTM anchor is Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4

FY2025, which equals TTM ending 2025-12-31. The forward horizon is the TTM end date plus exactly five calendar years: 2030-12-31. All FY+5 references in this report mean that date, not a six-year fiscal-year stretch.

Stage 1 - Disqualifier Sweep

The disqualifier sweep did not stop the run, but it did not produce a perfect profile. ROIC is Yellow: CRH reported FY2025 adjusted ROIC of 12.1%, down from 13.4% in FY2024, which is below the strict Gideon quality bar. FCF conversion is Green: FY2025 net income was about $3.8B, operating cash flow about $5.6B, and adjusted FCF about $5.0B. Leverage is Green: net debt / adjusted EBITDA was about 1.84x. End markets are Green/Yellow: infrastructure, roads, water, energy, data centers, and public funding support demand, but private construction and Europe remain cyclical. Governance is Green/Yellow: there is no disqualifying governance issue, though acquisition transparency and related-party optics require monitoring. AI exposure is Green because CRH sells physical materials, roads, products, and services rather than replaceable knowledge workflows. Pricing power is Green/Yellow: realized price and margin evidence are good in aggregates, ready-mix, roads, and International recovery, but not universal across Outdoor Living and weaker markets.

Management - Summary

Management clears the gate. Jim Mintern is new as CEO from January 1, 2025, but he is not new to CRH; he previously served as CFO and has more than two decades inside the business across operations, country, regional, divisional, and group finance roles. Nancy Buese, who became CFO in May 2025, brings relevant capital-intensive industry experience from Baker Hughes and Newmont, though her CRH tenure is still short. The operating bench is deep, with long-serving leaders across Americas and International. The capital allocation pattern is coherent: CRH reinvests in capex, buys local assets, prunes portfolio exposures, pays dividends, and uses buybacks without letting equity compensation overwhelm share count reduction. Incentives are better than average because they include operating cash flow, EPS, RONA, relative TSR, ownership guidelines, anti-hedging controls, and clawback provisions. Disclosure is candid enough to score well; management describes funding, price, volume, acquisitions, divestitures, and integration with useful specificity. The unresolved issue is not honesty or alignment. It is proof that the 2025-2026 acquisition cycle, especially Eco Material and Adbri, improves returns rather than simply enlarging adjusted EBITDA.

Moat - Summary

The moat is real, but the gate is Yellow. CRH owns scarce physical assets: quarry reserves, cementitious positions, asphalt and ready-mix networks, road construction and maintenance capacity, specified infrastructure products, and thousands of local operating sites. That local density matters because heavy materials are freight-sensitive and permitting new reserves is slow, uncertain, and politically difficult. Americas Materials Solutions is the strongest moat pocket, with reserve-backed density, vertical integration, and road/infrastructure exposure. Americas Building Solutions has a narrower but still valuable moat in water, energy, communications, transport, data-center, and outdoor-living product channels. International Solutions is more mixed: it has real local asset value in several markets, but also more country-level fragmentation, energy exposure, currency effects, and residential cyclicality. The 2046 test passes because roads, bridges, water systems, electric grids, telecom networks, data centers, industrial projects, and repair/remodel activity still require local physical materials and infrastructure products. AI does not dissolve the moat. The problem is economic rather than physical: FY2025 adjusted ROIC of 12.1% is not an elite compounder return, and the company is capital intensive and acquisition heavy.

Stage 5 Synthesis - Headline Numbers

The synthesis model passed 11 of 11 tie-out checks. It used official SEC/CRH values as controlling sources where FMP was stale or mismatched, including the documented FMP FY2025 revenue gap and Q4 product/service labeling issue. The 2025 base is clean because FY2025 equals the TTM anchor: revenue was $37.447B, operating income was $5.440B, adjusted EBITDA was $7.681B, net income attributable to CRH was $3.753B, and diluted shares were 677.0M. The model avoids inventing segment operating income. Segment revenue ties exactly to consolidated revenue, and segment adjusted EBITDA ties exactly to consolidated adjusted EBITDA. Consolidated EBIT is then built through an adjusted EBITDA-to-EBIT bridge.

In the base case, 2030-12-31 revenue reaches $49.777B, operating income / EBIT reaches $8.100B, net income attributable to CRH reaches $5.560B, and EPS reaches $8.81 on 630.8M diluted shares. At the live price of $118.00, required FY+5 EPS for a 15x P/E is $7.87. The base case therefore clears with a 12.0% cushion. The bear case fails: $6.15 of EPS supports only $92.26 at 15x, down 21.8% from the live price. The bull case passes with $11.11 of EPS and $166.64 at 15x. Probability-weighted EPS is $8.61, implying $129.11 at 15x and a 9.4% cushion.

Case	2030 revenue	2030 EBIT	Net income attributable	EPS	15x value	Vs. $118
Bear	$43.136B	$5.921B	$3.954B	$6.15	$92.26	-21.8%
Base	$49.777B	$8.100B	$5.560B	$8.81	$132.21	+12.0%
Bull	$54.631B	$9.940B	$6.903B	$11.11	$166.64	+41.2%
Probability-weighted	$49.088B	$7.923B	$5.427B	$8.61	$129.11	+9.4%

The base case does not require bull assumptions across all segments. It assumes a 5.86% company-wide revenue CAGR, below CRH's 7%-9% 2026-2030 total revenue target because the appendices do not force every segment to management's target and because management's target includes M&A. AMS is the largest value driver; a 200 bp error in AMS revenue CAGR would reduce base EPS from $8.81 to about $8.33 and narrow the cushion materially. Buybacks also matter: if share count were flat at 677.0M, base EPS would be about $8.21, still above the $7.87 requirement but with much less room for error.

Red Team - Summary

The red team does not break the base arithmetic, but it blocks a clean BUY. Its strongest point is that CRH can grow adjusted EBITDA while failing the equity compounding test if incremental capital earns too little after acquisitions, growth capex, carbon costs, maintenance inflation, and integration expense. The most fragile assumption is AMS Road Solutions compounding from an FY2025 revenue base of $11.834B at 6.5% while holding a 2030 adjusted EBITDA margin near 24.8%. The most likely optimistic Stage 5 number is base 2030 EBIT of $8.100B because it depends on a modeled EBITDA-to-EBIT bridge where CRH does not disclose segment operating income. The forced-exit signal is AMS adjusted EBITDA margin below 25.5% for combined Q2 plus Q3 FY2026, unless fully explained by a one-time weather event and recovered in backlog and Q4 pricing.

Kill / Trigger Criteria

- Upgrade toward BUY only if price falls below $105 while AMS seasonal margins, FY2026 guidance, leverage, and acquisition integration remain intact.
- Exit or downgrade to PASS if AMS Q2 plus Q3 FY2026 adjusted EBITDA margin is below 25.5%, because that would pressure the largest and highest-quality profit pool.
- Downgrade to PASS if adjusted ROIC stays near or below 12% through FY2026-FY2027 despite rising adjusted EBITDA.
- Downgrade to PASS if operating income growth persistently trails adjusted EBITDA growth, implying bridge leakage from D&A, acquisition amortization, capex, or integration costs.
- Re-open the model after Q1 2026 results on 2026-04-30 and especially after the Q2/Q3 construction-season periods.

Analyst Flags

The main data flag is not missing consolidated history; QF and QFR cleared the quantitative foundation and DR cleared the data package. The flag is disclosure granularity. CRH discloses segment adjusted EBITDA but not segment operating income, and product-level dollar histories are incomplete beneath the official categories. FMP data was materially unreliable for parts of this CRH run: FY2025 income-statement revenue was below official SEC/CRH revenue, and the FMP Q4 product/service row appeared to represent H2 rather than standalone Q4. Official SEC/CRH values therefore control throughout the report. The final verdict is WATCH because the price gate passes but the quality gate is not clean: real moat, good management, good cash conversion, but low-teens ROIC and a modest 15x cushion.

Appendix A - Company Primer

CRH - Company Primer

Scope and Source Discipline

This appendix is a reader-facing primer for an ER2 / Gideon review of CRH. It is not the quantitative source of record. All consolidated revenue, segment revenue, segment Adjusted EBITDA, cash-flow, balance-sheet, leverage, ROIC, product/service and quarterly TTM figures are taken from `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\quant_foundation.md`, which was independently reviewed in `quant_foundation_review.md` and cleared for Wave 1. Official SEC/CRH values control wherever FMP disagrees, especially because the quant foundation identified material FMP annual statement mismatches, a Q4-labeling issue in FMP product segmentation, and a product/service currency-label problem.

No `data_package.md` was present in the CRH folder, so qualitative context was taken from live primary sources: CRH's 2025 Form 10-K filed February 18, 2026, CRH's Q4/FY2025 results release, and the FMP stable transcript endpoint for the FY2025/Q4 call. Live FMP stable endpoints used for source compliance were `profile`, `revenue-product-segmentation?period=annual`, `key-metrics?period=annual`, `earning-call-transcript-dates`, and `earning-call-transcript?year=2025&quarter=4`; FMP financial outputs were not used as controlling values.

Stage 0 Time Anchor

- Today: 2026-04-26.
- Company fiscal year convention: CRH's fiscal year ends December 31.
- Most recently reported quarter: Q4 FY2025 / FY2025, period ended 2025-12-31. CRH published/filed its 2025 Form 10-K on 2026-02-18; CRH has announced Q1 2026 results for 2026-04-30, so Q1 2026 is not yet reported as of 2026-04-26.
- TTM anchor: Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025 -> TTM ending 2025-12-31.
- Forward horizon: TTM end date 2025-12-31 + 5 calendar years = 2030-12-31. Compounding span is exactly 5 calendar years.

Business Overview

CRH is a Dublin-headquartered, NYSE-primary listed building materials company with an unusually broad portfolio across heavy materials, value-added products, and construction services. The simple version is that CRH helps build and maintain roads, bridges, water systems, energy and telecom networks, commercial buildings, data centers, manufacturing facilities, residential projects, and outdoor spaces. The company is not a software, distributor-only, or pure commodity chemical business. It owns and operates physical assets: quarries, cement and cementitious assets, asphalt plants, ready-mixed concrete operations, precast and engineered product facilities, outdoor living product businesses, and local construction service networks.

CRH describes itself in the 2025 Form 10-K as a leading provider of building materials critical to modernizing infrastructure, with 83,032 employees across 3,961 locations. Its value proposition is local and physical: customers need reliable materials, permitted reserves, trucks and plants close to jobsites, installed paving capability, engineered products that meet specifications, and a supplier that can coordinate across a complicated construction value chain. That makes CRH a fundamentally different business from a manufacturer that ships interchangeable products across continents. Aggregates, ready-mix, asphalt, roadwork, and precast infrastructure products are distance-sensitive; the economics deteriorate as hauling distances grow. Local scale, reserve ownership, logistics, and trusted relationships matter.

The customer base spans public and private construction. Public customers include national, state, regional, and local government bodies, especially transportation departments and public infrastructure owners. Private customers include general contractors, civil contractors, utility contractors, data center and manufacturing project developers, commercial builders, homebuilders, repair-and-remodel channels, landscaping professionals, retailers, and other construction product suppliers. In many categories CRH sells directly through local operating companies. In road solutions it can bid for work that includes materials plus paving or construction services. In outdoor living and packaged products it also reaches professional

and consumer channels through distributors, dealers, and retail partners.

CRH's central idea is the "connected portfolio." The company owns upstream materials such as aggregates and cementitious materials, uses them internally in downstream asphalt, concrete, precast, road, and outdoor living products, and then often participates closer to the jobsite through service or installation. This matters because the business is not just selling one ton of rock. The same local quarry can feed cement or asphalt, the asphalt can feed a road contract, and a road contract can create follow-on maintenance work. In utility and water infrastructure, CRH can sell engineered precast or polymer products, and those products may pull through aggregates, cementitious materials, logistics, engineering support, and customer relationships.

For a new reader, the key mental model is a locally dense network, not a centralized global factory. CRH's businesses often operate under strong local brands. The parent provides capital allocation, acquisition discipline, operating playbooks, procurement leverage, safety and compliance systems, innovation, and cross-portfolio connectivity. The local businesses preserve customer proximity and market knowledge. This is why CRH can look fragmented on the ground but still behave like a scaled platform.

Product and Segment Logic

CRH reports through three segments: Americas Materials Solutions, Americas Building Solutions, and International Solutions. The official product/category bridge in the 2025 10-K and the quant foundation groups revenue into Essential Materials, Road Solutions, Building & Infrastructure Solutions, and Outdoor Living Solutions.

Essential Materials are the upstream base of the system: aggregates and cementitious materials. Aggregates are crushed stone, sand, and gravel used in roads, concrete, asphalt, drainage, rail, commercial projects, and residential construction. Cementitious materials include cement and supplementary cementitious materials such as fly ash, pozzolans, synthetic gypsum, calcined clay, and ground granulated blast-furnace slag. These products are heavy, often regulated, and highly local. The economic prize is not only the selling price per ton; it is the control of scarce reserves near demand centers and the ability to feed downstream uses.

Road Solutions includes materials, products, installation, maintenance, and circularity for road construction and repair. It is the most intuitive example of CRH's connected strategy. A road project can require aggregates, asphalt, ready-mix, logistics, paving crews, quality control, recycled asphalt pavement, and project execution. CRH's road exposure is tied to public highway and state/local funding, but also to commercial infrastructure, airports, parking lots, and residential roads.

Building & Infrastructure Solutions includes engineered products that connect and protect critical infrastructure, such as water, energy, transportation, telecommunications, and complex commercial building projects. Examples include underground vaults, drainage systems, enclosures, modular precast structures, pipes, manholes, anchoring and connecting systems, and other specified products. This segment tends to rely more on design, product specification, manufacturing quality, and project suitability than on pure commodity price.

Outdoor Living Solutions includes hardscapes, masonry, pavers, blocks, curbs, retaining walls, slabs, fencing, railing, decking-adjacent and lawn/garden products, packaged concrete mixes, and related offerings. Demand comes from residential repair and remodel, new residential construction, commercial outdoor spaces, and public spaces. The business has more consumer and channel flavor than a quarry or highway paving business, but it still benefits from CRH's materials base, manufacturing footprint, brands, and local distribution.

Revenue Architecture

CRH generated FY2025 total revenues of $37.447 billion and Adjusted EBITDA of $7.681 billion. The segment architecture is:

FY2025 segment	Revenue	% of total revenue	Adjusted EBITDA	Adjusted EBITDA margin
Americas Materials Solutions	$17.029bn	45.5%	$4.002bn	23.5%
Americas Building Solutions	$7.122bn	19.0%	$1.474bn	20.7%
International Solutions	$13.296bn	35.5%	$2.205bn	16.6%
Total	$37.447bn	100.0%	$7.681bn	20.5%

Americas Materials Solutions is the largest and most profitable segment by dollars. It manufactures and supplies aggregates, cementitious materials, ready-mixed concrete, and asphalt, and it provides paving and construction services in North America. In practical terms, this is CRH's North American heavy materials and roads platform. It serves public infrastructure, private

infrastructure, commercial and industrial projects, and residential construction. Its revenue comes from both product sales and service-heavy project work, and its margin profile reflects a mix of reserve-based materials, asphalt/ready-mix, construction services, pricing, weather, and utilization.

Americas Building Solutions is a North American value-added products platform. It includes building and infrastructure products for water, energy, transportation, and telecom applications, plus outdoor living products for private and public spaces. Compared with Americas Materials Solutions, this segment is less about quarry reserve ownership and more about engineered products, specification, customer problem-solving, and channels. Its FY2025 revenue was nearly flat versus FY2024, but Adjusted EBITDA grew, which suggests that pricing, operating improvements, mix, acquisitions, and asset optimization mattered more than volume alone in 2025.

International Solutions combines materials, products, and services across Europe and Australia. It includes aggregates, cementitious materials, ready-mix, asphalt, road activity, building products, and outdoor living categories outside the Americas structure. The segment is more geographically diverse and more exposed to European construction cycles, energy costs, public infrastructure plans, and Australian market conditions. FY2025 showed strong profit growth and margin expansion from a lower base, but its 16.6% Adjusted EBITDA margin remains below the Americas segments, making it both an improvement opportunity and a source of cyclicality.

By product/category, FY2025 revenue was $10.374 billion from Essential Materials, $17.089 billion from Road Solutions, $4.868 billion from Building & Infrastructure Solutions, and $5.116 billion from Outdoor Living Solutions. The striking point is that Road Solutions is the largest category, not just raw cement or aggregates. That supports the view that CRH is a vertically connected infrastructure platform rather than a pure upstream materials producer.

The official geography table in the 2025 10-K, which is not carried in the quant foundation and therefore should not be used as a modeling source, indicates that the United States is the dominant market, followed by Rest of Europe, the United Kingdom, and Rest of World. Rest of World principally includes Australia, Canada, and the Philippines. Qualitatively, geography matters because North America supplies the largest growth narrative: transportation funding, water infrastructure, reindustrialization, data centers, and state/local infrastructure work. Europe and Australia add scale and diversification, but they also bring different energy, residential, regulatory, and macro cycles.

Route to Market

CRH reaches customers through local operating networks. A DOT, municipality, airport authority, civil contractor, or commercial developer generally does not buy "CRH corporate" in the abstract; it buys from a local quarry, asphalt plant, ready-mix business, paving team, precast product supplier, or outdoor living brand. This is a classic local density model. The company wins by having the right permitted assets near demand, reliable production, jobsite delivery, technical support, bidding capability, and enough breadth to simplify procurement for customers.

For materials, the route to market is often direct shipment from quarry, cementitious, asphalt, or ready-mix operations to contractors or jobsites. Ready-mix and asphalt are especially time-sensitive, so proximity and dispatch reliability are central to the customer promise. For road services, CRH can bid on projects that include installed materials, paving, maintenance, and sometimes recycled inputs. This moves CRH from a supplier role into a project-execution role, with different accounting, working-capital, labor, and risk characteristics.

For building and infrastructure products, the sale is often specification-driven. Products must meet engineering requirements for water, energy, telecom, rail, transportation, and commercial applications. This can create stickier relationships because the customer is not simply buying the cheapest generic input; it is buying fit-for-purpose products, reliability, code compliance, delivery certainty, and technical competence. For outdoor living, CRH sells into professional and consumer-facing ecosystems where brands, dealer relationships, merchandising, availability, and repair/remodel demand matter.

Acquisitions are also part of the route-to-market story. CRH has completed more than 1,250 deals in its history, including 38 acquisitions for $4.1 billion in 2025. The acquisition strategy is not merely roll-up arithmetic. Management frames the advantage as local sourcing of targets, integration at scale, and synergies from connecting acquired assets to CRH's broader portfolio. In 2025, the Eco Material Technologies acquisition expanded CRH's supplementary cementitious materials position, which can support cementitious strategy, self-supply, decarbonization, and North American materials depth.

Unit Economics

For CRH, a dollar of revenue converts into profit through price, volume, plant utilization, logistics, input costs, labor productivity, energy efficiency, mix, and capital intensity. The company does not report segment operating income in the same

way it reports consolidated operating income; the official segment profit measure is Adjusted EBITDA. Interest and tax are centrally managed and not allocated to segments. The 2025 segment expense table discloses labor, energy costs, other segment items, and Adjusted EBITDA by segment.

Americas Materials Solutions had FY2025 revenue of $17.029 billion and Adjusted EBITDA of $4.002 billion. Labor was $3.665 billion, energy costs were $0.796 billion, and other segment items were $8.566 billion. Other segment items include raw materials, haulage costs, subcontractor costs, and SG&A. This segment has strong unit economics when CRH has well-located reserves, good pricing, high utilization, and the ability to move material into higher-value downstream uses. Aggregates can be attractive because reserves are scarce and permitting is difficult, but they require quarry development, equipment, land, reclamation, trucks, safety systems, and environmental compliance. Asphalt and ready-mix add utilization and logistics sensitivity. Paving services can deepen customer relationships and capture value, but they also add labor, weather, project execution, and contract risk.

Americas Building Solutions had FY2025 revenue of $7.122 billion and Adjusted EBITDA of $1.474 billion. Labor was $1.513 billion, energy costs were only $0.123 billion, and other segment items were $4.012 billion. Compared with heavy materials, the lower energy burden fits a product mix tilted toward engineered and manufactured building products rather than cement kilns or asphalt-heavy operations. Profitability comes from specification, manufacturing efficiency, product design, channel strength, pricing, and asset optimization. The segment can compound if water, energy, telecom, and data center demand remain strong and if outdoor living repair/remodel demand stays resilient. The main sensitivity is that residential new-build and consumer-adjacent categories can slow when rates, housing affordability, or retail channels weaken.

International Solutions had FY2025 revenue of $13.296 billion and Adjusted EBITDA of $2.205 billion. Labor was $2.669 billion, energy costs were $1.061 billion, and other segment items were $7.361 billion. This segment is more energy-intensive than Americas Building Solutions and lower margin than both Americas segments. Its revenue mix includes materials and roads in Europe and Australia, where cement, aggregates, asphalt, and ready-mix economics can be attractive but exposed to energy costs, residential demand, local regulation, and currency translation. The FY2025 margin improvement was meaningful, but a Gideon review should not assume Americas-level margins are naturally attainable everywhere.

At the consolidated level, the FY2025 cash profile was strong. Net income was $3.790 billion, net cash provided by operating activities was $5.625 billion, and adjusted free cash flow was $4.969 billion. That means operating cash flow was 148% of net income and adjusted free cash flow conversion was 131% of net income. Total capital expenditure was $2.713 billion, split between $1.742 billion of growth capex and $0.971 billion of maintenance capex. This is a capital-intensive business, but the 2025 figures show that CRH can produce substantial cash after maintaining assets. The question for Gideon is whether that conversion remains durable across cycles and while growth capex and M&A continue.

Cyclicality and End-Market Exposure

CRH's demand is tied to construction activity, but the mix is more balanced than a pure residential building-products company. In 2025, the 10-K described the end-market split as 40% infrastructure, 32% residential construction, and 28% non-residential construction; it also described a 60% new-build and 40% repair/remodel split. The important interpretation is that public infrastructure, repair, and maintenance create more resilience than a pure new-home or commercial construction supplier would have, but the company is still cyclical. Volumes, plant utilization, bids, customer order patterns, and working capital can move with weather, interest rates, budgets, construction confidence, and commodity input costs.

Seasonality is visible in the official 2025 quarterly base. Q1 FY2025 revenue was $6.756 billion and Adjusted EBITDA was $0.495 billion, while Q2 and Q3 were much larger, and Q4 remained above Q1. This is normal for a Northern Hemisphere construction-exposed company: winter weather restricts asphalt, paving, aggregates, and jobsite activity in many regions. A single quarter should not be extrapolated mechanically. TTM and full-year analysis are the correct anchors.

The infrastructure backdrop is the strongest part of the cycle story. CRH benefits from transportation funding, public highway budgets, water infrastructure needs, and the maintenance burden of aging assets. Management highlighted continued IIJA runway and state/federal support on the FY2025 call. Water, energy, telecom, and data center infrastructure also matter because CRH sells products that sit below and around those projects: drainage, vaults, enclosures, precast, concrete, aggregates, and road access materials.

Private exposure is the yellow part of the story. Residential new-build can be pressured by mortgage rates and housing affordability. Outdoor living has repair/remodel support but can still feel weaker consumer and housing turnover trends. Commercial and industrial activity can be lumpy, especially for large data center, chip, manufacturing, warehouse, and energy projects. Reindustrialization is a positive secular driver, but it is still project-based and can be delayed by permitting, financing,

grid availability, political changes, and customer capital budgets.

Cost cyclicality also matters. Energy, bitumen, steel, cementitious inputs, labor, subcontractors, maintenance, trucks, and equipment all affect margins. CRH has shown pricing power, including management's reference to a 12th consecutive year of margin expansion in FY2025, but pricing power is not the same as immunity. If demand weakens while cost inflation remains high, margin protection becomes harder.

Accounting and Reporting Quirks

First, CRH is Irish-domiciled but reports in U.S. dollars under U.S. GAAP and files U.S. Form 10-K/10-Q reports. It has a primary NYSE listing and a secondary LSE listing. This matters because historical comparisons can mix old and new reporting conventions, and the FY2025 release explicitly notes that the margin expansion reference is based on IFRS through 2022 and U.S. GAAP from 2023 through 2025.

Second, CRH's official segment profit metric is Adjusted EBITDA, not segment operating income. Segment reporting discloses revenue, labor, energy costs, other segment items, Adjusted EBITDA, depreciation/depletion/amortization, gains on divestitures/investments, and assets. Interest and income tax are centralized and omitted from the detailed segmental analysis. Therefore, downstream modeling should not invent segment operating income without a clear bridge.

Third, revenue recognition is mixed. Sales of goods are generally recognized when control passes to the customer. Construction and service-style contracts can be recognized over time as performance obligations are fulfilled. Road Solutions includes a meaningful over-time element, and some Building & Infrastructure Solutions revenue also has over-time recognition. This matters for seasonality, backlog interpretation, contract assets, and the difference between product shipment economics and project execution economics.

Fourth, FMP data must be handled carefully. The quant foundation logged that FMP's annual product segmentation for 2025 ties to official product/service totals but carries a EUR currency label while official reporting is USD. FMP's Q4-labeled 2025 product/service row equals official Q3 plus Q4 rather than standalone Q4. FMP's annual income statement, cash-flow, capex, EPS, and net debt values materially differ from official CRH/SEC values. For this ER2 run, official SEC/CRH values in the quant foundation control.

Fifth, acquisition accounting and goodwill matter. CRH is a serial acquirer, and acquisitions are central to the strategy. The 10-K identifies goodwill impairment as a critical accounting estimate, with impairment tests performed below the reportable segment level. The business has not presented an obvious current impairment problem in the materials reviewed here, but acquisition intensity means future returns depend on purchase price discipline, integration, synergy capture, and avoiding overcapitalization of local markets.

Why CRH May Be a Gideon Compounder

The positive case starts with local scarcity and physical relevance. Aggregates, cementitious materials, asphalt, ready-mix, precast, water products, and road services cannot be replaced by AI workflows. Customers need physical inputs near jobsites, and new quarries, cement assets, asphalt networks, and large-scale precast footprints are hard to permit, build, and operate. This gives CRH a potential moat where it has dense local networks, reserves, customer relationships, and integrated service capability.

The second positive is the connected portfolio. A company that only sells raw aggregates captures one layer of economics. A company that can supply aggregates, asphalt, concrete, road services, utility structures, water products, and outdoor living products can capture more share of wallet, reduce customer coordination friction, improve internal planning, and create acquisition synergies. The FY2025 category mix reinforces this point: Road Solutions was larger than Essential Materials, and Building & Infrastructure plus Outdoor Living were meaningful contributors.

The third positive is capital allocation. CRH generated strong FY2025 cash conversion, kept net debt to Adjusted EBITDA at 1.84x, invested in growth capex, completed acquisitions, paid dividends, and bought back shares. The company also has a long acquisition history and a culture of local deal sourcing. If management can continue buying local assets at attractive valuations, integrate them well, and then pull those assets through CRH's connected portfolio, the platform can compound beyond simple market growth.

The fourth positive is end-market support. Infrastructure funding, water systems, transportation maintenance, reindustrialization, data centers, manufacturing projects, and repair/remodel activity all support demand that is less discretionary than luxury consumer spending. CRH is not immune to cycles, but it is aligned with durable physical needs:

roads wear out, water networks age, electric and telecom networks expand, and urban/regional growth requires materials.

Why CRH May Fall Short

The main Gideon concern is return quality. CRH's adjusted ROIC was 12.1% in FY2025, down from 13.4% in 2024. Operating income divided by average invested capital was 15.2%, but the adjusted ROIC figure is below a strict 15% compounder threshold. This is not a red stop because cash conversion, leverage, pricing, and margin expansion are strong, but it is the central yellow flag. A business can have a strong moat and still fail a Gideon standard if incremental capital earns only modest returns.

The second concern is capital intensity. Quarries, cementitious assets, asphalt plants, ready-mix operations, trucks, precast facilities, maintenance, environmental compliance, reserve replacement, and growth capex require cash. FY2025 adjusted free cash flow was excellent, but the business must constantly reinvest to preserve and grow the asset base. Acquisitions can accelerate value creation, but they can also mask organic cyclicality or dilute returns if prices rise.

The third concern is cyclicality and weather. Infrastructure is more stable than speculative residential construction, but CRH still depends on budgets, bids, construction seasons, contractor activity, and macro conditions. Q1 seasonality is real. Severe weather can disrupt production and jobsites. Residential new-build and private commercial activity can be weak even when public infrastructure is healthy.

The fourth concern is cost and regulation. Cementitious materials, asphalt, bitumen, aggregates, steel, labor, energy, haulage, and subcontractor costs are important inputs. Environmental rules, quarry permits, reclamation obligations, carbon expectations, and community opposition can raise capital and operating costs. These same constraints can support incumbent moats, but they can also absorb management attention and capital.

Stage 1 Disqualifier Sweep to Preserve

- ROIC persistently >=15%? Yellow: CRH's 2025 adjusted ROIC was reported at 12.1%, down from 13.4% in 2024; related return-on-net-assets metrics have been around the mid-teens, so this is not a red stop but is the main return-quality flag.
- FCF conversion healthy? Green: FY2025 net income was about $3.8bn, operating cash flow about $5.6bn, adjusted FCF about $5.0bn.
- Net debt / EBITDA <3x? Green: FY2025 net debt about $14.2bn versus adjusted EBITDA about $7.7bn, roughly 1.8x.
- End-markets stable/growing? Green/yellow: infrastructure and building-materials demand has public-funding support, with cyclical private construction exposure.
- Governance clean? Green/yellow: no obvious disqualifying governance flag in current public materials, but verify executive-pay and listing-transition issues later.
- AI disruption manageable? Green: physical materials, aggregates, cement, asphalt, ready-mix, infrastructure products are not replaceable AI workflows.
- Pricing power exists? Green: CRH cites pricing momentum and a 12th consecutive year of margin expansion in FY2025.

Downstream Questions for ER2

The primer points to five questions for the main analysis. First, can CRH lift adjusted ROIC back above 15% while continuing to deploy large amounts of growth capital? Second, how much of the 2025 margin improvement is structural versus cycle, pricing, mix, or acquisition timing? Third, does the connected portfolio create measurable incremental economics beyond management narrative, especially in roads, water, cementitious materials, and data center-related infrastructure? Fourth, is the acquisition pipeline still priced to create value now that CRH has more scale and a higher public-market valuation? Fifth, how should a five-year forecast separate public infrastructure durability from private residential and commercial cyclicality?

My preliminary read is that CRH deserves continued work rather than a quick PASS. The business is physically durable, locally advantaged, cash generative, and aligned with infrastructure themes that are hard to replicate in software-like abstraction. It also has a real return-quality hurdle. The key issue is not whether CRH is a good company; it is whether incremental capital from the FY2025 base can compound at Gideon-quality returns through 2030.

Source Log

- Internal primary quantitative source: `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\quant_foundation.md`; QFR clearance in `quant_foundation_review.md`.
- SEC 2025 Form 10-K: https://www.sec.gov/Archives/edgar/data/849395/000162828026009043/crh-20251231.htm
- CRH Q4/FY2025 results release: https://www.crh.com/media/press-releases/2026/crh-reports-q4-and-fy-2025-results/
- SEC FY2025 results exhibit: https://www.sec.gov/Archives/edgar/data/849395/000162828026009032/fullyearresultsannouncemen.htm
- FMP stable live endpoints: `profile`, `revenue-product-segmentation`, `key-metrics`, `earning-call-transcript-dates`, and `earning-call-transcript` for CRH.

Appendix M - Management Assessment

CRH - Management Assessment

Stage 0 time anchor

- Today: 2026-04-26.
- Company fiscal year convention: CRHâ€™s fiscal year ends December 31.
- Most recently reported quarter: Q4 FY2025 / FY2025, period ended 2025-12-31. CRH published/filed its 2025 Form 10-K on 2026-02-18; CRH has announced Q1 2026 results for 2026-04-30, so Q1 2026 is not yet reported as of 2026-04-26.
- TTM anchor: Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025 -> TTM ending 2025-12-31.
- Forward horizon: TTM end date 2025-12-31 + 5 calendar years = 2030-12-31. Compounding span is exactly 5 calendar years.

Source discipline

This appendix uses the DR-cleared quant foundation and data package as controlling sources where instructed, especially for capital allocation history, ROIC and leverage. It also uses fresh live pulls saved under `raw/m`: FMP stable transcript dates and the last eight available CRH earnings-call transcripts, SEC submissions, the 2025 Form 10-K, the 2026 proxy statement, Section 16 ownership forms, CRH leadership pages, FY2025 results, Investor Day 2025, Eco Material, S&P 500 inclusion and LSE delisting releases. No local data warehouse cache was used. Official SEC/CRH figures control over FMP where they differ.

1. Who is running the company

CRH is now run by Jim Mintern, who became Chief Executive Officer on January 1, 2025 after serving as CFO and after more than two decades at CRH. He is not a new outsider learning the business: his CRH background includes operational, country, regional, divisional and group finance roles, and he directly owns the 2023 NYSE primary-listing transition because he was CFO when it happened. He also owns the 2025 Investor Day plan, the S&P 500 inclusion process, the 2025 acquisition surge and the current "connected portfolio" growth agenda.

Nancy Buese became CFO on May 12, 2025, succeeding Mintern after Alan Connolly served as interim CFO. Her relevant experience is outside CRH but inside capital-intensive, cyclical industries: CFO of Baker Hughes from November 2022 to February 2025, CFO of Newmont from 2016 to 2022, former Ernst & Young partner and public-company director at Chubb. This is a good resume for financial control, M&A discipline and commodity-cycle thinking, but her CRH operating tenure is short.

The operating team is unusually deep. Randy Lake is COO and has been with CRH in the Americas since 1996, including years running Americas Materials. Nathan Creech is President, Americas Division, joined CRH in 2011, and previously led Americas Building Products. Peter Buckley is President, International Division, joined CRH in 2009 and had Asia-Pacific, Europe, Ash Grove Cement and UK/Ireland roles before taking his current role in 2024. This matters because CRH's model is local-operating execution plus central capital allocation; the current segment heads have lived that model.

Board accountability is clean. Richie Boucher is independent Chair, Chair since January 2020 and director since March 2018. Lamar McKay is Senior Independent Director. The 2026 proxy lists 12 director nominees: 11 independent non-management directors plus Mintern. The board describes independence at 92%, annual election of all directors, over 95% 2025 board/committee attendance, and 13 board meetings. The board has an Acquisitions, Divestments & Finance Committee chaired by Boucher, which is important for a serial acquirer. I do not see a dual-class structure or founder-control issue.

2. Tenure and track record

The central tenure question is whether Mintern is "new" for Gideon purposes. As CEO, yes: he is only in his second year as of this report date. As a CRH capital allocator, no: he was CFO, has extensive portfolio management experience and was part of the prior long-running CRH operating system. I would treat this as internal succession with continuity, not a reset.

Mintern's three biggest owned decisions so far are clear. First, he helped move CRH's capital-market center of gravity to the United States. The primary NYSE listing became effective in 2023 while he was CFO; S&P 500 inclusion followed in December 2025, and in April 2026 CRH completed LSE delisting so the ordinary shares are now solely NYSE listed. That increased U.S. investor relevance and fits the fact that 61% of FY2025 revenue came from the United States. Second, he set the 2026-2030 ambition: 7%-9% average annual total revenue growth including M&A, 22%-24% adjusted EBITDA margin by 2030 and adjusted FCF conversion above 100%, supported by $40 billion of financial capacity after maintenance capex. Third, he accelerated the connected-portfolio M&A strategy in 2025, completing 38 acquisitions for $4.1 billion, including the $2.1 billion Eco Material Technologies acquisition in Americas Materials Solutions.

The early reported outcome is good, but not perfect. FY2025 revenue rose 5% to $37.447 billion, adjusted EBITDA rose 11% to $7.681 billion, adjusted EBITDA margin reached 20.5% and adjusted FCF conversion was 131%. International Solutions improved the most, with revenue up 8%, adjusted EBITDA up 23% and margin up 200 bps. However, adjusted ROIC declined to 12.1% from 13.4% in FY2024. That is the main yellow mark: the platform is compounding earnings and cash flow, but the return on capital is below a strict 15% Gideon-quality standard. Management acknowledges portfolio optimization and divestitures, including the Construction Accessories divestment, rather than presenting all acquired revenue as equally valuable. That is a positive candor signal.

Buese's track record at CRH is too short to score independently. Her first observable job is to keep leverage, cash conversion and acquisition accounting disciplined while CRH deploys aggressively. FY2025 net debt/adjusted EBITDA was 1.84x, which is controlled and consistent with management's "robust balance sheet" framing.

3. Capital allocation behavior

The five-year capital allocation history from the data package shows a consistent reinvest-and-return pattern. Capex was $1.554 billion in FY2021, $1.523 billion in FY2022, $1.817 billion in FY2023, $2.578 billion in FY2024 and $2.713 billion in FY2025. Capex/revenue moved from about 5% to about 7.2% as growth capex increased. R&D is not a material separately disclosed line item; this is a physical asset and M&A compounder, not an R&D-led business.

Buybacks were meaningful but not reckless: $0.896 billion in FY2021, $1.178 billion in FY2022, $3.067 billion in FY2023, $1.482 billion in FY2024 and $1.181 billion in FY2025. Dividends were roughly $0.9-$1.7 billion annually, with FY2025 dividends near $1.0 billion and the quarterly dividend raised to $0.39 per share in February 2026. The diluted share count fell from 786.8 million in FY2021 to 677.0 million in FY2025, so equity compensation is not swamping repurchases.

M&A is the defining capital tool. Acquisition cash/consideration was $1.494 billion in FY2021, $3.253 billion in FY2022, $0.640 billion in FY2023, $4.900 billion in FY2024 and $3.856 billion cash / $4.1 billion total consideration in FY2025. The 2025 Form 10-K says CRH has completed more than 1,250 deals over its history and 38 deals in 2025. Management's pitch is that CRH sources local deals through relationships, connects them to its portfolio, and extracts synergies that a narrower buyer cannot. The Q4 2025 call gave concrete Eco Material synergy buckets: self-supply of supplementary cementitious materials, cross-selling, logistics/terminal optimization and technical operating improvements. That is plausible and strategically coherent.

The risk is price discipline. Goodwill plus intangibles were $15.147 billion at FY2025 year-end, about 26% of total assets in the data package. The 10-K says FY2025 acquisitions contributed $755 million of revenue and only $15 million to net income attributable to CRH after financing effects and acquisition-related costs, though timing matters because Eco closed in September. The evidence supports a disciplined acquirer, but not an unquestioned one. Incremental ROIC must be monitored.

4. Compensation alignment

The compensation design is above average for Gideon purposes because it includes actual return and cash metrics. For the 2025 annual incentive plan, operating cash flow is 30%, EPS is 30%, RONA is 20% and sustainability/strategic measures are 20%. Long-term equity is 60% PSUs and 40% RSUs. The PSUs cliff vest after three years and are measured 50% on cash flow, 25% on RONA and 25% on relative TSR. This is much better than a plan dominated by revenue growth or vague strategic objectives, and it directly pushes against the risk that management chases acquisitions without returns.

There are still issues to watch. The specific cash flow and RONA PSU targets were not disclosed because CRH says they are competitively sensitive. That is a common disclosure stance, but it weakens outside verification. Mintern's 2025 total compensation was $17.842 million and his base salary rose 75% with the CEO promotion. High pay is not by itself a red flag, but it raises the bar for delivery.

Ownership alignment is adequate and improving. The 2026 proxy reports beneficial ownership of 57,612 shares for Mintern, 16,833 for Buese, 106,892 for Lake, 171,367 for Buckley and 149,919 for Creech. At the December 31, 2025 share price of $124.80, Mintern's reported beneficial shares were worth about $7.2 million, below the new six-times-salary CEO guideline of roughly $10.5 million. The policy was effective January 1, 2025 and gives covered officers until December 31, 2029, with a 75% net share retention requirement until guidelines are met. The proxy says NEOs are in compliance with or on track to comply.

Governance controls around pay are sound: no hedging or pledging by directors and executive officers, no single-trigger vesting, a NYSE/SEC clawback policy, and equity grants that are not timed to take advantage of material non-public information. That is a PASS input.

5. Disclosure quality and candor

I reviewed the last eight FMP live transcripts: Q1-Q4 FY2024 and Q1-Q4 FY2025. The overall pattern is direct, numeric and operational. Management does use normal cyclical language around weather, residential softness and uncertainty, but it generally pairs that language with price, volume, backlog, funding or margin detail. "Subdued" appears repeatedly around residential, but it is not used to hide a bad segment; in Q4 FY2025 Mintern explicitly said the 2026 base case assumes no help from new-build residential.

The Q4 FY2025 Q&A is the best example. Asked about 2026 guidance, management broke the answer into end-market drivers, price/volume assumptions and M&A/divestiture bridge. Asked about a future highway bill, Mintern and Lake answered with federal highway funding, remaining IIJA funds, state DOT funding and continuing-resolution implications. Asked about International margin expansion, Mintern gave a country and portfolio bridge: Eastern Europe, Western Europe, Australia, portfolio optimization and Adbri synergy. Asked about Eco Material integration, Lake listed commercial, self-supply, logistics and technical synergies, and did not claim full integration was already done.

Guidance discipline is good. Q1 2025 reaffirmed positive full-year expectations despite weather. Q2 and Q3 2025 raised guidance or the midpoint as performance improved. FY2025 finished inside/above the path implied by those updates, with FY2026 guidance of $3.9-$4.1 billion net income and $8.1-$8.5 billion adjusted EBITDA. The main disclosure limits are segment operating income and individual acquisition returns. CRH discloses segment adjusted EBITDA, not segment operating income; that is acceptable but constrains precision. Acquisition-level ROIC is the bigger missing metric for a roll-up compounder.

6. Strategic coherence

CRH says it is a provider of building materials critical to modernizing infrastructure, with unmatched scale, a connected portfolio and local relationships. The strategy is not decorative. The investment pattern supports it: Eco Material adds supplementary cementitious materials; growth capex targets high-return, low-risk organic opportunities; acquisitions focus on aggregates, cementitious, roads and water; and the portfolio is increasingly aligned with transportation, water and reindustrialization.

The 2030 target set is coherent because it ties total revenue growth, margin and cash conversion together. It does not pretend that organic growth alone will deliver 7%-9%; the Investor Day release states that revenue growth includes organic and inorganic growth. That is honest and important. The risk is that "financial capacity" of $40 billion can sound like a spending target. Management repeatedly qualifies deployment as value-dependent, and compensation includes RONA and cash flow, so the stated guardrails exist. The real test is whether FY2026-FY2028 acquired earnings raise ROIC rather than simply raising EBITDA.

7. Governance flags

I do not see a disqualifying governance issue. The board is independent, annual elections apply, board attendance is high, and the Chair/CEO split is clear. There is no dual-class share structure. Controls were effective at December 31, 2025; Deloitte gave an unqualified internal-control opinion. Eco Material was excluded from the 2025 internal-control assessment under the SEC's acquisition accommodation, and that exclusion is disclosed with size metrics.

Related-party disclosures are present but not alarming. BlackRock and Fidelity transactions were ordinary-course services or money-market/plan-administration relationships involving holders above 5%. Extech purchased about $7.0 million of building materials from CRH subsidiaries and is tied to the family of a former executive; it was disclosed as arm's-length and approved under policy. Two family employment relationships were disclosed: a family member of director Siobhan Talbot earned about $130,000, and Randy Lake's son-in-law earned about $138,500 in a sales role. These are not ideal optics, but the amounts

are immaterial for CRH and the disclosure is specific.

Insider trading activity over the last 12 months is not a red flag. Most Form 4s are grants, RSUs, PSUs or tax-withholding transactions. Randy Lake sold 40,000 shares in August 2025 at about $110.91, and Mintern filed a Form 144 for 7,502 shares related to vesting of a time-based equity award in February 2026. Directors Richard Fearon and Siobhan Talbot purchased shares in March 2026. The 10-K states no director or officer adopted or terminated a Rule 10b5-1 or non-Rule 10b5-1 trading arrangement in Q4 2025. There is no clustered insider exit pattern.

The listing changes are governance-relevant but not negative. CRH completed LSE delisting on April 20, 2026, leaving ordinary shares solely listed on the NYSE. It also proposed cancellation of 5% and 7% preference shares, subject to shareholder approvals, with dedicated FAQs and proxy disclosure. This simplifies the shareholder base around CRH's U.S. center of gravity. The unresolved issue is whether some legacy U.K./Irish holders face friction, but the process is disclosed.

8. Peer comparison

Against Vulcan Materials, CRH is broader and more acquisitive. Vulcan's CEO transition to Ronnie Pruitt effective January 1, 2026 means Vulcan now has a new CEO with Tom Hill as Executive Chairman. Vulcan has a simpler, high-quality aggregates-heavy model and probably cleaner per-dollar organic return evidence; CRH has a larger multi-platform M&A machine and more global complexity. On current CEO proof, Mintern's internal continuity is at least as reassuring as Pruitt's transition, but Vulcan's model is simpler to underwrite.

Against Martin Marietta, Ward Nye has the stronger individual CEO tenure record. Martin Marietta is a more focused U.S. aggregates and heavy-side materials compounder, and its capital allocation is easier to judge because the portfolio is less sprawling. CRH's advantage is breadth: roads, water, cementitious, outdoor living, Europe/Australia and a very deep acquisition funnel. I would rank Nye slightly ahead on demonstrated 5-year stewardship, but not enough to mark CRH below the gate.

Against Amrize, Jan Jenisch brings an elite public-company CEO resume from Sika and Holcim, and he has personally bought Amrize stock post-listing. Amrize, however, is newly public as a standalone North American building-solutions company. CRH has the better current disclosure history as a U.S. filer and the more tested listed-company operating cadence under its current structure. Directionally, CRH ranks in the top tier of realistic peers, though not clearly above the very best focused U.S. aggregates operators on return clarity.

9. Management gate verdict

Verdict: PASS. CRH's management team clears the Gideon management gate because the company has a deep internal CEO succession, an experienced CFO, long-tenured operating leaders, explicit cash/RONA/TSR incentives, clean governance, good disclosure quality and a capital allocation system that has produced revenue growth, margin expansion, cash conversion and controlled leverage. The PASS is not blind: FY2025 adjusted ROIC of 12.1%, acquisition intensity, goodwill/intangibles and the new CFO's short CRH tenure require monitoring. But the evidence points to a disciplined, candid, shareholder-aligned team that understands both operations and capital deployment. I would follow this team, while requiring proof that the 2025-2026 M&A cycle lifts returns rather than only expanding EBITDA.

Source log

- FMP stable live endpoints: `earning-call-transcript-dates` and `earning-call-transcript` for CRH FY2024 Q1-Q4 and FY2025 Q1-Q4, saved under `raw/m`.
- 2026 proxy statement: https://www.sec.gov/Archives/edgar/data/849395/000162828026021560/crh-20260326.htm
- 2025 Form 10-K: https://www.sec.gov/Archives/edgar/data/849395/000162828026009043/crh-20251231.htm
- CRH executive team and board pages: https://www.crh.com/who-we-are/leadership/executive-team/ and https://www.crh.com/who-we-are/leadership/board-of-directors/
- CRH FY2025 results: https://www.crh.com/media/press-releases/2026/crh-reports-q4-and-fy-2025-results/
- CRH Investor Day 2025: https://www.crh.com/media/press-releases/2025/crh-sets-out-next-era-of-growth-and-five-year-targets-at-investor-day/
- Eco Material completion: https://www.crh.com/media/press-releases/2025/crh-completes-acquisition-of-eco-material-technologies

- LSE delisting completion: https://www.crh.com/media/press-releases/2026/crh-completes-lse-delisting/

Appendix W - Moat and 2046 Durability

CRH - Moat and 2046 Durability

Stage 0 time anchor

- Today: 2026-04-26.
- Company fiscal year convention: CRH's fiscal year ends December 31.
- Most recently reported quarter: Q4 FY2025 / FY2025, period ended 2025-12-31. CRH published/filed its 2025 Form 10-K on 2026-02-18; CRH has announced Q1 2026 results for 2026-04-30, so Q1 2026 is not yet reported as of 2026-04-26.
- TTM anchor: Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025 -> TTM ending 2025-12-31.
- Forward horizon: TTM end date 2025-12-31 + 5 calendar years = 2030-12-31. Compounding span is exactly 5 calendar years.

Source discipline

This appendix uses the cleared quantitative foundation and data package as the internal control files, with official SEC/CRH values controlling over FMP where the DR-cleared caveats identify FMP mismatches. Live checks were also performed against FMP stable endpoints (`profile`, `revenue-product-segmentation?period=annual`, `earning-call-transcript-dates`, and `earning-call-transcript?year=2025&quarter=4`), CRH's 2025 Form 10-K on SEC EDGAR, CRH's Q4/FY2025 results release, CRH's Investor Day 2025 release, and CRH's Eco Material completion release. No local data warehouse cache was used.

1. Moat taxonomy applied

CRH's moat is not a software-style network effect. There is no user graph where one customer's adoption increases another customer's product utility. The closest analogue is a local physical network effect: once a quarry, asphalt plant, ready-mix operation, logistics fleet, paving crew, and municipal/contractor relationship base are dense in a geography, the combined route density improves availability, bid credibility, and internal pull-through. That is real, but it is local scale economics rather than a true network effect.

Switching costs are moderate and project-specific. A contractor, state DOT, municipality, utility contractor, or distributor can technically switch suppliers on the next job. The friction comes from qualification, specifications, jobsite timing, tested mix designs, delivery reliability, safety performance, and the risk of project delay. In Road Solutions and Building & Infrastructure Solutions, where CRH supplies installed work or engineered products, the customer is buying execution certainty, not only a commodity input. Switching costs are weaker in basic aggregates sold at the gate and stronger in integrated roads, water, energy, telecom, and specified infrastructure products.

Scale economies are the core moat. The 2025 Form 10-K describes 1,334 extractive properties, with 252,791 owned acres and 128,651 leased acres, and 3,961 locations across 28 countries. Aggregate extraction was 324.5 million short tons in 2025, with especially long depletion lives in the United States aggregates base at 88 years and Australia at 104 years. These are not globally shippable assets; heavy materials are freight-sensitive and often must be near demand. The cost curve therefore rewards local density, permitting history, internal supply, and the ability to balance volume across product lines.

Brand is useful but secondary. CRH has many strong local operating brands and a corporate reputation for scale, safety, and financial capacity, but the customer does not usually pay a premium for the parent name alone. Brand matters most when it signals reliability to public owners, contractors, channel partners, and specifiers. It matters least for commodity tonnage where freight-adjusted price and availability dominate.

Regulatory barriers are high in materials. Quarries, mines, cement plants, asphalt plants, water rights, zoning, air permits, water permits, reclamation obligations, MSHA/OSHA compliance, and local community acceptance make replication slow and politically difficult. The same rules raise CRH's cost base, but they also protect incumbent locations. A new entrant cannot simply decide to put a reserve-backed quarry next to a growing metro market in time for the next highway cycle.

IP and patents are not the main moat. CRH does own or apply for patents and trademarks where appropriate, and it invests in low-carbon cement, recycling, water analytics, and construction technology. But the defensibility is not a proprietary algorithm

or patent wall. IP is a supporting tool in engineered products and sustainability, while the main moat remains assets, permits, operating knowledge, logistics, and customer trust.

High-trust procurement is important. Public infrastructure owners and large contractors value low failure risk, compliant materials, safety, on-time delivery, and balance-sheet depth. In road services and critical utility products, a cheap bid from a weak supplier can be expensive if it causes delay, rework, or compliance problems. This supports incumbents with long local operating records.

2. Per-segment moat

Americas Materials Solutions is CRH's strongest moat segment. It generated FY2025 revenue of $17.029 billion and adjusted EBITDA of $4.002 billion, a 23.5% margin. The moat is reserve-backed local density plus vertical integration: aggregates and cementitious materials feed asphalt, ready-mix, paving, and construction services. The segment has durable 10- to 20-year advantages in local markets where reserves are close to demand and permits are hard to obtain. It would break if CRH lost pricing discipline, if public infrastructure funding rolled over, if reserve depletion required uneconomic haul distances, or if acquisitions were made at prices that diluted returns. The earliest signal would be falling aggregate price realization despite stable volumes, shrinking construction backlog, and sustained margin compression in AMS.

Americas Building Solutions has a different moat: specification, product breadth, channel relationships, manufacturing footprint, and exposure to water, energy, communications, data centers, and outdoor living. FY2025 revenue was $7.122 billion with a 20.7% adjusted EBITDA margin. This moat is narrower than AMS because some products have more substitutes and less reserve scarcity. The most durable sub-pocket is Building & Infrastructure Solutions for critical utility infrastructure, especially water and energy applications where fit-for-purpose products and reliability matter. Outdoor Living is more cyclical and channel/brand dependent. The earliest warning sign would be share loss in water/energy products, discounting in outdoor living, or margin reliance on cost cuts rather than mix and price.

International Solutions is a blended moat. It generated FY2025 revenue of $13.296 billion and adjusted EBITDA of $2.205 billion, a 16.6% margin. The segment includes materials, roads, infrastructure products, and outdoor living across Europe, Australia, and other markets. Where CRH owns local aggregates/cementitious assets near demand, the moat looks like AMS, but the segment also has more country-level fragmentation, energy exposure, currency effects, residential sensitivity, and lower returns. Its FY2025 margin expansion was impressive, up 200 basis points, but the base remains below the Americas. The earliest warning sign would be a reversal of pricing progress, elevated energy/labor costs, renewed impairments, or inability to integrate Adbri and other acquired assets.

The blended company moat is weaker than the best segment. AMS is the anchor, but roughly 54.5% of FY2025 revenue sits outside AMS. ABS includes a strong infrastructure-products core and a weaker residential/outdoor mix, while International combines real local assets with lower average margin. The equity should not be valued as if 100% of CRH were a North American aggregate reserve business. It is better described as a high-quality, acquisition-capable infrastructure materials platform with some commodity, weather, and cycle exposure.

3. Margin persistence evidence

The margin evidence supports a real moat but not a perfect Gideon compounder. Consolidated operating margin improved from 11.6% in FY2021 and FY2022 to 12.0% in FY2023, 13.8% in FY2024, and 14.5% in FY2025. Adjusted EBITDA margin was 20.5% in FY2025 versus 19.5% in FY2024 and 17.7% in FY2023. The FY2025 release also stated that 2025 marked the twelfth consecutive year of margin expansion, though the accounting basis crosses IFRS and U.S. GAAP before and after 2023.

Segment margins show the same pattern with nuance. AMS adjusted EBITDA margin rose from 18.4% in FY2022 to 23.5% in FY2025. ABS was steadier, at 19.7% in FY2022, 20.6% in FY2023, 19.7% in FY2024, and 20.7% in FY2025. International rose from 12.5% in FY2022 to 16.6% in FY2025. That is good evidence that pricing, cost management, portfolio action, and acquisitions are doing real work. The yellow flag is return quality: official FY2025 adjusted ROIC was 12.1%, down from 13.4% in FY2024, and well below the strict Gideon ideal of greater than 20%. The moat protects margins and cash flow, but the capital intensity and acquisition base keep returns below elite compounder levels.

4. AI disruption stress test

AMS is protected from direct AI substitution. A foundation model cannot replace a quarry, cementitious supply, asphalt plant, ready-mix truck, permitted site, paving crew, or proximity to a highway job. AI can improve dispatch, bid analytics, preventive maintenance, plant optimization, safety, and mix design, but those improvements likely help incumbents with dense assets

and data. The segment is chokepoint economics, not prompt-to-output workflow economics.

ABS is more mixed. Building & Infrastructure Solutions is still physical and specification-driven, especially for water, energy, transport, telecom, and data center infrastructure. AI may improve design, inspection, project coordination, and predictive water analytics; CRH's VODA.ai investment points in that direction. Outdoor Living is the most exposed part of the company to digital merchandising, design tools, and substitute materials because customer choice, retail channels, and residential repair/remodel cycles matter more. Even there, AI changes demand generation and design workflows rather than eliminating the need for pavers, blocks, fencing, and packaged materials.

International Solutions is protected where it resembles AMS and exposed where it resembles commoditized building products in weaker markets. AI can help with logistics, carbon optimization, and bidding, but local permits, reserves, plants, crews, and public procurement remain the bottlenecks. The most AI-protected segment is AMS. The most AI-exposed segment is Outdoor Living within ABS and International, because product selection, design, and channel traffic can be more influenced by digital tools and alternative materials.

5. The 2046 test

Today is 2026-04-26; twenty years forward is 2046-04-26. A credible 2046 CRH still sells aggregates, cementitious materials, asphalt, ready-mix, recycled materials, road construction and maintenance services, water/energy/telecom infrastructure products, and outdoor/public-space products. The buyers are still DOTs, municipalities, utilities, civil contractors, commercial developers, industrial and data center builders, distributors, dealers, and repair/remodel channels. The reason is simple: roads wear out, bridges and water systems age, electric and telecom networks expand, and physical construction still requires local materials.

The 2046 company likely has a larger recycled-materials and low-carbon cementitious mix. Eco Material's supplementary cementitious materials platform is a clue: SCMs, pozzolans, calcined clays, recycled asphalt pavement, lower-carbon concrete, and circular construction inputs should be more important. CRH's quarry reserves are still relevant because the U.S. aggregate base alone had an 88-year depletion life in the 2025 filing, and several international basins also showed multi-decade lives. The 2046 operating margin can be stable to modestly higher than FY2025 if CRH continues to optimize logistics, recycle more inputs, and sell more specified infrastructure products. It can be lower if decarbonization capex, carbon prices, labor scarcity, and permitting friction absorb the benefit.

Segments in 2046: AMS should still exist and remain the profit anchor, perhaps renamed around North American infrastructure materials and circular roads. ABS should skew more toward water, energy, grid, telecom, and data-center infrastructure products, with outdoor living more selective and more tied to repair/remodel. International should remain but may be more actively pruned toward markets where CRH has local density, attractive reserves, and public-infrastructure support. The intact moat in 2046 is local physical scarcity plus permitting, logistics, vertical integration, and trusted procurement.

The bear-case 2046 description is not AI replacing CRH. It is a lower-return, over-acquired materials conglomerate whose moat exists physically but not economically. The mechanisms would be: acquisition prices rise as every large peer chases aggregates and SCMs; carbon regulation and community opposition raise capital needs; public funding becomes more volatile; substitutes and recycled materials shift value away from CRH where it lacks capability; and local competitors undercut price in weak cycles. Probability: moderate, not high. The moat survives physically, but shareholder compounding can disappoint if incremental capital stays near low-teens returns.

6. Competitive threat inventory

Threat	Mechanism	Segment(s) affected	Earliest observable signal	Plausibility
Local price competition and utilization pressure	Fragmented markets and excess capacity reduce price realization, especially in commodity products.	AMS, International, Outdoor Living	Negative price/mix in aggregates, asphalt, cement, ready-mix, or outdoor living while volumes are stable.	Medium
Acquisition return dilution	CRH pays full prices for scarce reserves, SCMs, or infrastructure product assets and synergies do not offset goodwill.	All, especially AMS and International	Adjusted ROIC remains below FY2024 levels, goodwill impairment rises, leverage creeps above target.	Medium-high
Regulation, carbon, and permitting	New permits become harder, carbon compliance costs rise, and communities resist extractive assets.	AMS, International cement/materials	Higher environmental capex, delayed quarry/cement permits, lower cement margins, larger reclamation provisions.	Medium

Threat	Mechanism	Segment(s) affected	Earliest observable signal	Plausibility
End-market cycle and public funding delay	Infrastructure appropriations, state budgets, residential demand, or reindustrialization projects slow.	AMS roads, ABS outdoor, International	Backlog down, Q2/Q3 volume misses, lower DOT lettings, weaker repair/remodel channel orders.	Medium
Substitution and low-carbon product shift	Customers prefer substitute products, more recycled content, or lower-carbon products not controlled by CRH.	Cementitious, asphalt, Outdoor Living	Share loss in SCMs/low-carbon concrete, pricing concessions to meet sustainability specs.	Medium

7. Pricing power verification

Pricing power is observable but uneven. In FY2025 AMS, aggregates pricing increased 4% despite adverse mix, cement prices were up 1%, and ready-mixed concrete prices were up 2%; Q4 aggregates prices rose 3% and ready-mix prices 4%. International also posted favorable pricing, including FY2025 aggregates up 2%, cement up 1%, and ready-mix up 4%, while Q4 asphalt pricing was up 4%. CRH's FY2025 adjusted EBITDA rose 11% on revenue growth of 5%, and consolidated adjusted EBITDA margin expanded 100 basis points to 20.5%.

The evidence is strongest in aggregates, ready-mix, road solutions, and International's 2025 recovery. It is weaker in asphalt, where some periods showed flat pricing, and in Outdoor Living, where subdued residential demand held revenue roughly flat. The data package does not show a large customer retention metric or multi-year contract escalator disclosure, so the pricing power claim should be based on realized price/margin outcomes, not asserted contractual lock-in. The right conclusion is that CRH has local pricing power where it has reserve density and service reliability, but not a universal right to price through every cycle.

8. Moat verdict

Moat gate: YELLOW. CRH has a real and concrete moat in reserve-backed local density, permits, logistics, vertical integration, and high-trust infrastructure procurement. The evidence is particularly strong in Americas Materials Solutions, supported by long-lived aggregate reserves, pricing progress, and margin expansion. The gate is Yellow rather than full Pass because the company is capital intensive, acquisition-heavy, exposed to commodity and cyclical markets, and FY2025 adjusted ROIC of 12.1% sits well below the strict Gideon greater-than-20% ideal.

2046 test: PASS. The 2046 business can be described specifically: CRH should still own and operate local materials, roads, cementitious, water, energy, telecom, and infrastructure-products platforms, with more recycled and low-carbon inputs. AI does not dissolve the moat because the chokepoints are physical assets, permits, logistics, and public/customer trust. The main durability risk is not obsolescence; it is whether CRH can keep converting a durable physical position into high enough incremental returns after carbon investment, permitting friction, and acquisition competition.

Source log

- CRH 2025 Form 10-K, SEC EDGAR: https://www.sec.gov/Archives/edgar/data/849395/000162828026009043/crh-20251231.htm
- CRH Q4/FY2025 results release and SEC Exhibit 99.1: https://www.crh.com/media/press-releases/2026/crh-reports-q4-and-fy-2025-results/ and https://www.sec.gov/Archives/edgar/data/849395/000162828026009032/fullyearresultsannouncemen.htm
- CRH Investor Day 2025 release: https://www.crh.com/media/press-releases/2025/crh-sets-out-next-era-of-growth-and-five-year-targets-at-investor-day/
- CRH Eco Material completion release: https://www.crh.com/media/press-releases/2025/crh-completes-2-1b-acquisition-of-eco-material-technologies/
- FMP live stable endpoints checked: `profile`, `revenue-product-segmentation?symbol=CRH&period=annual`, `earning-call-transcript-dates?symbol=CRH`, and `earning-call-transcript?symbol=CRH&year=2025&quarter=4`.

Appendix B1 - Americas Materials Solutions

Americas Materials Solutions - Segment Deep Dive

Company: CRH Ticker: CRH Segment: Americas Materials Solutions Prepared for: ER2 / Gideon Wave 2 Prepared on: 2026-04-26 DR gate: DATA PACKAGE VERIFIED â€" CLEARED FOR WAVE 2

0. Segment boundary and taxonomy note

Stage 0 time anchor, used verbatim:

- Today: 2026-04-26.
- Company fiscal year convention: CRHâ€™s fiscal year ends December 31.
- Most recently reported quarter: Q4 FY2025 / FY2025, period ended 2025-12-31. CRH published/filed its 2025 Form 10-K on 2026-02-18; CRH has announced Q1 2026 results for 2026-04-30, so Q1 2026 is not yet reported as of 2026-04-26.
- TTM anchor: Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025 -> TTM ending 2025-12-31.
- Forward horizon: TTM end date 2025-12-31 + 5 calendar years = 2030-12-31. Compounding span is exactly 5 calendar years.

Americas Materials Solutions, or AMS, is CRH's North American heavy materials and roads platform. The current segment label is stable for FY2022-FY2025 in the cleared quantitative foundation and data package; FY2021 is not comparable because it was reported under older IFRS/20-F labels. Current product/activity taxonomy is comparable at the company level for FY2023-FY2025, and the 2025 Form 10-K gives the FY2025 bridge by reportable segment. Downstream dollar comparisons in this appendix therefore use FY2022-FY2025 for the AMS segment total, FY2023-FY2025 for CRH-wide product/activity categories, and FY2025 only for the AMS split between Essential Materials and Road Solutions. [DATA GAP: Segment-level FY2023-FY2024 Essential Materials and Road Solutions revenue is not separately disclosed; only the FY2025 AMS product bridge is disclosed in the data package.]

1. What this segment actually is

AMS manufactures, sources, sells, and often installs the basic materials that go into North American infrastructure and construction. Its two official FY2025 product/activity categories are Essential Materials and Road Solutions. Essential Materials are aggregates and cementitious materials. Aggregates are crushed stone, sand, gravel, and related mineral products used in asphalt, concrete, drainage, rail ballast, roads, bridges, commercial foundations, industrial sites, and residential work. Cementitious materials include cement and supplementary cementitious materials, or SCMs, such as fly ash and pozzolans. Road Solutions includes asphalt, ready-mixed concrete, paving, road construction services, maintenance, recycling, and related road-material activity. CRH's 2025 data package describes AMS as "Aggregates, cementitious materials, ready-mixed concrete, asphalt, paving and construction services in North America" and reports FY2025 AMS revenue of $17.029 billion and adjusted EBITDA of $4.002 billion [data_package section 1, segment table row Americas Materials Solutions; data_package section 3, AMS table rows Revenue and Adjusted EBITDA].

The customer is local and project-based. AMS sells to public agencies, state and local departments of transportation, municipalities, civil contractors, commercial and industrial developers, general contractors, residential builders, utilities, and other local construction participants. Some revenue is a product shipment from a quarry, cement terminal, asphalt plant, or ready-mix location. Some revenue is a service or project contract, especially in paving and construction. The pricing model is therefore mixed. Aggregates, cementitious materials, asphalt, and ready-mix are usually priced by ton, cubic yard, load, mix design, or local quote, with freight and delivery economics heavily influenced by distance. Paving and construction work is typically bid or contracted around project scope, materials, labor, equipment, and schedule.

The core operating logic is local density. Most AMS products are heavy, low-to-moderate value per unit of weight, and time-sensitive. Ready-mix and asphalt lose value quickly if they travel too far or sit too long. Aggregates can move by rail or water in some corridors, but most local economics still depend on having permitted reserves and logistics close to demand. A customer building or repairing a road wants reliable supply, a plant close enough to hit jobsite windows, quality control, a crew that can execute, and a counterparty that can handle weather, permitting, traffic control, and change orders. AMS is not a generic commodity export business; it is a network of local reserve positions, plants, terminals, trucks, crews, and

relationships.

The go-to-market advantage is that CRH can sell more than a ton of stone. A quarry can feed asphalt and ready-mix. Asphalt can feed a paving project. Cementitious materials can feed concrete products and reduce dependence on third-party cement or SCM supply. Road construction relationships can create future maintenance work, and water-management needs around roads can connect AMS to CRH's Americas Building Solutions product portfolio. Management calls this a connected portfolio, but for AMS the economic translation is practical: more internal pull-through, more bidding relevance, better visibility, and more ways to earn profit from a local infrastructure dollar.

2. Current economics

FY2025 is the TTM base. AMS generated $17.029 billion of revenue, up 5.3% from FY2024, and $4.002 billion of adjusted EBITDA, up 6.9%, for a 23.5% adjusted EBITDA margin [data_package section 3, AMS table rows Revenue, YoY %, Adjusted EBITDA, Adjusted EBITDA margin]. CRH's official segment profit metric is adjusted EBITDA. Segment operating income is not disclosed in the same form as consolidated operating income, and this appendix does not invent it [data_package section 10, caveat 3]. Where this appendix uses "segment profit," it means adjusted EBITDA unless stated otherwise.

The FY2025 product bridge is simple but important. AMS consisted of $5.195 billion of Essential Materials and $11.834 billion of Road Solutions, totaling $17.029 billion [data_package section 4, FY2025 product/category bridge by segment]. Essential Materials was 30.5% of AMS revenue; Road Solutions was 69.5%. This mix matters because the segment is not just an upstream aggregates and cement business. Road Solutions is the larger revenue pool and includes more service and project execution exposure. That service mix can reduce pure commodity cyclicality, but it also adds labor, equipment, weather, contract, and project-risk complexity.

The FY2025 segment cost stack from the quant foundation was: labor $3.665 billion, energy costs $0.796 billion, other segment items $8.566 billion, and adjusted EBITDA $4.002 billion on revenue of $17.029 billion [quant_foundation P2, AMS row; data_package section 3, AMS table]. As a share of revenue, labor was 21.5%, energy was 4.7%, other items were 50.3%, and adjusted EBITDA was 23.5%. "Other segment items" includes the broad bucket that matters most for day-to-day unit economics: raw materials, subcontractors, haulage, repair and maintenance, SG&A, and other operating costs. Energy is visible but not dominant at AMS level; labor, logistics, subcontracting, and utilization are equally or more important.

The most recent quarterly trend was strong. Q4 FY2025 AMS revenue was $4.640 billion, up 9% year over year, adjusted EBITDA was $1.147 billion, up 9%, and margin was 24.7% [data_package section 5, segment quarterly trend row Q4 FY2025 AMS]. Q4 was also above the full-year margin, but the segment is seasonal and Q4 should not be extrapolated mechanically. Q1 is typically low-margin because winter weather restricts road and materials activity in many geographies. The relevant forward base is the full TTM year ended 2025-12-31, not a single quarter.

Sub-line operating indicators were positive but not all dollar-disclosed. For FY2025, aggregates volume grew 4% and price grew 4%, cement volume grew 1% and price grew 1%, asphalt volume grew 4% and price was in line, ready-mixed concrete volume grew 3% and price grew 2%, and paving and construction revenue grew 2% with construction backlogs ahead of the prior year [data_package section 4, products with growth-only or volume/price disclosure, AMS rows]. These data support a view that FY2025 growth was not purely acquisition-driven; there was pricing and volume support across the materials complex. But the data package is also explicit that aggregates, cement, asphalt, ready-mix, and paving are not disclosed as annual AMS dollar histories, so they cannot be turned into fabricated sub-line revenues.

Capital intensity is high at the enterprise level and likely high for AMS, but segment capex is not separately disclosed in the cleared package. CRH spent $2.713 billion of total capex in FY2025, including $1.742 billion of growth capex and $0.971 billion of maintenance capex [data_package section 7, capital allocation history row FY2025; quant_foundation P6]. AMS requires quarry development, reserve replacement, stripping, crushing and processing equipment, asphalt plants, ready-mix plants, trucks, pavers, maintenance facilities, environmental compliance, and safety systems. The segment's profit quality therefore depends on earning enough margin to cover ongoing reinvestment and still produce cash after the asset base is maintained.

3. Unit economics

AMS unit economics begin with physical scarcity and proximity. Well-located aggregate reserves near growth markets are valuable because new quarries are difficult to permit, face community resistance, require capital, and need transport access. A quarry near a growing metropolitan area can have real pricing power if alternatives are far away. The customer does not

simply compare headline price per ton; it compares delivered cost, timing, reliability, specification, and whether the supplier can consistently meet project needs. Freight is often the governor. If a competing quarry is too far from the jobsite, its lower plant-gate price may not matter.

The second layer is vertical integration. Aggregates are an input into asphalt and ready-mixed concrete, and Vulcan's 2025 Form 10-K gives a useful peer benchmark: aggregates make up about 95% of asphalt mix by weight and 80% of ready-mixed concrete by weight, and asphalt/ready-mix delivery is typically constrained to roughly 20 to 25 miles from the production facility [Vulcan 2025 Form 10-K, segment note]. CRH has the same physical logic. Internal aggregate supply improves control over cost, quality, and availability for downstream asphalt, ready-mix, and paving. The more CRH can use its own materials in its own road and construction work, the more it can convert a local materials position into a broader profit pool.

The third layer is price-cost spread. FY2025 disclosed indicators show aggregates price up 4%, cement price up 1%, ready-mix price up 2%, and asphalt price in line, while management described good pricing momentum and operational efficiencies for AMS [data_package section 4, AMS growth-only rows; data_package section 6, AMS commentary rows]. Margin expanded 30 basis points despite weather challenges, which suggests price, acquisition contribution, cost discipline, and mix offset inflation. The key risk is that labor, raw materials, maintenance, bitumen, fuel, subcontractors, and equipment costs can move quickly. Management specifically cited labor, raw materials, services, and maintenance as cost-inflation areas on the FY2025 call; that is why the base case assumes continued pricing, not margin expansion by magic.

The fourth layer is utilization and seasonality. Quarry fixed costs, plant labor, maintenance, equipment, and fleet costs do not flex perfectly with volume. When volumes are healthy and weather is normal, incremental tons can carry attractive contribution margins. When weather disrupts paving windows or public lettings shift, volume softness can squeeze margins. This is visible in the 2025 quarterly pattern: Q1 AMS margin was 2.6%, Q2 was 27.5%, Q3 was 27.6%, and Q4 was 24.7% [data_package section 5, segment quarterly trend, AMS rows]. The segment earns most of its annual profit in the construction season. A fair model therefore anchors to full-year margin and does not treat Q2/Q3 margins as a steady-state annual rate.

The fifth layer is project execution. Road Solutions is the majority of AMS revenue. Project work can deepen customer relationships, improve internal material pull-through, and create recurring maintenance touchpoints, but it also exposes CRH to bid discipline, labor availability, subcontractor cost, change orders, liquidated damages, and weather. A poor paving project can burn margin even if the asphalt plant is well run. The moat is strongest when CRH controls the scarce upstream materials and is disciplined about which projects it bids. It is weaker if the company chases service revenue at thin margins just to keep plants busy.

The sixth layer is acquisition and integration. In 2025, CRH completed 38 acquisitions for $4.1 billion, and Eco Material Technologies was allocated to AMS [data_package section 9, recent corporate actions]. Management said in the FY2025 call that 2025 acquisitions added 1 billion tons of aggregate reserves, 8 million tons of annual aggregates production, 2 million tons of asphalt, and 10 million tons of cementitious materials [live FMP Q4 FY2025 transcript pull saved under raw/b_americas_materials_solutions; used only as verification of data-package context]. Acquisition economics are attractive when CRH buys local assets that plug into existing networks and generate procurement, logistics, customer, and self-supply synergies. They are less attractive if acquisition multiples rise or integration absorbs too much capital and management attention.

4. Competitive dynamics

AMS competes in fragmented but locally concentrated markets. The national peer set includes Vulcan Materials, Martin Marietta Materials, Heidelberg Materials, Holcim's North American businesses, Cemex, Summit Materials, regional aggregates and asphalt companies, local ready-mix producers, paving contractors, and specialty cementitious-material suppliers. The right competitor depends on the product and geography. In aggregates, the battle is local reserves and delivered cost. In cementitious materials, the battle is plant or terminal network, SCM access, rail and water logistics, product specification, and customer reliability. In asphalt and ready-mix, the battle is plant proximity, dispatch, mix design, jobsite execution, and local relationships. In paving, the battle is bid discipline, crews, equipment, public-agency qualification, and performance history.

The U.S. market is large enough that no single national competitor controls it. USGS Mineral Commodity Summaries 2026 describes U.S. construction materials as massive physical markets, including an estimated 1.5 billion tons of crushed stone in 2025 and an estimated 870 million tons of construction sand and gravel [USGS MCS 2026, Crushed Stone and Construction Sand and Gravel chapters]. The point for CRH is not national share arithmetic; it is local share. A quarry that is number one or two within a practical haul radius can have better economics than a company with a modest national share but weak local reserve positions.

Vulcan and Martin Marietta are the cleanest public comparables for U.S. aggregates economics. Vulcan reported 2025 aggregates revenues of $6.297 billion, asphalt revenues of $1.294 billion, and concrete revenues of $0.847 billion, with aggregates gross profit far above asphalt and concrete gross profit in dollar and margin terms [Vulcan 2025 Form 10-K]. Martin Marietta describes its Building Materials business as aggregates, cement, ready-mix, asphalt, and paving, and its 2025 Form 10-K underscores the same reserve-based, local-market economics [Martin Marietta 2025 Form 10-K]. These peers support a key AMS modeling assumption: aggregates and cementitious positions should carry better structural economics than more service-heavy road work, but integrated road work can increase total profit dollars and customer relevance.

Pricing power is strongest where CRH has scarce reserves, tight logistics, strong public infrastructure demand, and the ability to offer connected solutions. Pricing power is weaker in more commoditized ready-mix or paving markets where local competitors have sufficient capacity and customers can bid work broadly. The FY2025 AMS record shows pricing was still positive: aggregates price plus 4%, cement price plus 1%, ready-mix price plus 2%, asphalt price in line, and paving/construction revenue plus 2% [data_package section 4, AMS rows]. The base case assumes CRH can continue to price at or slightly above input cost inflation in aggregate-rich markets, while Road Solutions pricing remains more competitive and project-dependent.

Entry barriers are real but uneven. Aggregates have the highest barriers because permitting, reserves, zoning, transport access, environmental review, and community opposition limit new supply. Cementitious materials also have barriers from capital intensity, environmental regulation, logistics, and long-term supply relationships, and Eco Material adds SCM supply and terminal network depth. Asphalt and ready-mix have moderate barriers where plant siting and delivery radius matter, but more competition where local capacity exists. Paving has lower product barriers but higher execution and relationship barriers. The integrated platform moat is therefore built from many local advantages, not one national monopoly.

Substitution risk is manageable over five years but not zero. Recycled asphalt pavement, recycled aggregates, alternative binders, low-carbon cement, SCMs, and new construction methods can change mix. For CRH, some substitution can be a benefit because Eco Material and CRH's circularity investments position the company to supply alternative cementitious materials and recycled road inputs. The bigger risk is not that roads stop using aggregates or asphalt by 2030; it is that environmental rules, carbon costs, or public procurement standards shift faster than CRH can adapt in particular markets.

5. Segment-level moat

The AMS moat is local, physical, and cumulative. It is not a brand moat in the consumer sense, and it is not a patent moat. The first protection is reserve ownership. Aggregates are bulky and permitting is hard, so a well-located quarry can be a long-duration asset. The second protection is network density. A quarry, asphalt plant, ready-mix plant, construction crew, and logistics base in the same region can serve customers better than disconnected assets. The third protection is customer and agency trust. Public infrastructure owners and contractors value reliability because schedule failure is costly. The fourth protection is acquisition capability. CRH's scale and local relationships can give it access to smaller assets that are more valuable inside CRH than as stand-alone businesses.

The moat is durable if CRH keeps discipline. The most defensible profit pools are aggregates, cementitious materials, and connected road solutions where CRH can self-supply and bid from a strong local position. The moat weakens if management overpays for acquisitions, allows service-heavy road revenue to dilute margins, or loses pricing discipline in competitive ready-mix and paving markets. The segment's FY2022-FY2025 margin expansion from 18.4% to 23.5% is evidence that the moat is currently producing economic benefits [data_package section 3, AMS table rows Adjusted EBITDA margin]. But that margin expansion followed a period of inflation, pricing actions, acquisitions, and efficiency work. It should not be treated as a straight-line trend.

Over a 5-10 year horizon, the best moat argument is that AMS sits in the middle of physical needs that remain hard to digitize away: roads, bridges, water management, data centers, factories, rail access, warehouses, homes, and public maintenance. AI can improve bidding, dispatch, quarry planning, predictive maintenance, and water analytics, but it cannot replace stone, cementitious materials, asphalt, or jobsite execution. The business can still be cyclical, and ROIC must be watched, but the risk of outright technological obsolescence is low.

6. Historical growth rates reproduced from the data package

The table below reproduces the cleared historical foundation. Dollar figures are $ billions. The AMS segment total is clean from FY2022-FY2025. The CRH-wide Essential Materials and Road Solutions category totals are clean from FY2023-FY2025. The AMS-specific split between Essential Materials and Road Solutions is disclosed for FY2025 only, so earlier AMS product splits are shown as not disclosed rather than estimated.

Product / sub-segment	FY2022 rev	FY2023 rev	FY2024 rev	FY2025 / TTM rev	Historical CAGR	Latest YoY	Data package cite
AMS total	$14.324 [data_package section 3, AMS row Revenue]	$15.435 [data_package section 3, AMS row Revenue]	$16.173 [data_package section 3, AMS row Revenue]	$17.029 [data_package section 3, AMS row Revenue]	5.9% FY2022-FY2025 [calculated from same row]	5.3% [data_package section 3, AMS row YoY %]	data_package section 3, Americas Materials Solutions table
Essential Materials, CRH-wide category	n/d [data_package section 1, taxonomy note says current product table starts FY2023]	$9.459 [data_package section 4, dollar-disclosed product row Essential Materials]	$9.560 [data_package section 4, dollar-disclosed product row Essential Materials]	$10.374 [data_package section 4, dollar-disclosed product row Essential Materials]	4.7% FY2023-FY2025 [calculated from same row]	8.5% [calculated from same row]	data_package section 4, dollar-disclosed product/activity categories
Road Solutions, CRH-wide category	n/d [data_package section 1, taxonomy note says current product table starts FY2023]	$15.666 [data_package section 4, dollar-disclosed product row Road Solutions]	$16.310 [data_package section 4, dollar-disclosed product row Road Solutions]	$17.089 [data_package section 4, dollar-disclosed product row Road Solutions]	4.4% FY2023-FY2025 [calculated from same row]	4.8% [calculated from same row]	data_package section 4, dollar-disclosed product/activity categories
Essential Materials, AMS-only	n/d [DATA GAP: AMS product split not disclosed for FY2022-FY2024]	n/d [DATA GAP: AMS product split not disclosed for FY2022-FY2024]	n/d [DATA GAP: AMS product split not disclosed for FY2022-FY2024]	$5.195 [data_package section 4, FY2025 product/category bridge by segment]	n/d [DATA GAP]	n/d in dollars; aggregates/cement volume and price indicators disclosed [data_package section 4, AMS growth-only rows]	data_package section 4, FY2025 product/category bridge
Road Solutions, AMS-only	n/d [DATA GAP: AMS product split not disclosed for FY2022-FY2024]	n/d [DATA GAP: AMS product split not disclosed for FY2022-FY2024]	n/d [DATA GAP: AMS product split not disclosed for FY2022-FY2024]	$11.834 [data_package section 4, FY2025 product/category bridge by segment]	n/d [DATA GAP]	n/d in dollars; asphalt /ready-mix/paving indicators disclosed [data_package section 4, AMS growth-only rows]	data_package section 4, FY2025 product/category bridge

Internal arithmetic checks: AMS total ties within 2%: $14.324B x 1.078 = $15.441B versus reported $15.435B; $15.435B x 1.048 = $16.176B versus reported $16.173B; $16.173B x 1.053 = $17.030B versus reported $17.029B. Essential Materials CRH-wide ties: $9.459B x 1.011 = $9.563B versus $9.560B; $9.560B x 1.085 = $10.373B versus $10.374B. Road Solutions CRH-wide ties: $15.666B x 1.041 = $16.308B versus $16.310B; $16.310B x 1.048 = $17.093B versus $17.089B. No back-solved AMS product dollars are used.

FY2025 growth-only operating indicators for AMS are reproduced here because they inform the forward model but are not dollar histories:

AMS sub-line	FY2025 / latest trend	Data package cite	Modeling use
Aggregates	Volume +4%; price +4%, with adverse mix effects; Q4 volume +6%; price +3%.	data_package section 4, products with growth-only row AMS Aggregates	Supports positive Essential Materials pricing and volume, but no dollar split.
Cement	Volume +1%; price +1%; Q4 volume +1%; price in line.	data_package section 4, products with growth-only row AMS Cement	Supports slower base cement growth than aggregates/SCMs.
Asphalt	Volume +4%; price in line; Q4 volume +7%; price in line.	data_package section 4, products with growth-only row AMS Asphalt	Supports Road Solutions volume but not aggressive pricing.
Ready-mixed concrete	Volume +3%; price +2%; Q4 volume +1%; price +4%.	data_package section 4, products with growth-only row AMS Ready-mixed concrete	Supports moderate growth and inflation pass-through.
Paving and construction	Revenue +2%; construction backlogs ahead of prior year; Q4 revenue +3%.	data_package section 4, products with growth-only row AMS Paving and construction	Supports low-to-mid single-digit organic road-service growth.

7. Management guidance and commentary from the data package

The data package provides short verified quote fragments and modeling interpretations. I use those fragments here without re-pulling them as controlling quotes; a live FMP Q4 transcript was fetched only to verify source availability and saved under the B raw folder.

Source	Speaker	Quote fragment from data package	Topic	Interpretation for AMS model
Q4 FY2025 call, 2026-02-19 FMP transcript	Randy Lake, COO	"underlying backdrop remains positive"	Transportation, water and reindustrialization demand	Demand supports are real enough to justify above-GDP AMS growth in the base case, especially for Road Solutions and connected infrastructure work [data_package section 6, AMS row 1].
Q4 FY2025 call, 2026-02-19 FMP transcript	Jim Mintern, CEO	"all-time record levels"	2026 federal highway funding	Road Solutions should have a funding tailwind into at least 2026; the model does not assume an immediate post-IIJA cliff [data_package section 6, AMS row 2].
Q3 FY2025 release, 2025-11-05 CRH IR	Jim Mintern, CEO	"favorable underlying demand"	Q3 AMS and consolidated demand	Positive demand was visible before Q4; this reduces the odds that FY2025 was purely a one-quarter weather rebound [data_package section 6, AMS row 3].
Q2 FY2025 results release, 2025-08-06 SEC/CRH IR	Jim Mintern, CEO	"active pipeline of opportunities"	M&A in materials platforms	AMS growth should be modeled with an inorganic component, but acquisition contribution must be separated conceptually from same-store growth [data_package section 6, AMS row 4].
Investor Day release, 2025-09-30 CRH IR	Jim Mintern, CEO	"raising our ambition to 2030"	Long-range targets	The company-level 7%-9% revenue growth target includes both organic and M&A. Segment forecasts should not treat 7%-9% as pure organic growth [data_package section 6, AMS row 5; data_package section 6, enterprise guidance row 2].

The company-wide guidance bridge is also relevant. CRH's 2025 Investor Day targets were 7%-9% average annual total revenue growth from 2026-2030, adjusted EBITDA margin of 22%-24% by 2030, and adjusted free cash flow conversion above 100% [data_package section 6, guidance bridge]. These targets are not AMS-specific. I use them as a reasonableness check, not as a mechanical segment forecast. AMS starts with a higher margin than the consolidated target, so the margin question is not whether AMS can reach 22%-24%; it is whether it can defend and modestly expand from 23.5% while absorbing inflation and integrating acquired assets.

Live-source verification notes: FMP stable annual income statement was fetched live and still showed FY2025 revenue of $31.871 billion versus official SEC/CRH revenue of $37.447 billion, confirming the data-package caveat that official SEC/CRH values control. FMP annual product segmentation was also fetched live and still matched official Product and Service totals for FY2025 while carrying the wrong EUR currency label. The CRH 2025 Form 10-K and FY2025 results page were fetched live into the B raw folder. The CRH Eco Material and Investor Day press-release pages failed after one exact retry each with a connection-closed error; those pages are therefore not used as fresh B-run sources beyond the DR-cleared data-package context. [DATA GAP: B-run live fetch of the CRH Eco Material announcement page and CRH Investor Day release page failed after one exact retry each.]

8. Forward growth assumptions

The forward horizon is exactly TTM ending 2025-12-31 to 2030-12-31. The forecast is built from the FY2025 AMS product bridge: Essential Materials at $5.195 billion and Road Solutions at $11.834 billion. Because prior-year AMS product splits are not disclosed, product-level historical anchors use the CRH-wide category CAGRs and the AMS total segment CAGR, with the data gap stated rather than hidden.

Base case growth

Product	FY2025 AMS base	Historical anchor	Latest trend	Mgmt FY+1 guide	Base CAGR TTM to 2030-12-31	Justification
Essential Materials	$5.195B	AMS total revenue CAGR 5.9% FY2022-FY2025; CRH-wide Essential Materials CAGR 4.7% FY2023-FY2025	Aggregates volume +4%, price +4%; cement volume +1%, price +1%	No AMS product-specific FY2026 guide; management highlighted positive infrastructure backdrop and M&A pipeline	8.0%	Base growth is above the CRH-wide historical Essential Materials CAGR because Eco Material adds SCM exposure, 2025 acquisitions added aggregates/cementitious capacity, and infrastructure demand remains supportive; it is not assumed to be purely organic.
Road Solutions	$11.834B	AMS total revenue CAGR 5.9% FY2022-FY2025; CRH-wide Road Solutions CAGR 4.4% FY2023-FY2025	Asphalt volume +4%, price in line; paving/construction revenue +2%; backlogs ahead	Highway funding and backlog commentary support demand into 2026	6.5%	Road Solutions grows above its CRH-wide historical category CAGR because AMS has strong North American highway exposure and backlogs, but the rate is below Essential Materials because service-heavy work has more bid competition and weather risk.

Base case implied product roll-forward:

Product	FY2025 base	CAGR	2030 revenue
Essential Materials	$5.195B	8.0%	$7.633B
Road Solutions	$11.834B	6.5%	$16.214B
AMS total	$17.029B	7.0% blended	$23.847B

The base case assumes roughly mid-single-digit organic growth plus recurring acquisition and growth-capex contribution. It is intentionally close to the low end of CRH's company-wide 7%-9% target because AMS already has scale, Road Solutions is large and competitive, and FY2025 included acquisition contribution. The key base-case idea is not explosive volume; it is steady infrastructure demand, price-cost discipline, Eco Material integration, and bolt-on deployment.

Bull case growth

Product	FY2025 AMS base	Historical anchor	Latest trend	Mgmt FY+1 guide	Bull CAGR TTM to 2030-12-31	Justification
Essential Materials	$5.195B	AMS total 5.9%; CRH-wide Essential Materials 4.7%	Aggregates volume and price both positive; cement modest; SCM opportunity enhanced by Eco Material	Positive demand, active M&A pipeline, 2030 ambition	10.0%	Bull case assumes stronger acquisition deployment into aggregates and SCMs, faster Eco Material synergy capture, and sustained pricing above cost inflation. It still treats cement as slower than SCMs and aggregates.
Road Solutions	$11.834B	AMS total 5.9%; CRH-wide Road Solutions 4.4%	Asphalt and paving volumes/backlogs positive	Highway funding supportive and 2026 funding described as strong in data-package commentary	8.5%	Bull case assumes a smooth highway funding transition after IIJA, more R&M work, better bid discipline, and high utilization across asphalt and paving seasons.

Bull case implied product roll-forward:

Product	FY2025 base	CAGR	2030 revenue
Essential Materials	$5.195B	10.0%	$8.367B
Road Solutions	$11.834B	8.5%	$17.794B
AMS total	$17.029B	9.0% blended	$26.161B

The bull case is essentially CRH's company-level target working well inside AMS. It requires continued M&A availability, no major public-funding interruption, normal weather, and pricing that keeps up with labor, maintenance, and raw-material inflation. It also requires the connected portfolio to produce real cross-selling and self-supply benefits rather than just narrative value.

Bear case growth

Product	FY2025 AMS base	Historical anchor	Latest trend	Mgmt FY+1 guide	Bear CAGR TTM to 2030-12-31	Justification
Essential Materials	$5.195B	AMS total 5.9%; CRH-wide Essential Materials 4.7%	Aggregates strong in FY2025, cement modest	No product-specific guide	5.0%	Bear case assumes pricing remains positive but volume softens, Eco Material synergies are slower, and acquisitions contribute less because deal prices or integration constraints limit deployment.
Road Solutions	$11.834B	AMS total 5.9%; CRH-wide Road Solutions 4.4%	Asphalt and paving positive but lower pricing	Funding supportive in 2026 but uncertainty after current program	4.0%	Bear case assumes highway funding is extended but less generous, private work weakens, weather disruption is normal-to-worse, and project bidding pressure prevents full cost recovery.

Bear case implied product roll-forward:

Product	FY2025 base	CAGR	2030 revenue
Essential Materials	$5.195B	5.0%	$6.630B
Road Solutions	$11.834B	4.0%	$14.398B
AMS total	$17.029B	4.3% blended	$21.028B

The bear case is not a construction depression; it is a lower-quality compounding case. It assumes CRH's local reserve positions and public infrastructure exposure still produce growth, but not enough to meet the company-level 7%-9% ambition within AMS. The big swing factor is Road Solutions, because it is nearly 70% of AMS revenue and has more service/project exposure than Essential Materials.

9. Forward adjusted EBITDA margin assumptions

Segment operating income and operating margin are not disclosed for AMS. CRH discloses segment adjusted EBITDA, labor, energy costs, other segment items, and adjusted EBITDA margin. This section therefore models adjusted EBITDA margin and adjusted EBITDA as the segment profit metric. [DATA GAP: Segment operating income, product-level operating income, and product-level adjusted EBITDA are not disclosed; no segment operating income is estimated.]

Current AMS adjusted EBITDA margin is 23.5% [data_package section 3, AMS row Adjusted EBITDA margin]. The margin bridge from FY2022 to FY2025 is strong: 18.4% in FY2022, 19.8% in FY2023, 23.2% in FY2024, and 23.5% in FY2025 [data_package section 3, AMS table]. The 2023-2024 expansion was unusually large, so the forecast does not extrapolate that pace. From the FY2025 base, the main margin drivers are price-cost spread, mix between Essential Materials and Road Solutions, Eco Material and SCM contribution, aggregate reserve utilization, labor productivity, maintenance inflation, weather, and project execution.

Product-level margin assumptions are model estimates, not disclosed facts. I use them only to compute a revenue-weighted segment adjusted EBITDA margin. Essential Materials is modeled at a higher margin than Road Solutions in the base and bull cases because reserve-based aggregates and cementitious materials should structurally earn better margins than service-heavy road construction. Road Solutions still earns an attractive margin because CRH self-supplies materials and has local scale, but it carries more labor, subcontractor, and contract risk.

Margin cases

Product	FY2025 segment margin anchor	Bear 2030 adjusted EBITDA margin	Base 2030 adjusted EBITDA margin	Bull 2030 adjusted EBITDA margin	Mechanism
Essential Materials	AMS disclosed margin 23.5%; product margin not disclosed	23.5%	25.5%	27.5%	Bear holds the segment at current margin as cost inflation absorbs pricing; base assumes Eco Material, SCM mix, aggregates pricing, and utilization add 200 bps; bull assumes strong reserve utilization, SCM synergies, and acquisition integration.
Road Solutions	AMS disclosed margin 23.5%; product margin not disclosed	23.5%	24.8%	26.3%	Bear assumes public work remains competitive and project risk offsets utilization; base assumes connected self-supply and backlog quality add 130 bps; bull assumes high utilization, disciplined bidding, and R&M mix improvement.

The base case blended adjusted EBITDA margin is 25.0%, up about 150 basis points from FY2025. That is above CRH's company-wide 2030 adjusted EBITDA margin target of 22%-24%, but AMS already sits at 23.5% and is the higher-quality North American materials platform. The base expansion is meaningful but modest compared with the FY2022-FY2025 move. It requires pricing and efficiency to offset labor, raw material, maintenance, and subcontractor inflation. It does not require a repeat of the 2024 step-change.

The bull case blended margin is 26.7%, up about 320 basis points from FY2025. That is achievable only if mix improves toward Essential Materials and SCMs, Eco Material synergies are larger than expected, acquisitions are integrated well, and high utilization spreads fixed costs over more tons and projects. The bull case should not be used unless the broader company thesis also assumes strong ROIC discipline, because adding lots of acquired revenue at weak returns would not be a true bull case.

The bear case blended margin is 23.5%, flat with FY2025. This is not punitive because the segment still has strong local assets and public infrastructure exposure. A more severe recession could push below 23.5%, but the five-year bear case here assumes the segment keeps pricing discipline and does not chase low-margin work. If the main ER2 bear case requires a construction downturn, the synthesis agent should consider an additional cyclical stress below this case.

10. Segment rollup

The rollup is built bottoms-up from the FY2025 AMS product bridge. Revenue totals reconcile to product-level assumptions within rounding. Segment adjusted EBITDA is revenue multiplied by the product-level adjusted EBITDA margin assumptions from section 9.

Case	Essential Materials 2030 revenue	Road Solutions 2030 revenue	Segment 2030 revenue	Blended adjusted EBITDA margin	Segment 2030 adjusted EBITDA
Bear	$6.630B	$14.398B	$21.028B	23.5%	$4.942B
Base	$7.633B	$16.214B	$23.847B	25.0%	$5.967B
Bull	$8.367B	$17.794B	$26.161B	26.7%	$6.981B

Arithmetic tie-out: bear revenue equals $6.630B plus $14.398B, or $21.028B; bear adjusted EBITDA equals $6.630B x 23.5% plus $14.398B x 23.5%, or $4.942B. Base revenue equals $7.633B plus $16.214B, or $23.847B; base adjusted EBITDA equals $7.633B x 25.5% plus $16.214B x 24.8%, or $5.967B. Bull revenue equals $8.367B plus $17.794B, or $26.161B; bull adjusted EBITDA equals $8.367B x 27.5% plus $17.794B x 26.3%, or $6.981B.

The base case implies total AMS revenue CAGR of about 7.0% from FY2025/TTM to 2030-12-31. That is consistent with the low end of CRH's company-wide target, but it requires inorganic contribution. Pure same-store growth is likely lower, probably in the low-to-mid single digits over a normal cycle. The model's base case should therefore be paired with a capital allocation assumption that CRH continues to deploy into AMS through bolt-ons and growth capex without materially degrading returns.

Operating income note: no segment operating income, segment operating margin, or product operating income is disclosed by CRH. The numbers above are adjusted EBITDA, not operating income. A consolidated operating-income bridge can be built later by the synthesis agent using company-level depreciation, depletion, amortization, corporate costs, and other reconciling items, but this segment appendix does not allocate those items to AMS.

Final summary table:

Case	Segment TTM+5y revenue	Segment TTM+5y adjusted EBITDA margin	Segment TTM+5y adjusted EBITDA	Probability
Bear	$21.028B	23.5%	$4.942B	25%
Base	$23.847B	25.0%	$5.967B	50%
Bull	$26.161B	26.7%	$6.981B	25%

11. Key risks and wildcards

Funding transition risk, mostly bear: IIJA support and federal/state highway funding are core to Road Solutions. FHWA's IIJA funding page states that the act provides about $350 billion for Federal highway programs over fiscal years 2022-2026, and its apportionment fact sheet shows rising apportioned highway-program contract authority through FY2026 [FHWA IIJA funding page; FHWA apportionment fact sheet]. The bear case assumes funding remains supportive but less powerful after the current program. A sharper funding cliff would push Road Solutions below the modeled bear case.

Weather and seasonality risk, mostly bear: AMS earns a large portion of profit in the construction season. Wet weather, hurricanes, early winter, or smoke/heat disruptions can delay jobs and reduce utilization. Because Q1 margin is structurally low, lost work in Q2/Q3 can have an outsized effect on annual adjusted EBITDA.

Input-cost and labor risk, bear and base: labor, raw materials, maintenance, services, bitumen, fuel, subcontractors, and equipment costs can all pressure margins. The base case assumes CRH can price to offset this. If public agencies or private contractors resist price increases while costs remain inflationary, the margin bridge fails.

Project-execution risk, bear: Road Solutions is service-heavy. Poor bid discipline, labor shortages, schedule penalties, subcontractor overruns, or quality issues can turn revenue growth into weak profit growth. This is the main reason the base Road Solutions margin is only modestly above current segment margin despite strong demand.

M&A price and integration risk, base and bull: CRH's acquisition engine is a strength, but it can become a weakness if the company overpays or if integration lags. Eco Material is strategically attractive, but the model assumes synergies in SCMs, logistics, self-supply, and cross-selling. If those synergies are slower or smaller, Essential Materials growth and margin should be cut.

Permitting and environmental risk, base and bear: quarry expansions, asphalt plants, cementitious assets, trucking routes, reclamation, water use, emissions, and community opposition can constrain supply or increase cost. These constraints support incumbent moats, but they also make growth capex harder and can delay projects.

Private-cycle risk, mostly bear: AMS is less residential-sensitive than Outdoor Living, but private non-residential, industrial, and residential sitework still matter. Data centers and reindustrialization are helpful, yet projects can be delayed by power availability, permitting, financing, customer capex priorities, or political changes.

Upside wildcard, bull: Eco Material and SCMs could be more important than the model assumes. If low-carbon cementitious materials grow faster than traditional cement, if CRH's terminal network creates real national reach, and if self-supply reduces input risk across CRH's North American portfolio, Essential Materials could earn both higher growth and higher margin than the base case.

Source notes

Primary CRH historical source: `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\data_package.md`, especially sections 1, 3, 4, 5, 6, and 10. Quantitative cross-check source: `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\quant_foundation.md`, especially P2, P4, and P6. Live B-run verification files are saved under `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\raw\b_americas_materials_solutions\`.

External live sources used for context and verification: CRH 2025 Form 10-K at https://www.sec.gov/Archives/edgar/data/849395/000162828026009043/crh-20251231.htm; CRH FY2025 results page at https://www.crh.com/media/press-releases/2026/crh-reports-q4-and-fy-2025-results/; FHWA IIJA funding page at https://highways.dot.gov/iija/funding; FHWA apportionment fact sheet at https://highways.dot.gov/iija/fact-sheets/apportionment; USGS Mineral Commodity Summaries 2026 at https://pubs.usgs.gov/publication/mcs2026; Vulcan Materials 2025 Form 10-K at https://www.sec.gov/Archives/edgar/data/1396009/000162828026009546/vmc-20251231.htm; Martin Marietta 2025 Form

10-K at https://www.sec.gov/Archives/edgar/data/0000916076/000119312526059193/mlm-20251231.htm.

Appendix B2 - International Solutions

CRH - International Solutions Segment Deep Dive

Prepared for ER2 / Gideon Wave 2, Subagent B. Segment: International Solutions. Ticker: CRH. Prepared on 2026-04-26.

Source Discipline And Time Anchor

This appendix uses `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\data_package.md` as the controlling source for CRH historical revenue, segment adjusted EBITDA, margin, product/activity dollars, recent quarterly trends and management commentary. Live FMP and primary-source pulls were used only for compliance, verification and external context; they do not override the DR-cleared data package. Raw files from this segment run are saved under `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\raw\b_international_solutions\`.

Stage 0 time anchor to use verbatim:

- Today: 2026-04-26.
- Company fiscal year convention: CRH's fiscal year ends December 31.
- Most recently reported quarter: Q4 FY2025 / FY2025, period ended 2025-12-31. CRH published/filed its 2025 Form 10-K on 2026-02-18; CRH has announced Q1 2026 results for 2026-04-30, so Q1 2026 is not yet reported as of 2026-04-26.
- TTM anchor: Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025 -> TTM ending 2025-12-31.
- Forward horizon: TTM end date 2025-12-31 + 5 calendar years = 2030-12-31. Compounding span is exactly 5 calendar years.

Important metric note: CRH does not disclose segment operating income in the same format as consolidated operating income. The official segment profit metric is adjusted EBITDA, and the historical tables below do not invent a disclosed segment operating income line. Sections 9 and 10 provide a clearly labeled modeled operating-income proxy for synthesis only, derived from adjusted EBITDA less segment D&A and normalized impairment assumptions using the 2025 Form 10-K segment reconciliation. That proxy is not a CRH-reported segment operating income figure. [DATA GAP: Segment operating income is not disclosed by CRH.]

0. Segment Boundary And Taxonomy Note

International Solutions is CRH's non-Americas reportable segment, covering materials, roads, building and infrastructure products, and outdoor-living products across Europe, Australia and other non-U.S. markets. The current segment taxonomy is comparable for FY2022-FY2025 in the quant foundation and data package, while FY2021 was reported under older IFRS/20-F labels and should not be spliced into current segment CAGR calculations. Product/activity dollars are clean on the current taxonomy for FY2023-FY2025 at the consolidated category level, and the FY2025 Form 10-K provides the FY2025 product/category bridge by reportable segment. For International Solutions product-level modeling, this means the FY2025 bridge is the clean dollar base, but multi-year International product/category histories are not separately disclosed. [data_package.md section 1, "Taxonomy stability"; section 4, "FY2025 product/category bridge by segment"]

1. What International Solutions Actually Is

International Solutions is a regional portfolio rather than a single product business. It sells heavy materials, road products and services, engineered building and infrastructure products, and a smaller outdoor-living portfolio outside the Americas segment structure. In practical terms, it includes aggregates and cementitious materials, asphalt, ready-mixed concrete, road materials and road work, products used in water, energy, telecom and complex infrastructure, and select hardscape/outdoor living products. The operating footprint is anchored in Europe and Australia, with other non-U.S. markets included in CRH's International division. The most important customer groups are public infrastructure owners, road agencies, municipal and utility customers, civil contractors, commercial builders, residential developers, repair/remodel channels and regional distributors.

The pricing model is local and physical. Aggregates, ready-mixed concrete and asphalt are transport-sensitive; the price that matters is not just a commodity quote but the delivered value at a jobsite after considering quarry reserve location, plant density, dispatch reliability, seasonality, material specifications, fuel, truck availability and local competition. Road Solutions

adds project and service economics: a road job may bundle aggregates, asphalt, paving crews, recycled asphalt, subcontractors, traffic management and quality control. Building & Infrastructure Solutions adds more specified products: water, energy, telecom and commercial infrastructure products are not sold purely on tonnage, because they must meet engineering, code, durability and availability requirements. Outdoor Living Solutions is more channel-sensitive and housing-cycle-sensitive, but still depends on manufacturing footprint, local brands and distribution.

The segment's go-to-market is therefore local operating-company first, supported by CRH corporate capital allocation and integration playbooks. A customer in Poland, France, the U.K. or Australia is buying from a local quarry, asphalt plant, ready-mix operation, precast supplier, paving contractor or product brand, not from a remote centralized factory. The corporate advantage comes from the connected portfolio: upstream aggregates and cementitious materials can feed downstream concrete, asphalt, road and building products, while local acquisitions can be integrated into procurement, safety, operating discipline, product innovation and cross-selling. The Adbri transaction in Australia is a good example of that logic: CRH described Adbri as having "high-quality assets and leading market positions" in cement, concrete and aggregates, complementing CRH's existing Australian business. [CRH Adbri release, 2024-02-26: https://www.crh.com/media/press-releases/2024/crh-enters-binding-agreement-to-acquire-adbri-in-australia/]

2. Current Economics: FY2025 / TTM

International Solutions generated FY2025 / TTM revenue of $13.296B, or 35.5% of CRH consolidated revenue. Adjusted EBITDA was $2.205B and adjusted EBITDA margin was 16.6%. The segment was CRH's strongest FY2025 margin improver: revenue increased 7.7%, adjusted EBITDA increased 22.8%, and adjusted EBITDA margin expanded 200 bps from 14.6% in FY2024. The data package attributes the improvement to favorable pricing, acquisitions, operational efficiencies, divestitures of lower-return activity and a good contribution from Australia following Adbri. [data_package.md section 3, International Solutions table; section 6 International commentary]

The FY2025 product/category bridge for International is:

International Solutions FY2025 product/activity	FY2025 revenue	% of International revenue	Data package cite
Essential Materials	$5.179B	38.9%	data_package.md section 4, FY2025 product/category bridge, Essential Materials row
Road Solutions	$5.255B	39.5%	data_package.md section 4, FY2025 product/category bridge, Road Solutions row
Building & Infrastructure Solutions	$2.236B	16.8%	data_package.md section 4, FY2025 product/category bridge, Building & Infrastructure Solutions row
Outdoor Living Solutions	$0.626B	4.7%	data_package.md section 4, FY2025 product/category bridge, Outdoor Living Solutions row
Total International Solutions	$13.296B	100.0%	data_package.md section 4, FY2025 product/category bridge, Total revenues row

The segment is almost evenly split between Essential Materials and Road Solutions, which together represented 78.5% of International FY2025 revenue. That makes the unit-economics center of gravity more like heavy materials and roads than like a pure building-products company. Building & Infrastructure Solutions is smaller, but strategically important because water, energy, telecom, data-center and complex commercial infrastructure can carry better specification and reliability economics than commodity materials. Outdoor Living is small within International and should not drive the segment thesis.

Recent quarterly performance was seasonally uneven but strong on a full-year basis. International revenue was $2.831B in Q1 2025, $3.538B in Q2, $3.635B in Q3 and $3.292B in Q4. Adjusted EBITDA margin moved from 5.3% in Q1 to 20.4% in Q2, 19.5% in Q3 and 19.0% in Q4. Q1 is not a representative run-rate quarter for a construction-materials business with winter exposure. The full TTM / FY2025 base is the right anchor. [data_package.md section 5, Segment quarterly trend]

The data package also provides the cost architecture from the 2025 10-K segment table. International FY2025 labor was $2.669B, energy costs were $1.061B, other segment items were $7.361B and adjusted EBITDA was $2.205B on $13.296B of revenue. In revenue terms, labor was about 20.1%, energy about 8.0%, other segment items about 55.4%, and adjusted EBITDA 16.6%. Energy is far more meaningful here than in Americas Building Solutions, reflecting the cementitious, asphalt, aggregates, ready-mix and manufacturing mix. [data_package.md section 3, International Solutions table;

quant_foundation.md P2]

3. Unit Economics

International Solutions converts revenue into profit through local pricing, volume, mix, plant utilization, energy cost control, labor productivity, logistics density, procurement, acquisition integration and portfolio pruning. The margin history is good but still below the Americas segments: adjusted EBITDA margin was 12.5% in FY2022, 13.4% in FY2023, 14.6% in FY2024 and 16.6% in FY2025. The improvement is not a one-factor story. Management commentary and the data package point to favorable pricing, operational efficiencies, acquisition contribution, lower-return divestitures and Australia as the main 2025 drivers. [data_package.md section 3, International Solutions; section 6 International Solutions]

Essential Materials economics begin with reserve scarcity and kiln/cementitious capacity. A quarry close to demand is worth more than a theoretically similar quarry far from demand because hauling costs can erase value quickly. Cementitious materials add more energy, emissions and regulatory burden than aggregates, but also higher strategic relevance as customers and governments push low-carbon infrastructure. Unit economics break when demand weakens enough to reduce utilization, when energy or carbon costs rise faster than price, when imports become disruptive, or when permitting and environmental obligations require heavy capital without pricing recovery.

Road Solutions economics are a blend of materials and project execution. Asphalt and ready-mix need dense plants, dispatch reliability and seasonally efficient utilization. Paving and construction services can pull through materials and deepen relationships with public owners and civil contractors, but services also add labor, weather, subcontractor, safety and execution risk. A materials-only ton sale can be cleaner; a road project can be higher-share-of-wallet but has more moving parts. That is why International's margin can improve when CRH divests lower-return activity or improves project discipline, even if volume is not explosive.

Building & Infrastructure Solutions should have better structural margin potential than many raw materials lines because it is more specification-led. Products used to connect and protect water, energy, telecom and complex infrastructure are chosen for suitability, code compliance, durability and project reliability. That can support pricing power and lower substitution risk. The risk is that the International segment does not disclose product-level margin, so any product-margin model must be a reasoned allocation, not a disclosed fact.

Outdoor Living Solutions is the smallest International line and likely carries the most residential repair/remodel and discretionary exposure. It can benefit from brands, channel relationships and local manufacturing, but in a European downcycle it has less public-infrastructure ballast than roads or water infrastructure. I therefore model Outdoor Living as a modest contributor, not as the segment's growth engine.

Capital intensity matters. Live SEC/10-K verification shows International Solutions depreciation, depletion and amortization of $786M in FY2025, $615M in FY2024 and $553M in FY2023. International impairment losses were $40M in FY2025, $161M in FY2024 and $295M in FY2023. Adjusted EBITDA is the official segment profit metric, but these D&A and impairment lines are a useful reminder that International's asset base absorbs real reinvestment and that prior architectural-products impairment risk has not disappeared. [CRH 2025 Form 10-K, segment reconciliation: https://www.sec.gov/Archives/edgar/data/849395/000162828026009043/crh-20251231.htm]

4. Competitive Dynamics

International Solutions competes market by market. There is no single global market share number that usefully describes the segment. Heavy materials, ready-mix, asphalt and road work are local markets because transport cost, permitting, plant location and customer relationships matter. That creates local oligopoly characteristics in some catchments, but also means CRH faces strong incumbent competitors in many countries.

In Europe, the most relevant heavy-materials competitors include Holcim, Heidelberg Materials, Cemex, Buzzi and strong national or regional players. Road activity also overlaps with road contractors and construction-services platforms such as Colas and Eurovia/Vinci in certain markets. In building products, competition broadens to engineered product, drainage, precast, pipe, utility enclosure, masonry and outdoor-living specialists, including local manufacturers and larger groups such as Saint-Gobain, Wienerberger and other regionally strong players. The key point is that International Solutions is not protected by a single patent or global brand; it is protected only where CRH has local density, reserves, service reputation, specification position and operating execution.

The peer evidence supports a market where pricing, cost discipline and decarbonization are front-and-center. Holcim reported FY2025 net sales of CHF 15.724B, recurring EBIT of CHF 2.876B and recurring EBIT margin of 18.3%, with management

attributing margin expansion to cost discipline, operational excellence and a sustainable offering. Heidelberg Materials reported 2025 revenue of EUR21.5B, result from current operations of EUR3.4B, RCOBD margin of 21.8% and emphasized price management, cost discipline, portfolio optimization and decarbonization investments such as CCS. These are not weak competitors; they are scaled, disciplined, capitalized and actively optimizing portfolios. [Holcim FY2025 results: https://www.holcim.com/media/media-releases/full-year-2025-results; Heidelberg Materials FY2025 results: https://www.heidelbergmaterials.com/en/pr-2026-02-25]

Australia adds another competitive layer. CRH's exposure there was expanded through Adbri, which is owned by CRH ANZ Pty Ltd and the Barro Group. The ACCC's 2025 BGC Cementitious review identifies active overlap among Cement Australia, Holcim, Heidelberg Materials Australia, Adbri and BGC in cement, slag, aggregates, concrete and asphalt in Western Australia. The ACCC also found that remaining ready-mix competitors including Boral, WA Premix and Adbri would constrain Holcim and Heidelberg Materials Australia in relevant local areas after the proposed BGC restructuring. That is a useful market-structure clue: Australian materials markets can be concentrated and vertical, but competition is still local and constrained by other regional players. [ACCC review: https://www.accc.gov.au/node/165275]

The end-market backdrop is mixed but improving. The Euroconstruct December 2025 summary indicates that European construction was weak from 2023 through 2025 but expects a return to growth from 2026, with civil engineering having already accumulated growth across 2023-2025 and projected to keep growing, albeit at a moderated rate. Infrastructure Australia reports a five-year Major Public Infrastructure Pipeline of A$242B for FY2024-25 to FY2028-29, up 14% from the prior projection, with transport still the largest category and utilities investment rising. These sources support a base case of mid-single-digit International growth, not an unconstrained boom. [Euroconstruct/ITeC summary: https://en.itec.cat/services/market-research/euroconstruct-report-summary/; Infrastructure Australia: https://www.infrastructureaustralia.gov.au/reports/2025-infrastructure-market-capacity-report]

5. Segment-Level Moat

International Solutions has a real but local moat. The strongest pieces are permitted aggregates reserves, cementitious and asphalt capacity, proximity to jobsites, customer relationships, public-infrastructure qualifications, road-service capability, specification positions in building/infrastructure products and CRH's ability to acquire and integrate local platforms. These advantages are durable because new quarries, cement assets, asphalt networks and road-service footprints are slow to permit and build. A customer also values reliability: missed delivery on a road job, water project or utility installation is costly, so established suppliers with local availability can earn a service premium.

The moat is not uniformly strong across every product. Essential Materials can have excellent catchment-level economics where reserves are scarce and transport costs protect local pricing. Road Solutions can be attractive when CRH controls both materials and execution, but service work can dilute margin if contracts are badly priced or weather/labor/subcontractor risks move against the company. Building & Infrastructure Solutions has specification and product-quality moat potential, especially in water, energy and telecom infrastructure. Outdoor Living has the weakest segment-level moat because demand is more discretionary and channel competition can be intense.

The moat should remain durable over five to ten years if CRH keeps local density and pricing discipline. The biggest long-term moat threat is not AI or digital substitution; roads, aggregates, cement, concrete and infrastructure products are physical. The bigger threats are carbon regulation, energy costs, weak residential demand, public-budget delays, imports in cementitious products, and acquisition overpayment. In other words, International Solutions is protected by local physical scarcity, but it is still cyclical and capital intensive.

6. Historical Growth Rates Reproduced From Data Package

The clean segment history starts in FY2022. FY2021 is not comparable under the current segment taxonomy. The table below uses only data package figures and cites the specific source row for each metric.

Product / sub-segment	FY2022 rev	FY2023 rev	FY2024 rev	FY2025 rev / TTM	3-yr CAGR	Most recent YoY	Data package cite
International Solutions total	$12.211B [section 3 International Revenue row]	$12.497B [section 3 International Revenue row]	$12.340B [section 3 International Revenue row]	$13.296B [section 3 International Revenue row]	2.9% [calc from section 3 Revenue row]	7.7% [section 3 YoY row]	data_package.md section 3, International Solutions table, Revenue and YoY rows

Product / sub-segment	FY2022 rev	FY2023 rev	FY2024 rev	FY2025 rev / TTM	3-yr CAGR	Most recent YoY	Data package cite
International Essential Materials	n/d [DATA GAP]	n/d [DATA GAP]	n/d [DATA GAP]	$5.179B [section 4 bridge row]	n/d [DATA GAP]	n/d [DATA GAP]	data_package.md section 4, FY2025 product/category bridge, Essential Materials row
International Road Solutions	n/d [DATA GAP]	n/d [DATA GAP]	n/d [DATA GAP]	$5.255B [section 4 bridge row]	n/d [DATA GAP]	n/d [DATA GAP]	data_package.md section 4, FY2025 product/category bridge, Road Solutions row
International Building & Infrastructure Solutions	n/d [DATA GAP]	n/d [DATA GAP]	n/d [DATA GAP]	$2.236B [section 4 bridge row]	n/d [DATA GAP]	n/d [DATA GAP]	data_package.md section 4, FY2025 product/category bridge, Building & Infrastructure row
International Outdoor Living Solutions	n/d [DATA GAP]	n/d [DATA GAP]	n/d [DATA GAP]	$0.626B [section 4 bridge row]	n/d [DATA GAP]	n/d [DATA GAP]	data_package.md section 4, FY2025 product/category bridge, Outdoor Living row

[DATA GAP: CRH does not disclose FY2023-FY2024 International Solutions revenue by principal product/activity. It discloses FY2025 product/category revenue by segment and consolidated category revenue for FY2023-FY2025.]

For product context only, the consolidated current-taxonomy product/activity table is:

Product/activity category, consolidated CRH	FY2023 revenue	FY2024 revenue	FY2025 revenue	Current-taxonomy two-year CAGR	FY2025 YoY	Data package cite
Essential Materials	$9.459B [section 4 product table row]	$9.560B [section 4 product table row]	$10.374B [section 4 product table row]	4.7% [calc from section 4 row]	8.5% [calc from section 4 row]	data_package.md section 4, Dollar-disclosed product/activity categories, Essential Materials row
Road Solutions	$15.666B [section 4 product table row]	$16.310B [section 4 product table row]	$17.089B [section 4 product table row]	4.4% [calc from section 4 row]	4.8% [calc from section 4 row]	data_package.md section 4, Dollar-disclosed product/activity categories, Road Solutions row
Building & Infrastructure Solutions	$4.698B [section 4 product table row]	$4.567B [section 4 product table row]	$4.868B [section 4 product table row]	1.8% [calc from section 4 row]	6.6% [calc from section 4 row]	data_package.md section 4, Dollar-disclosed product/activity categories, Building & Infrastructure row
Outdoor Living Solutions	$5.126B [section 4 product table row]	$5.135B [section 4 product table row]	$5.116B [section 4 product table row]	-0.1% [calc from section 4 row]	-0.4% [calc from section 4 row]	data_package.md section 4, Dollar-disclosed product/activity categories, Outdoor Living row

Arithmetic tie-out checks: International total revenue ties within the 2% rule. $12.211B x 1.023 = $12.492B versus reported $12.497B for FY2023. $12.497B x 0.987 = $12.335B versus reported $12.340B for FY2024. $12.340B x 1.077 = $13.290B versus reported $13.296B for FY2025. No product-level International back-solved dollars are used because the data package explicitly says not to derive aggregates, cement, asphalt, ready-mix or paving revenue dollars without explicit disclosure. [data_package.md section 4, "No back-solved product dollars"]

7. Management Guidance Quoted From Data Package Section 6

Data package row	Short verified quote fragment	Interpretation for International Solutions
section 6 International, Q4 FY2025 call, Jim Mintern	"really good momentum"	Management described International as entering 2026 with positive momentum across Eastern Europe, Western Europe and Australia, but the appendix should still model country-level variation rather than a straight-line boom.

Data package row	Short verified quote fragment	Interpretation for International Solutions
section 6 International, Q4 FY2025 call, Jim Mintern	"another strong year"	Management expects continued International progress from Eastern Europe, early residential signs in France/U.K. and Australia synergy delivery. This supports a base case above the FY2022-FY2025 historical CAGR.
section 6 International, Q2 FY2025 release	"sustained pricing momentum"	Pricing remains a key margin lever. The model should separate price/mix and operational efficiency from pure volume.
section 6 International, Q4 FY2025 results release	"operational efficiencies"	The 200 bps FY2025 margin expansion should not be treated as only cyclical volume leverage. Efficiency and portfolio actions are part of the bridge.
section 6 enterprise guidance, Investor Day release	"7% and 9%"	CRH's 2026-2030 total revenue target is consolidated and includes organic plus inorganic growth. International should contribute but does not need to grow as fast as North America to support the company target.
section 6 enterprise guidance, FY2025 results release	"$8.1bn to $8.5bn"	FY2026 consolidated adjusted EBITDA guidance provides a company-level starting point, but there is no segment-specific 2026 International EBITDA guide.

[DATA GAP: No explicit segment-level FY2026 revenue or adjusted EBITDA guide for International Solutions was disclosed in the data package.]

8. Forward Growth Assumptions To 2030-12-31

The model compounds from FY2025 / TTM ending 2025-12-31 to 2030-12-31, exactly five calendar years. The product bases are the FY2025 International product/category bridge. The historical context for product lines uses consolidated product/activity growth where International-specific history is not disclosed, and the segment total uses the FY2022-FY2025 International CAGR of 2.9% plus FY2025 YoY of 7.7%.

Base case: International grows at a 5.0% revenue CAGR to $17.0B by 2030. This is above the FY2022-FY2025 segment CAGR because the base case credits Australia/Adbri, pricing, Eastern Europe, civil engineering and water/energy infrastructure, but below CRH's 7%-9% consolidated target because International has more European residential and energy/cost cyclicality and a lower starting margin than the Americas segments.

Product	Historical context	Latest YoY	Mgmt FY+1 guide	Base CAGR TTM->TTM+5y	Justification
Essential Materials	Segment CAGR 2.9%; consolidated category two-year CAGR 4.7%	Consolidated category FY2025 +8.5%; International sub-line dollars n/d	Positive International momentum; pricing support	5.0%	Aggregates and cementitious materials benefit from Australia, Central/Eastern Europe and infrastructure demand, but energy/carbon costs and mature European markets keep the line below the FY2025 consolidated category jump.
Road Solutions	Segment CAGR 2.9%; consolidated category two-year CAGR 4.4%	Consolidated category FY2025 +4.8%; International sub-line dollars n/d	Positive International momentum; operational efficiency	4.8%	Road demand is supported by civil engineering, transport repair and public budgets, but service-heavy activity and portfolio pruning keep growth near mid-single digits.
Building & Infrastructure Solutions	Segment CAGR 2.9%; consolidated category two-year CAGR 1.8%	Consolidated category FY2025 +6.6%; International sub-line dollars n/d	Water/energy/data-center and infrastructure demand indirectly supported	6.5%	This line receives the highest base CAGR because water, energy, telecom and complex infrastructure products have better structural demand and specification value than housing-led products.
Outdoor Living Solutions	Segment CAGR 2.9%; consolidated category two-year CAGR -0.1%	Consolidated category FY2025 -0.4%; International sub-line dollars n/d	No specific International outdoor guide	1.5%	Repair/remodel and normalization support modest growth, but European residential affordability and discretionary exposure limit the contribution.

Base year-by-year segment deceleration bridge: FY2026 +5.6%, FY2027 +5.1%, FY2028 +4.9%, FY2029 +4.8%, FY2030 +4.8%. This path takes the segment from FY2025's 7.7% growth toward a sustainable 5.0% five-year CAGR without assuming a collapse in demand immediately after management's "really good momentum" comment.

Bull case: International grows at a 6.9% revenue CAGR to $18.6B by 2030. The bull case assumes Europe recovers closer to the high end of Euroconstruct-style civil/residential improvement, Australia integration is materially accretive, pricing remains firm, and CRH deploys bolt-on M&A into attractive Central/Eastern Europe, Australia and infrastructure niches.

Product	Historical context	Latest YoY	Mgmt FY+1 guide	Bull CAGR TTM->TTM+5y	Justification
Essential Materials	Segment CAGR 2.9%; consolidated category two-year CAGR 4.7%	Consolidated category FY2025 +8.5%	Positive International momentum	7.0%	The bull case assumes sustained pricing, Adbri synergies, low-carbon cementitious demand and infrastructure catchments offset energy cost pressure.
Road Solutions	Segment CAGR 2.9%; consolidated category two-year CAGR 4.4%	Consolidated category FY2025 +4.8%	Positive International momentum	6.5%	Civil engineering and transport repair stay strong, and CRH wins higher-value integrated materials plus road-service work without major execution slippage.
Building & Infrastructure Solutions	Segment CAGR 2.9%; consolidated category two-year CAGR 1.8%	Consolidated category FY2025 +6.6%	Infrastructure/reindustrialization support	8.5%	Water, energy, data-center and telecom infrastructure pull specification-led products faster than the segment average.
Outdoor Living Solutions	Segment CAGR 2.9%; consolidated category two-year CAGR -0.1%	Consolidated category FY2025 -0.4%	No specific guide	3.0%	Residential repair/remodel and lower rates improve demand, but this line remains a small contributor.

Bear case: International grows at a 1.8% revenue CAGR to $14.6B by 2030. The bear case assumes European residential remains weak, infrastructure budgets are delayed or crowded out, energy/carbon cost pressure returns, pricing gives back some 2025 gains, and acquisition synergies are slower.

Product	Historical context	Latest YoY	Mgmt FY+1 guide	Bear CAGR TTM->TTM+5y	Justification
Essential Materials	Segment CAGR 2.9%; consolidated category two-year CAGR 4.7%	Consolidated category FY2025 +8.5%	Positive International momentum, not a guarantee	2.0%	Essential Materials still benefits from local scarcity, but weak volumes and cost pressure limit price/mix and utilization.
Road Solutions	Segment CAGR 2.9%; consolidated category two-year CAGR 4.4%	Consolidated category FY2025 +4.8%	Positive International momentum, not a guarantee	1.5%	Public works remain more resilient than private construction, but delays, lower-margin service mix and divestitures suppress growth.
Building & Infrastructure Solutions	Segment CAGR 2.9%; consolidated category two-year CAGR 1.8%	Consolidated category FY2025 +6.6%	Structural demand in water/energy	3.0%	This line still grows because utility and infrastructure needs are durable, but project deferrals and competition halve the base growth rate.
Outdoor Living Solutions	Segment CAGR 2.9%; consolidated category two-year CAGR -0.1%	Consolidated category FY2025 -0.4%	No specific guide	-1.0%	Residential and discretionary repair/remodel remain soft; International outdoor living loses share of mix.

9. Forward Margin Assumptions

The official current segment profit metric is adjusted EBITDA. FY2025 adjusted EBITDA margin was 16.6%, up from 14.6% in FY2024 and 13.4% in FY2023. Segment operating income is not disclosed. For the product margin bridge below, I allocate FY2025 adjusted EBITDA by product in a way that reconciles to the disclosed segment adjusted EBITDA, then project product margins by case. This is a model allocation, not a disclosure. [data_package.md section 3 International Solutions table]

Current modeled product adjusted EBITDA margins are: Essential Materials 17.0%, Road Solutions 15.5%, Building & Infrastructure Solutions 19.0% and Outdoor Living Solutions 14.0%. On the FY2025 product revenue base, that produces $2.207B of modeled adjusted EBITDA, effectively equal to the disclosed $2.205B after rounding. The allocation reflects Essential Materials' reserve/price strength, Road Solutions' service mix, Building & Infrastructure's specification value and Outdoor Living's smaller, more residential-exposed profile.

Margin case assumptions:

Product	FY2025 modeled adjusted EBITDA margin	Bear 2030 margin	Base 2030 margin	Bull 2030 margin	Mechanism
Essential Materials	17.0%	15.5%	18.5%	20.0%	Price/cost discipline, energy and carbon cost pass-through, quarry/cementitious utilization, Adbri integration.
Road Solutions	15.5%	14.0%	17.0%	18.5%	Better project selection and integrated materials pull-through in base/bull; labor/subcontractor/weather risk in bear.
Building & Infrastructure Solutions	19.0%	17.5%	21.0%	23.0%	Mix shift to water, energy, telecom and specified products; pricing power and scale in bull; competitive price pressure in bear.
Outdoor Living Solutions	14.0%	11.5%	14.5%	16.0%	Modest scale in base; weak residential/channel mix in bear; housing recovery and repair/remodel support in bull.

At the segment level, these assumptions produce adjusted EBITDA margins of 15.1% in bear, 18.2% in base and 19.8% in bull. The base case margin is 160 bps above FY2025, supported by operational efficiencies, portfolio pruning and mix shift toward Building & Infrastructure. The bull case does not assume Americas Materials-like margins; it gives International a strong but still plausible outcome below 20% adjusted EBITDA margin. The bear case gives back 150 bps from FY2025 as energy, labor and service-mix pressure offset pricing.

For modeled operating-income proxy, I use FY2025 International D&A of $786M, equal to 5.9% of revenue, as the starting reference. Base assumes D&A remains 5.8% of 2030 revenue as growth capex and acquired assets remain material. Bull assumes 5.6% as utilization and scale leverage improve. Bear assumes 6.2% as lower utilization and capital intensity weigh. Normalized impairment is assumed to be zero in base and bull; bear embeds impairment risk implicitly through the lower operating margin. This produces modeled operating-income proxy margins of 8.9% bear, 12.4% base and 14.2% bull. Again, these are not disclosed segment operating margins.

10. Segment Rollup

The revenue rollup is bottoms-up from the FY2025 product/category base. All figures are $ billions except margins.

Case	Product	FY2025 revenue base	CAGR to 2030	2030 revenue	2030 adjusted EBITDA margin	2030 adjusted EBITDA
Bear	Essential Materials	5.179	2.0%	5.718	15.5%	0.886
Bear	Road Solutions	5.255	1.5%	5.661	14.0%	0.793
Bear	Building & Infrastructure Solutions	2.236	3.0%	2.592	17.5%	0.454
Bear	Outdoor Living Solutions	0.626	-1.0%	0.595	11.5%	0.068
Bear	Total International Solutions	13.296	1.8%	14.567	15.1%	2.201
Base	Essential Materials	5.179	5.0%	6.610	18.5%	1.223
Base	Road Solutions	5.255	4.8%	6.643	17.0%	1.129
Base	Building & Infrastructure Solutions	2.236	6.5%	3.064	21.0%	0.643
Base	Outdoor Living Solutions	0.626	1.5%	0.674	14.5%	0.098
Base	Total International Solutions	13.296	5.0%	16.991	18.2%	3.093
Bull	Essential Materials	5.179	7.0%	7.264	20.0%	1.453
Bull	Road Solutions	5.255	6.5%	7.200	18.5%	1.332
Bull	Building & Infrastructure Solutions	2.236	8.5%	3.362	23.0%	0.773
Bull	Outdoor Living Solutions	0.626	3.0%	0.726	16.0%	0.116
Bull	Total International Solutions	13.296	6.9%	18.552	19.8%	3.674

Arithmetic tie-out: product revenue sums equal segment totals within rounding. Adjusted EBITDA equals product revenue multiplied by product margin and sums to the segment total within 1%. The base case reaches $17.0B of revenue and $3.09B of adjusted EBITDA by 2030; the bull case reaches $18.6B and $3.67B; the bear case reaches $14.6B and $2.20B.

Modeled operating-income proxy rollup:

Case	2030 revenue	Adjusted EBITDA margin	Adjusted EBITDA	Modeled D&A / revenue	Modeled operating margin proxy	Modeled operating income proxy
Bear	$14.567B	15.1%	$2.201B	6.2%	8.9%	$1.298B
Base	$16.991B	18.2%	$3.093B	5.8%	12.4%	$2.108B
Bull	$18.552B	19.8%	$3.674B	5.6%	14.2%	$2.635B

Final case summary table:

Case	Segment TTM+5y Revenue	Segment TTM+5y modeled op margin proxy	Segment TTM+5y modeled op income proxy	Probability
Bear	$14.567B	8.9% modeled proxy	$1.298B modeled proxy	25%
Base	$16.991B	12.4% modeled proxy	$2.108B modeled proxy	55%
Bull	$18.552B	14.2% modeled proxy	$2.635B modeled proxy	20%

Probability-weighted modeled operating income proxy is $2.01B. Probability-weighted adjusted EBITDA is $2.99B, or about $3.0B rounded. The official measure to use for historical segment performance remains adjusted EBITDA; the operating-income proxy is included only because the synthesis model requires an operating-margin style output.

11. Key Risks And Wildcards

Bear risk - European residential relapse: International has exposure to France, the U.K., Western Europe and other markets where affordability, rates, permitting and weak private investment can weigh on cement, aggregates, ready-mix, outdoor living and building products. A housing relapse would hit Outdoor Living first, then ready-mix and cementitious utilization.

Bear risk - energy, carbon and cement cost pressure: International's FY2025 energy cost burden was about 8.0% of revenue. Cementitious and asphalt exposure make the segment vulnerable to energy spikes, EU ETS/carbon cost pressure and volatility in bitumen, fuel and electricity. Pricing can offset but not perfectly if volumes soften.

Bear/Base risk - project execution in Road Solutions: Road work can pull through materials, but it also introduces contract, weather, labor and subcontractor risk. The bear case assumes some of FY2025's portfolio and efficiency gains reverse through lower-margin work or delays.

Base/Bull wildcard - Australia and Adbri synergy: Adbri gives CRH a larger Australian platform in cement, concrete, aggregates and supplementary cementitious materials. If integration is better than expected and Australia public infrastructure remains strong, Essential Materials and Road Solutions can outgrow the base case.

Base/Bull wildcard - European civil engineering and energy transition: Euroconstruct data point to civil engineering resilience and renewed construction growth from 2026. Infrastructure, energy transition, water and grid projects could support both Road Solutions and Building & Infrastructure Solutions even if residential stays only modest.

Bull risk - acquisition discipline: CRH's connected portfolio model needs M&A to create value, not simply add revenue. International can compound faster if CRH buys local assets at attractive prices and connects them to existing platforms. The reverse is also true: expensive deals or integration misses would pressure ROIC and impairment risk.

Bear risk - local competition and antitrust scrutiny: ACCC materials-market work shows how regulators examine ready-mix and cement market power in local catchments. CRH has local advantages, but competitors such as Holcim, Heidelberg Materials, Boral, Cement Australia and regional players can constrain price. Future transactions may require remedies or may not close on desired terms.

Sources Used

- DR-cleared data package: `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\data_package.md`.
- Quant foundation for segment cost architecture and TTM anchor: `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\quant_foundation.md`.

- FMP live raw files: `raw\b_international_solutions\fmp_profile_crh_live.json`; `raw\b_international_solutions\fmp_revenue_product_segmentation_annual_live.json`.
- CRH 2025 Form 10-K live source: https://www.sec.gov/Archives/edgar/data/849395/000162828026009043/crh-20251231.htm.
- CRH FY2025 results page: https://www.crh.com/media/press-releases/2026/crh-reports-q4-and-fy-2025-results/.
- CRH Investor Day 2025 presentation: https://www.crh.com/wp-content/uploads/2025/09/crh-investor-day-2025_main-presentation.pdf.
- CRH Adbri transaction release: https://www.crh.com/media/press-releases/2024/crh-enters-binding-agreement-to-acquire-adbri-in-australia/.
- ACCC BGC Cementitious review: https://www.accc.gov.au/node/165275.
- Euroconstruct/ITeC December 2025 construction outlook summary: https://en.itec.cat/services/market-research/euroconstruct-report-summary/.
- Infrastructure Australia 2025 Market Capacity Report: https://www.infrastructureaustralia.gov.au/reports/2025-infrastructure-market-capacity-report.
- Holcim FY2025 results: https://www.holcim.com/media/media-releases/full-year-2025-results.
- Heidelberg Materials FY2025 results: https://www.heidelbergmaterials.com/en/pr-2026-02-25.

Appendix B3 - Americas Building Solutions

Americas Building Solutions - Segment Deep Dive

Company: CRH plc Ticker: CRH Segment: Americas Building Solutions Prepared for: ER2 / Gideon Wave 2 Prepared on: 2026-04-26 Output path: `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\appendix_B_americas_building_solutions.md`

Source Discipline And Time Anchor

This appendix uses `data_package.md` as the source of record for CRH's own historical revenue, adjusted EBITDA, product/category disclosure, quarterly trend, and management commentary. The data package was cleared by the DR gate with `DATA PACKAGE VERIFIED -- CLEARED FOR WAVE 2`; official SEC/CRH values control over FMP where the two disagree. Fresh live-source pulls for this B appendix were saved under `raw\b_americas_building_solutions\` for FMP stable endpoints, the 2025 Form 10-K, the FY2025 results page, the 2025 Investor Day release, and CRH Americas product pages. Those live pulls enrich the analysis but do not override the cleared data package without a flag. The peer/market references used for competitive context are linked in the source note at the end.

Stage 0 time anchor, used verbatim:

- Today: 2026-04-26.
- Company fiscal year convention: CRH's fiscal year ends December 31.
- Most recently reported quarter: Q4 FY2025 / FY2025, period ended 2025-12-31. CRH published/filed its 2025 Form 10-K on 2026-02-18; CRH has announced Q1 2026 results for 2026-04-30, so Q1 2026 is not yet reported as of 2026-04-26.
- TTM anchor: Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025 -> TTM ending 2025-12-31.
- Forward horizon: TTM end date 2025-12-31 + 5 calendar years = 2030-12-31. Compounding span is exactly 5 calendar years.

Important modeling caveat: CRH's official segment profit metric is adjusted EBITDA. Segment operating income is not separately disclosed in the same way consolidated operating income is disclosed. Where this appendix provides "operating income" for ER2 rollup purposes, it is explicitly a modeled proxy: segment adjusted EBITDA less disclosed segment depreciation, depletion and amortization where available, and then projected with transparent margin assumptions. It is not represented as a CRH-reported segment operating income figure.

0. Segment Boundary + Taxonomy Note

Americas Building Solutions is one of CRH's two Americas division segments. The segment contains North American building and infrastructure products and outdoor living products. The current reporting taxonomy is stable for segment revenue and adjusted EBITDA from FY2022 through FY2025 in the cleared quant foundation and data package. For product/activity categories, the clean current-taxonomy dollar table is disclosed for FY2023-FY2025, while the FY2025 bridge splits Building & Infrastructure Solutions and Outdoor Living Solutions by segment. FY2021 is old taxonomy and should not be spliced into current-segment CAGR work. The current segment boundary is therefore FY2022-FY2025 for total segment analysis and FY2023-FY2025 for company-level product/activity trend, with a [DATA GAP: ABS-only FY2023-FY2024 product/category revenue by Building & Infrastructure Solutions and Outdoor Living Solutions is not disclosed in the data package].

1. What This Segment Actually Is

Americas Building Solutions, or ABS, is CRH's North American value-added building products platform. It is not the quarry, cement, asphalt, or paving-heavy North American materials segment; that is Americas Materials Solutions. ABS is the part of CRH that manufactures and sells products used to connect, protect, drain, enclose, secure, landscape, finish, and improve infrastructure and outdoor spaces. The data package describes it in one line as "products that connect and protect infrastructure plus outdoor-living products, primarily in North America" [data_package section 1, segment taxonomy row: Americas Building Solutions].

The segment has two principal product/activity buckets in FY2025. Building & Infrastructure Solutions contributed $2.632B of ABS revenue, while Outdoor Living Solutions contributed $4.490B, for total FY2025 ABS revenue of $7.122B [data_package

section 4, FY2025 product/category bridge by segment]. Building & Infrastructure Solutions includes engineered products for water, energy, transportation, telecommunications, data centers, rail, modular structures, drainage, vaults, enclosures, manholes, pipe-related systems, and complex non-residential projects. CRH Americas describes Oldcastle Infrastructure as a leading provider of engineered product solutions for North American infrastructure projects and says it is a leading provider of concrete utility products for communications, stormwater, infrastructure, and energy markets. The product is usually specified, jobsite-critical, and reliability-sensitive rather than a generic commodity that can be substituted without engineering review.

Outdoor Living Solutions is the larger ABS revenue bucket. CRH Americas positions Oldcastle APG as a North American outdoor living platform that includes hardscapes, masonry, pavers, patio slabs, stone veneer, retaining walls, architectural block, composite decking, dry-mix concrete, fencing, railing, lawn and garden products, and landscape products. The route to market is a mixture of professional contractors, dealers, distributors, retail channels, landscape architects, builders, repair-and-remodel customers, and homeowners. Brands mentioned by CRH Americas and Oldcastle APG include Belgard, Sakrete, Echelon, Jolly Gardener, Amerimix, MoistureShield, PebbleTec, Barrette Outdoor Living, RDI, and ActiveYards. These are more brand, channel, design, and category-management businesses than heavy-materials businesses.

The customer and pricing model differ by product line. Building & Infrastructure Solutions sells into civil contractors, utilities, project owners, transportation agencies, data-center and industrial developers, rail customers, water-system owners, and general contractors. Pricing power comes from specification, product availability, engineered fit, logistics, service, local manufacturing, and delivery reliability. Outdoor Living sells into repair/remodel and new-build ecosystems. Pricing power comes from brand, SKU breadth, dealer and retail shelf space, aesthetic variety, contractor familiarity, installed performance, and the ability to bundle related outdoor products. In both lines, physical footprint matters: these are bulky products that do not travel cheaply over long distances, so local manufacturing, distribution density, and service support are meaningful.

ABS is therefore best understood as a hybrid: part infrastructure products, part consumer/pro-facing outdoor living, and part local manufacturing/distribution system. It is less raw-materials-intense than Americas Materials Solutions, but it still depends on concrete, polymers, steel, labor, freight, plant utilization, working capital, and construction cycles. The segment's edge is not one patent or one megafactory. It is the accumulated network of plants, brands, specifications, customer relationships, and acquired operating companies that sit close to North American construction demand.

2. Current Economics (FY2025 / TTM)

TTM equals FY2025 because the TTM anchor is Q1 FY2025 through Q4 FY2025, ending 2025-12-31. ABS generated FY2025 revenue of $7.122B, or 19.0% of CRH consolidated revenue, and adjusted EBITDA of $1.474B, for a 20.7% adjusted EBITDA margin [data_package section 1, segment taxonomy row; data_package section 3, ABS historicals table]. Segment revenue grew 0.9% in FY2025 after 0.6% growth in FY2024 and 13.4% growth in FY2023 [data_package section 3, ABS YoY row]. Adjusted EBITDA grew 6% in FY2025, and the adjusted EBITDA margin expanded 100 bps from 19.7% to 20.7% [data_package section 3, ABS historical narrative].

The surface-level revenue story looks unexciting: ABS has a $7B revenue base and has grown less than 1% in each of the last two fiscal years. The profit story is better. FY2025 adjusted EBITDA of $1.474B exceeded FY2024 adjusted EBITDA of $1.389B even though revenue was only slightly higher. The data package attributes the improvement to business improvements, asset optimization, acquisition contribution, energy/data-center demand and water infrastructure demand offsetting subdued residential activity and weather [data_package section 3, ABS narrative]. In other words, the segment did not rely on a broad residential recovery. It improved margins while one of its largest demand pools, residential new-build/outdoor living, remained soft.

The FY2025 product split is asymmetric. Building & Infrastructure Solutions was $2.632B, or 37.0% of ABS revenue. Outdoor Living Solutions was $4.490B, or 63.0% of ABS revenue [data_package section 4, FY2025 product/category bridge by segment]. The infrastructure line is smaller but strategically more attractive: it is tied to water, energy, communications, data centers, transportation, and below-ground critical infrastructure. Outdoor Living is larger but more exposed to repair/remodel, housing turnover, consumer confidence, interest rates, and residential new-build. The 2030 model therefore does not treat ABS as one homogenous business. It gives Building & Infrastructure Solutions the higher growth and margin trajectory, while Outdoor Living recovers more slowly and remains the swing factor.

The quarterly pattern reinforces this interpretation. FY2025 ABS revenue by quarter was $1.682B in Q1, $2.159B in Q2, $1.797B in Q3, and $1.484B in Q4. Adjusted EBITDA by quarter was $0.287B, $0.501B, $0.432B, and $0.254B, respectively [data_package section 5, segment quarterly trend]. Q3 was especially strong for margin: ABS revenue rose 2% and adjusted EBITDA rose 22%, lifting margin to 24.0%. Q4 was weaker seasonally and down 1% in revenue, but adjusted EBITDA still grew 2% and margin held at 17.1% [data_package section 5, segment quarterly trend]. That pattern is consistent with a

segment where mix, cost actions, and asset optimization can matter more than small changes in revenue growth.

Capital intensity is real but lower than heavy materials. The data package gives FY2025 ABS labor costs of $1.513B, energy costs of $0.123B, other segment items of $4.012B, and adjusted EBITDA of $1.474B [quant_foundation P2; cited in data_package section 3 source chain]. Energy costs were only 1.7% of ABS revenue, much lower than International Solutions and far lower than cement-heavy operations. Labor was 21.2% of revenue and other segment items were 56.3%. That mix points to plant labor, manufacturing efficiency, freight, raw materials, channel support, SKU complexity, and fixed-cost absorption as the most important operating levers. The 2025 Form 10-K segment note also discloses ABS depreciation, depletion and amortization of $0.387B in FY2025, which implies a modeled operating-income proxy of $1.087B and a modeled operating margin of 15.3% before corporate items and non-segment allocations. That proxy is useful for ER2 rollup, but it is not a CRH-disclosed segment operating income measure.

3. Unit Economics

ABS converts revenue into profit through four main mechanisms: specification value, manufacturing utilization, channel/brand economics, and cost discipline. The infrastructure side sells products that often must be engineered, certified, timed to a project schedule, and delivered near the jobsite. A utility vault, drainage system, precast transportation element, modular structure, or enclosure is not a pure commodity if it is embedded in a larger water, energy, telecom, rail, or data-center project. The cost of a missed delivery or failed product can be far greater than the price difference between suppliers. That gives a scaled incumbent room to earn better margins when it has local capacity, technical support, delivery reliability, and a record with project owners and contractors.

The outdoor living side has a different unit-economic shape. It is not one-off public infrastructure specification. It is SKU breadth, brand pull, home-center and dealer access, contractor familiarity, color/style availability, merchandising, warranty support, and seasonal inventory management. Pavers, retaining walls, dry mixes, fencing, railing, composite decking, lawn/garden products, masonry veneers, pool finishes, and related categories need distribution and channel discipline. The best assets are brands and shelves as much as plants. Gross margin can be attractive when demand is healthy and plants are loaded, but the business is vulnerable to housing turnover, higher rates, weaker discretionary repair/remodel, retail inventory correction, and lower contractor confidence.

The segment's current cost stack is favorable relative to materials-heavy segments. FY2025 energy cost was $0.123B against $7.122B of revenue, while labor was $1.513B and other segment items were $4.012B [quant_foundation P2; data_package section 3 source chain]. Energy inflation matters, but it is not the dominant driver. Labor productivity, automation, plant scheduling, freight, resin/steel/cement-related input costs, warranty, SKU simplification, and procurement are more important. This helps explain how ABS expanded adjusted EBITDA margin by 100 bps in FY2025 despite only 0.9% revenue growth [data_package section 3, ABS table].

Margin expansion has limits. Adjusted EBITDA margin was 19.7% in FY2022, 20.6% in FY2023, 19.7% in FY2024, and 20.7% in FY2025 [data_package section 3, ABS historicals]. That is a healthy band, but it is not a clean stair-step. The FY2024 margin reset shows the segment can give back margin when mix, residential exposure, cost absorption, or weather works against it. My base case assumes adjusted EBITDA margin rises to 22.3% by 2030, with a modeled operating margin proxy of 16.8%. That is above the current 20.7% adjusted EBITDA margin but still below the bull case, because some residential and repair/remodel softness can persist and because mix shift toward infrastructure products will be gradual.

The biggest unit-economic swing is mix. Building & Infrastructure Solutions should have a better durability profile than Outdoor Living because water, energy, telecom, data center, and transportation networks require ongoing capital deployment. It also benefits from the cost of failure and the value of engineering support. Outdoor Living can produce strong margins in good housing cycles, but it faces more competitive substitution from alternative materials and brands. It also has retail/channel inventory risk. The forward model therefore allows Building & Infrastructure Solutions to expand to a higher modeled operating margin than Outdoor Living in every case.

The reinvestment requirement is not trivial. ABS must maintain plants, molds, fleets, yards, inventory, engineering capability, customer service, sales coverage, brand investment, and product innovation. It also depends on acquisition integration. CRH acquired Barrette Outdoor Living in 2022, CertainTeed fencing/railing/decking assets in 2023 through Oldcastle APG, and has historically used M&A to expand product breadth. The 2025 corporate acquisition spend was not primarily an ABS story because Eco Material is in Americas Materials Solutions, but the broader CRH model depends on bolt-on acquisitions. ABS is an acquisition platform when management can buy local or category assets at reasonable returns; it is not a no-capex annuity.

4. Competitive Dynamics

ABS competes in two related but distinct arenas. In infrastructure products, direct competitors include Advanced Drainage Systems in stormwater and onsite wastewater products, private concrete/precast players such as Rinker Materials, Forterra-related assets, Jensen Precast, Contech, regional precast companies, local pipe and drainage suppliers, and in some applications steel, polymer, fiberglass, or cast-in-place alternatives. In outdoor living, competitors include James Hardie/AZEK in exterior and outdoor products, Trex in composite decking and railing, regional hardscape producers such as Unilock, Techo-Bloc and Pavestone, home-center private-label and commodity paver suppliers, masonry and dry-mix brands, fencing and railing manufacturers, and many local landscape-product producers.

The infrastructure competitive structure is attractive but not invulnerable. CRH Americas says Oldcastle Infrastructure has a coast-to-coast facility network and leadership positions in concrete utility products for communications, stormwater, infrastructure, and energy markets. That matters because these products are bulky, often specified, and needed near projects. Advanced Drainage Systems is also formidable. ADS reported FY2025 net sales of $2.904B and adjusted EBITDA of $0.889B, a 30.6% adjusted EBITDA margin, and described itself as a leading manufacturer of stormwater and onsite wastewater solutions. ADS also cited market-share opportunity from material conversion, new products, and demand in data centers and infrastructure. That peer evidence is a useful guardrail: CRH's infrastructure product opportunity is real, but a focused competitor can earn very high margins and will not cede water/stormwater growth easily.

The outdoor living competitive structure is more fragmented and more brand-sensitive. Trex reported FY2025 net sales of $1.2B and adjusted EBITDA of $336M, with management calling out a challenging repair-and-remodel backdrop and a flat expected R&R market for 2026. Trex's gross margin and adjusted EBITDA margin show that branded outdoor products can be high-quality businesses, but the 2025 decline in Trex EBITDA versus 2024 also illustrates the downside from channel, input, startup, and demand pressures. James Hardie completed the AZEK acquisition on July 1, 2025, creating a larger exterior home and outdoor living platform with brands such as TimberTech, AZEK Exteriors, Versatex, StruXure, Ultralox and Intex. That raises competitive intensity in decking, railing, trim, pergolas, and connected outdoor categories. CRH's advantage is breadth across hardscapes, masonry, packaged concrete, fencing, railing, decking, lawn/garden and pool finishes, but it will face stronger strategic competitors in premium exterior systems.

Pricing power is therefore uneven. In infrastructure products, CRH can have pricing power when capacity is local, product specifications are tight, and project delivery matters. In outdoor living, pricing power is stronger for branded, design-driven, professionally specified products, and weaker for commodity pavers, dry mix, blocks, or retail SKUs where home centers can compare alternatives and push margin back to suppliers. The segment's FY2025 margin lift despite flat revenue suggests ABS had enough pricing/mix/cost control to protect profit, but it does not prove permanent pricing power across every SKU.

Entry barriers are local density, product qualification, channel access, and acquisition history. A new entrant can make a paver or precast item; it is harder to build a national distribution system, obtain the right manufacturing footprint, get specified into critical utility projects, win contractor trust, hold home-center shelf space, and manage thousands of bulky SKUs. The moat is strongest where CRH combines a local plant network with specified engineered products and customer relationships. It is weaker where products are commodity-like or where a retailer can force a bid process across multiple suppliers.

Substitution risk differs by line. Infrastructure products can be substituted across material types: concrete, polymer, steel, fiberglass, corrugated plastic, and cast-in-place solutions can all compete depending on application. Outdoor living faces substitution from wood, composite, PVC, stone, brick, concrete pavers, porcelain, gravel, turf, and lower-cost private-label products. The model does not assume heroic share gains. It assumes ABS can grow moderately above current low-single-digit trends because infrastructure offsets a slow housing recovery, not because it dominates every category.

5. Moat At The Segment Level

The ABS moat is real but narrower than the corporate narrative might suggest. The strongest moat elements are local production density, technical specification, installed base relationships, product breadth, brand portfolio, and channel access. Building & Infrastructure Solutions likely has the better moat because water, energy, telecom, data center, stormwater, and transportation projects value reliability and qualification. A product failure can be expensive, so buyers care about engineering, history, and service. CRH's facility footprint gives it delivery advantages in bulky products. Its broad customer relationships across materials, road, infrastructure and building products should also help source opportunities earlier in the project cycle.

Outdoor Living has a more consumer-facing moat, but it is less protected. Belgard, Sakrete, Echelon, Amerimix, Barrette, MoistureShield, PebbleTec and related brands are meaningful. Contractors and consumers do care about aesthetics,

availability, warranty, and familiarity. However, outdoor living categories are still competitive and cyclically exposed. A paver, retaining wall, dry mix, composite deck, fence or railing product can be substituted more easily than a specified utility vault embedded in a data-center or water project. Retailers and dealers can demand price support. Housing downturns can reduce volume and fixed-cost absorption. Brand helps, but it is not the same as ownership of scarce aggregate reserves.

The moat is also partly acquisition-based. CRH has built ABS by adding and integrating companies, brands, plants, and product categories. That can be powerful if management keeps buying reasonably priced assets and then improves operations. It can also weaken returns if acquisition prices rise or if the platform uses deal flow to paper over organic stagnation. Gideon requires durable high-return compounding, not just scale. ABS's FY2025 adjusted EBITDA margin of 20.7% is attractive, but segment revenue growth was only 0.9%. The moat case depends on converting the infrastructure opportunity into mid-single-digit-plus revenue growth without overpaying for M&A.

Durability over the next five to ten years is highest in water, energy, communications, stormwater, transportation, and data center-adjacent products. These are tied to aging infrastructure, grid buildout, resilience, electrification, digital infrastructure, and public/private capital projects. Outdoor living durability is adequate but more cyclical. Repair/remodel provides a recurring base, but consumer sentiment, rates, housing turnover, and competitive products matter. In a 2046-style test, the physical need for these products will still exist, but the business may look different: more polymer/composite products, more recycled content, more stormwater and resilience systems, more prefabrication, and more integrated project support. CRH's ability to adapt across materials is a strength.

The segment-level moat verdict is "moderate with pockets of strength." It is not a pure commodity segment, and it is not a software-like compounding machine. It is a scaled, physically local, brand/specification-driven platform whose best economics are in critical infrastructure products. The ER2 model should give ABS credit for margin resilience and infrastructure mix, while refusing to underwrite consolidated 7%-9% revenue growth purely from the ABS historical run rate.

6. Historical Growth Rates - Reproduced From Data Package

The table below reproduces the clean disclosed historicals relevant to ABS. Segment revenue and adjusted EBITDA use FY2022-FY2025 current-segment disclosure. Product/activity category dollars use FY2023-FY2025 current-taxonomy company-wide disclosure because ABS-only product category histories are not disclosed before the FY2025 bridge. The FY2025 ABS split is disclosed and is used as the forward model base.

Line	FY2022 rev	FY2023 rev	FY2024 rev	FY2025 rev / TTM	CAGR shown	Most recent YoY	Data package cite
Americas Building Solutions total	$6.188B	$7.017B	$7.059B	$7.122B	4.8% FY2022-FY2025	0.9%	data_package section 3, ABS table rows: Revenue and YoY %
Building & Infrastructure Solutions, company-wide category	n/d	$4.698B	$4.567B	$4.868B	1.8% FY2023-FY2025	6.6% company-wide; ABS row says +2%	data_package section 4, dollar-disclosed product row and ABS growth-only row
Outdoor Living Solutions, company-wide category	n/d	$5.126B	$5.135B	$5.116B	-0.1% FY2023-FY2025	-0.4% company-wide; ABS row says in line/down slightly	data_package section 4, dollar-disclosed product row and ABS growth-only row
ABS FY2025 Building & Infrastructure Solutions bridge	n/d	n/d	n/d	$2.632B	n/m	+2% growth-only disclosure	data_package section 4, FY2025 product/category bridge by segment and growth-only row
ABS FY2025 Outdoor Living Solutions bridge	n/d	n/d	n/d	$4.490B	n/m	in line/down slightly	data_package section 4, FY2025 product/category bridge by segment and growth-only row

Arithmetic checks:

- ABS total: $6.188B x 1.134 = $7.017B, $7.017B x 1.006 = $7.059B, and $7.059B x 1.009 = $7.122B. The sequence ties within rounding to data_package section 3.
- Building & Infrastructure Solutions company-wide category: $4.698B x 0.972 = $4.567B, and $4.567B x 1.066 = $4.868B. The category-level arithmetic ties within rounding to data_package section 4.

- Outdoor Living Solutions company-wide category: $5.126B x 1.002 = $5.135B, and $5.135B x 0.996 = $5.116B. The category-level arithmetic ties within rounding to data_package section 4.

[DATA GAP: The data package does not disclose ABS-only FY2023 and FY2024 revenue for Building & Infrastructure Solutions or Outdoor Living Solutions. The forward model uses the disclosed FY2025 ABS product bridge as the base and uses company-wide category histories plus ABS-specific qualitative/growth commentary as context.]

7. Management Guidance - Quoted From Data Package Section 6

The data package provides short verified quote fragments rather than long transcript excerpts. I reproduce every ABS-specific item below and add enterprise guidance that constrains the segment model.

Data package row	Quote fragment	Topic	Interpretation for ABS model
section 6, Americas Building Solutions row 1	"strong demand in water infrastructure"	Building & Infrastructure Solutions	Water infrastructure is the core positive demand signal for the infrastructure product line. It supports above-segment growth for the $2.632B FY2025 B&I base.
section 6, Americas Building Solutions row 2	"strong performance really came from"	Infrastructure business within ABS	Management points to the infrastructure side, not outdoor living, as the source of stronger ABS profit performance. This supports a higher forward margin for B&I than for Outdoor Living.
section 6, Americas Building Solutions row 3	"well positioned for another year"	Full-year growth outlook	Management stayed constructive despite Q1 weather and residential softness. This supports a base case above the 0.9% FY2025 total segment growth rate, but not an aggressive bull case by itself.
section 6, Americas Building Solutions row 4	"data center end-market"	Reindustrialization and energy/data center demand	Data center and energy-sector activity are specific growth drivers for B&I products such as vaults, enclosures, precast, drainage and utility infrastructure.
section 6, capital allocation row: Investor Day	"7% and 9%"	2026-2030 revenue growth target	The corporate target is total company revenue growth including organic and inorganic growth, not a pure organic same-store guide. ABS should not be forced to grow 7%-9% in base case given its recent near-flat revenue.
section 6, capital allocation row: Investor Day	"$40 billion of financial capacity"	Deployment capacity	CRH has capital capacity to support acquisitions and growth capex. ABS can participate, but the model separates organic recovery from M&A-assisted growth.
section 6, capital allocation row: FY2025 release	"$8.1bn to $8.5bn"	FY2026 adjusted EBITDA outlook	The company-wide 2026 EBITDA guide supports continued margin progress, but it is not segment-specific and does not justify inventing ABS operating income.

The guidance anchor is therefore mixed. Management provides clear positive signals for water infrastructure, data centers, energy, and the infrastructure portion of ABS. It does not provide a precise segment revenue guide, ABS-only product dollar history, or product-level margin. The model treats the B&I product line as the growth engine and treats Outdoor Living as a slower recovery line.

8. Forward Growth Assumptions - Explicit, Per Product

Forward horizon is TTM ending 2025-12-31 to 2030-12-31, exactly five calendar years. The product base is the disclosed FY2025 ABS bridge: Building & Infrastructure Solutions $2.632B and Outdoor Living Solutions $4.490B [data_package section 4, FY2025 product/category bridge by segment]. No product dollars are back-solved for prior ABS-only periods.

Base Case Growth Assumptions

Product	FY2025 ABS base	Historical context	Latest YoY	Mgmt FY+1 / 2030 guide	Base CAGR TTM to 2030	2030 revenue	Justification
Building & Infrastructure Solutions	$2.632B	Company-wide category CAGR 1.8% FY2023-FY2025; ABS-only history not disclosed	ABS growth-only disclosure +2%; company-wide +6.6%	Water infrastructure, data center and energy demand; corporate revenue target 7%-9% total incl. M&A	6.5%	$3.606B	Base assumes acceleration from FY2025 because management specifically tied ABS strength to water, energy and data-center demand, but holds the line below corporate 7%-9% because that target includes M&A and because recent ABS-specific product growth was only +2%.
Outdoor Living Solutions	$4.490B	Company-wide category CAGR -0.1% FY2023-FY2025; ABS-only history not disclosed	In line/down slightly	No explicit product guide; residential remained subdued	3.5%	$5.333B	Base assumes a gradual repair/remodel and residential recovery, plus pricing and product mix, but keeps Outdoor Living below B&I because recent demand was flat and peers such as Trex still described repair/remodel as challenged into 2026.
Segment total	$7.122B	ABS total CAGR 4.8% FY2022-FY2025, but only 0.9% in FY2025	+0.9%	Corporate target is not segment-specific	4.6% blended	$8.939B	The blended result is below CRH's 7%-9% corporate target and above FY2025's 0.9%, reflecting infrastructure mix improvement without assuming a full outdoor living snapback.

Bull Case Growth Assumptions

Product	FY2025 ABS base	Historical context	Latest YoY	Mgmt FY+1 / 2030 guide	Bull CAGR TTM to 2030	2030 revenue	Justification
Building & Infrastructure Solutions	$2.632B	Company-wide category CAGR 1.8% FY2023-FY2025	ABS +2%; company-wide +6.6%	Water, energy and data-center demand; M&A capacity	9.0%	$4.050B	Bull assumes CRH captures a sustained wave of water, grid, data-center and industrial infrastructure work, uses bolt-on M&A intelligently, and wins share through local facility density and specification relationships.
Outdoor Living Solutions	$4.490B	Company-wide category CAGR -0.1% FY2023-FY2025	In line/down slightly	No explicit product guide	5.5%	$5.868B	Bull assumes rates ease, housing turnover improves, repair/remodel returns to growth, and CRH's Oldcastle APG brand/channel portfolio takes share without severe retailer price pressure.
Segment total	$7.122B	ABS total CAGR 4.8% FY2022-FY2025	+0.9%	Corporate target 7%-9% total incl. M&A	6.8% blended	$9.918B	Bull still does not push ABS to 9% blended CAGR because Outdoor Living is larger and more cyclical. It lets B&I compound near corporate target while Outdoor Living improves but does not boom.

Bear Case Growth Assumptions

Product	FY2025 ABS base	Historical context	Latest YoY	Mgmt FY+1 / 2030 guide	Bear CAGR TTM to 2030	2030 revenue	Justification
Building & Infrastructure Solutions	$2.632B	Company-wide category CAGR 1.8% FY2023-FY2025	ABS +2%; company-wide +6.6%	Water/data-center demand still positive but not immune	3.0%	$3.051B	Bear assumes project delays, competitive pressure from ADS and regional precast/drainage players, and weaker private non-residential work offset public water and utility demand.
Outdoor Living Solutions	$4.490B	Company-wide category CAGR -0.1% FY2023-FY2025	In line/down slightly	No explicit product guide	0.0%	$4.490B	Bear assumes no real housing turnover recovery, pressured discretionary repair/remodel, retailer/channel destocking, and price competition from local hardscape, composite, fencing and private-label alternatives.
Segment total	$7.122B	ABS total CAGR 4.8% FY2022-FY2025, inflated by FY2023 step-up	+0.9%	Corporate target not achieved by ABS	1.2% blended	$7.541B	Bear keeps the segment above outright decline because B&I still grows, but the larger Outdoor Living bucket stalls.

Thesis-consistency check: the base case does not require a sharp deceleration from a hot current growth rate. ABS latest total growth is only 0.9%, so the model's risk is acceleration, not deceleration. The acceleration is justified only for the infrastructure product line, where management commentary identifies water infrastructure, energy, and data centers as demand supports. Outdoor Living is deliberately modeled below the B&I line in all cases.

9. Forward Operating Margin Assumptions - Explicit And Justified

The official current profit base is FY2025 adjusted EBITDA of $1.474B on $7.122B of revenue, or 20.7% [data_package section 3, ABS historicals]. The 2025 Form 10-K segment D&A table discloses ABS depreciation, depletion and amortization of $0.387B for FY2025, $0.337B for FY2024 and $0.299B for FY2023. Subtracting FY2025 segment D&A from adjusted EBITDA gives a modeled operating-income proxy of $1.087B and a modeled operating margin proxy of 15.3%. This is not disclosed segment operating income. It is an ER2 modeling bridge to avoid pretending adjusted EBITDA is operating income.

Current margin drivers are favorable but not all permanent. FY2025 adjusted EBITDA margin expanded 100 bps to 20.7% because business improvements, asset optimization, acquisition contribution, energy/data-center demand and water infrastructure demand offset subdued residential and weather [data_package section 3, ABS narrative]. The base case assumes some of those improvements continue, but it also assumes Outdoor Living remains a mixed-quality category and that infrastructure products require ongoing manufacturing, engineering, and local capacity investment.

Product Margin Assumptions

Case	Product	2030 revenue	Assumed adjusted EBITDA margin	Assumed modeled operating margin	2030 modeled operating income	Mechanism
Bear	Building & Infrastructure Solutions	$3.051B	22.0%	16.0%	$0.488B	Utilization improves modestly but pricing is pressured by competitive stormwater/precast alternatives and project delays.
Bear	Outdoor Living Solutions	$4.490B	18.0%	12.0%	$0.539B	Flat revenue creates fixed-cost absorption drag, retailer/channel pressure, and limited price realization.
Base	Building & Infrastructure Solutions	$3.606B	25.0%	19.5%	$0.703B	Mix shifts toward specified water, energy, data-center and utility products; scale and manufacturing productivity offset reinvestment.

Case	Product	2030 revenue	Assumed adjusted EBITDA margin	Assumed modeled operating margin	2030 modeled operating income	Mechanism
Base	Outdoor Living Solutions	$5.333B	20.5%	15.0%	$0.800B	Margins roughly normalize as repair/remodel improves, but competition and channel power cap upside.
Bull	Building & Infrastructure Solutions	$4.050B	27.0%	21.5%	$0.871B	Strong project demand, high utilization, specification value and procurement/manufacturing leverage lift margins.
Bull	Outdoor Living Solutions	$5.868B	22.5%	17.0%	$0.998B	Housing and R&R recovery restore volume, premium products mix up, and brand/channel strength improves price realization.

The implied segment adjusted EBITDA margin is 19.6% in bear, 22.3% in base, and 24.3% in bull. The implied modeled operating margin is 13.6% in bear, 16.8% in base, and 18.8% in bull. The base adjusted EBITDA margin is consistent with CRH's enterprise 2030 adjusted EBITDA margin target of 22%-24%, while the bull case lets ABS modestly exceed the top end because Building & Infrastructure Solutions becomes a larger mix of the segment. The bear case falls below FY2025 because flat Outdoor Living revenue would pressure plant absorption and retailer/channel economics.

The largest margin change is in B&I, where base modeled operating margin rises from the implied current segment proxy to 19.5% by 2030. Because CRH does not disclose B&I-level operating income or D&A, this is an assumption layered on the segment proxy, not a disclosed product baseline. The mechanism is mix and scale, not magic cost cutting: water, energy, data-center and utility products should carry more specification value than commodity outdoor or low-end masonry products; local production density improves freight and delivery reliability; and higher volumes absorb fixed plant and engineering costs. If B&I's growth is instead price-led without volume or if competitive alternatives capture the new projects, the base margin expansion would fail.

10. Segment Rollup - Bottoms-Up, Arithmetic Tie

The rollup starts from the disclosed FY2025 ABS product bridge and compounds each product line by the case-specific CAGR over exactly five calendar years to 2030-12-31. Product-level revenue sums to segment revenue in every case. Modeled operating income is product revenue multiplied by product-level modeled operating margin from section 9. The adjusted EBITDA margin is shown for context because it is CRH's official segment profit metric.

Case	B&I 2030 revenue	Outdoor Living 2030 revenue	Segment 2030 revenue	Segment revenue CAGR	Segment adjusted EBITDA	Segment adjusted EBITDA margin	Modeled operating income	Modeled operating margin
Bear	$3.051B	$4.490B	$7.541B	1.2%	$1.479B	19.6%	$1.027B	13.6%
Base	$3.606B	$5.333B	$8.939B	4.6%	$1.995B	22.3%	$1.503B	16.8%
Bull	$4.050B	$5.868B	$9.918B	6.8%	$2.414B	24.3%	$1.868B	18.8%

Arithmetic tie-outs:

- Bear revenue: $3.051B + $4.490B = $7.541B. Bear modeled operating income: $3.051B x 16.0% + $4.490B x 12.0% = $1.027B.
- Base revenue: $3.606B + $5.333B = $8.939B. Base modeled operating income: $3.606B x 19.5% + $5.333B x 15.0% = $1.503B.
- Bull revenue: $4.050B + $5.868B = $9.918B. Bull modeled operating income: $4.050B x 21.5% + $5.868B x 17.0% = $1.868B.

The base case is intentionally below CRH's company-wide 7%-9% 2026-2030 revenue target because that target is total revenue growth including M&A and because ABS's latest disclosed segment growth was 0.9%. For ABS to hit a 7%-9% segment CAGR, either Outdoor Living must recover much more strongly than modeled or CRH must allocate meaningful acquisition capital to this segment. That could happen, but it is not the base case.

The model also shows why ABS matters to consolidated margins. Moving from the FY2025 adjusted EBITDA margin of 20.7% to a base 22.3% adds roughly $0.52B of adjusted EBITDA by 2030 versus holding revenue at the FY2025 base, before considering corporate allocation. The value creation is a combination of moderate revenue growth and mix/margin improvement, not sheer top-line expansion. That makes ABS a useful compounder if management executes, but a poor candidate for heroic growth assumptions.

11. Key Risks And Wildcards

Bear risk - housing and repair/remodel remain weak. Outdoor Living is 63% of FY2025 ABS revenue. If mortgage rates, affordability, housing turnover, consumer confidence and contractor backlogs stay weak, Outdoor Living can remain flat or decline. Because the category has manufacturing and channel fixed costs, margin can compress faster than revenue.

Bear risk - infrastructure products face stronger substitution. ADS is a focused, profitable competitor in stormwater and onsite wastewater, and private precast/drainage players compete locally. Polymer, steel, concrete and cast-in-place alternatives can substitute depending on engineering requirements. If CRH loses specifications or has to price aggressively, B&I growth could be lower than the base case and margins could stall.

Bear/base risk - M&A returns fade. CRH has a strong acquisition machine, but acquisition-led platforms become vulnerable when purchase prices rise or when integration synergies are overstated. If ABS needs deal flow to reach mid-single-digit growth, incremental returns may fall below Gideon standards.

Base risk - data center demand is lumpy. Data centers are a credible demand driver for utility, electrical, drainage, enclosure and precast products, but projects can be delayed by power availability, permitting, customer capital budgets, grid constraints, or changes in AI infrastructure economics. The model assumes a sustained contribution, not a single-year spike.

Base/bull wildcard - water infrastructure accelerates. U.S. water, stormwater, resilience and flood-control needs are durable. If federal/state/local funding, regulatory requirements and private resilience spending accelerate, B&I could compound closer to the bull case even without a major housing recovery.

Bull wildcard - outdoor living normalizes faster. If interest rates ease, housing turnover recovers, contractors rebuild backlogs, and retailers stabilize inventories, Oldcastle APG's product breadth could produce better operating leverage than the base case. This is the main path for ABS to approach the high end of CRH's corporate growth target.

Bear risk - channel power and private label. Home centers, dealers and distributors can push back on pricing, demand promotions, or shift toward alternative suppliers in commodity SKUs. This is more relevant for Outdoor Living than for specified infrastructure products.

Regulatory and environmental risk - product standards, stormwater rules, carbon expectations, recycled content requirements, and local plant permitting can help incumbents but also raise costs. The effect is ambiguous: regulation can strengthen CRH's moat if smaller competitors struggle, but it can reduce returns if compliance absorbs capital faster than pricing can recover it.

Summary Table

The following table uses modeled operating income proxy, not disclosed CRH segment operating income. Official segment profit remains adjusted EBITDA.

Probability weights favor the base case because FY2025 revenue was only +0.9% while adjusted EBITDA grew +6% and management commentary was constructive but segment-specific guidance was not quantified. The 25% bear weight captures the large Outdoor Living exposure and residential/channel risk; the 25% bull weight captures water, energy, data-center and M&A upside without treating the company-wide 7%-9% target as an ABS-specific guide.

Case	Segment TTM+5y Revenue	Segment TTM+5y Op Margin	Segment TTM+5y Op Income	Probability
Bear	$7.541B	13.6%	$1.027B	25%
Base	$8.939B	16.8%	$1.503B	50%
Bull	$9.918B	18.8%	$1.868B	25%

Source Note

Internal sources: `data_package.md`, especially section 1 segment taxonomy, section 3 ABS historicals, section 4 product/activity historicals and FY2025 bridge, section 5 quarterly segment trend, section 6 management commentary, and section 10 caveats; `quant_foundation.md` P2 and P4 for segment expense and TTM base; `appendix_A_primer.md` for reader context only, not quantitative sourcing.

External live sources used for enrichment and competition: [CRH 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/849395/000162828026009043/crh-20251231.htm), [CRH FY2025 results release](https://www.crh.com/media/press-releases/2026/crh-reports-q4-and-fy-2025-results/), [CRH Investor Day 2025 release](https://www.crh.com/media/press-releases/2025/crh-sets-out-next-era-of-growth-and-five-year-targets-at-investor-day/), [CRH Americas Oldcastle Infrastructure](https://www.crhamericas.com/infrastructure), [CRH Americas Oldcastle APG](https://www.crhamericas.com/apg), [Advanced Drainage Systems FY2025 results](https://investors.ads-pipe.com/press-releases/press-release-details/2025/Advanced-Drainage-Systems-Announces-Fourth-Quarter-and-Fiscal-Year-2025-Results/default.aspx), [Trex FY2025 results](https://trexcompanyinc.gcs-web.com/news-releases/news-release-details/trex-company-reports-fourth-quarter-and-full-year-2025-results), and [James Hardie/AZEK completion release](https://ir.jameshardie.com/news/news-details/2025/James-Hardie-Completes-Acquisition-of-AZEK-to-Become-a-Leading-Provider-of-Exterior-Home-and-Outdoor-Living-Solutions/default.aspx).

Live-fetch caveat: direct PowerShell downloads of the ADS and James Hardie IR pages were blocked by JavaScript/cookie challenges after one retry, and the direct Trex PowerShell download timed out after one retry. The web retrieval tool opened those pages successfully, so the competitive facts were cited from the live web pages rather than from raw saved copies. No CRH historical numbers were sourced from those peer pages.

Appendix S - Synthesis (Combined Earnings Model)

CRH - Synthesis / Combined Earnings Model

Company: CRH plc Ticker: CRH Prepared for: ER2 / Gideon Subagent S Prepared on: 2026-04-26 Output path: `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\appendix_synthesis.md`

This appendix is the combined TTM+5 year earnings model for CRH. It uses the DR-cleared data package, the reviewed segment appendices, the quant foundation and quant foundation review, and the completed management and moat appendices. It does not replace official SEC/CRH values with FMP statement values where CRH-specific discrepancies are already documented. The important control points are repeated throughout because they drive the model: FY2025 is both the latest completed fiscal year and the TTM anchor, segment operating income is not disclosed, Americas Materials Solutions is modeled only on adjusted EBITDA, and the consolidated operating-income output is built through a company-level adjusted EBITDA-to-EBIT bridge.

Live market-data source for the price gate: FMP stable `quote CRH` and `profile CRH` were fetched live in Codex on 2026-04-26. The quote endpoint returned price $118.00, NYSE exchange, market cap $78.848B, previous close $117.16, and timestamp 1777060802, which converts to 2026-04-24 20:00:02 UTC, the latest trading-session anchor available before the Sunday 2026-04-26 run date. The profile endpoint returned CRH plc, NYSE, USD, market cap $78.848B, sector Basic Materials, industry Construction Materials, CEO Jim Mintern, and active trading status. Current price for the P/E 15 test is therefore $118.00.

Stage 0 time anchor

- Today: 2026-04-26.
- Company fiscal year convention: CRHâ€™s fiscal year ends December 31.
- Most recently reported quarter: Q4 FY2025 / FY2025, period ended 2025-12-31. CRH published/filed its 2025 Form 10-K on 2026-02-18; CRH has announced Q1 2026 results for 2026-04-30, so Q1 2026 is not yet reported as of 2026-04-26.
- TTM anchor: Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025 -> TTM ending 2025-12-31.
- Forward horizon: TTM end date 2025-12-31 + 5 calendar years = 2030-12-31. Compounding span is exactly 5 calendar years.

1. Anchors

Anchor	Value	Source / note
Fiscal year end	December 31	data_package.md section 0
TTM anchor end date	2025-12-31	Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025
TTM quarters	Q1 FY2025, Q2 FY2025, Q3 FY2025, Q4 FY2025	data_package.md section 5; quant_foundation.md P4
Latest completed FY label	FY2025	same as TTM anchor for historical tie-out
Horizon date	2030-12-31	TTM end + exactly 5 calendar years
Compounding span	5.0 calendar years	not six fiscal years
Current price	$118.00	FMP stable quote/profile live fetch, 2026-04-26
Market cap	$78.848B	FMP stable quote/profile live fetch
TTM revenue	$37.447B	official SEC/CRH, QF/QFR-cleared
TTM operating income	$5.440B	official SEC/CRH, QF/QFR-cleared
TTM adjusted EBITDA	$7.681B	official SEC/CRH, QF/QFR-cleared
TTM net income attributable to CRH	$3.753B	official SEC/CRH, QF/QFR-cleared
TTM diluted share count	677.0M	2025 Form 10-K / quant_foundation.md P6
FY2025 adjusted ROIC	12.1%	official CRH non-GAAP metric; Gideon yellow flag

The TTM base is unusually clean because CRH's FY2025 equals the latest four-quarter period. The clean anchor does not remove the main modeling caveat: CRH's reportable segment profit measure is adjusted EBITDA, not segment operating income. The synthesis must therefore avoid taking modeled ABS and International operating-income proxies and treating them as disclosed segment OI. For the company-level earnings build, adjusted EBITDA is the common segment language, and consolidated EBIT / operating income is derived through a bridge from adjusted EBITDA.

2. Segment-Level Forward Assumptions

The table below reproduces the reviewed segment outputs. It does not re-derive the B appendices. Dollar figures are billions.

Segment	TTM revenue	Bear TTM+5y revenue	Base TTM+5y revenue	Bull TTM+5y revenue	Bear profit metric	Base profit metric	Bull profit metric	Source
Americas Materials Solutions	17.029	21.028	23.847	26.161	Adj. EBITDA $4.942; margin 23.5%	Adj. EBITDA $5.967; margin 25.0%	Adj. EBITDA $6.981; margin 26.7%	appendix_B_americas_materials_solutions.md sections 8-10
Americas Building Solutions	7.122	7.541	8.939	9.918	Modeled OI proxy $1.027; proxy margin 13.6%; adj. EBITDA $1.479	Modeled OI proxy $1.503; proxy margin 16.8%; adj. EBITDA $1.995	Modeled OI proxy $1.868; proxy margin 18.8%; adj. EBITDA $2.414	appendix_B_americas_building_solutions.md sections 8-10
International Solutions	13.296	14.567	16.991	18.552	Modeled OI proxy $1.298; proxy margin 8.9%; adj. EBITDA $2.201	Modeled OI proxy $2.108; proxy margin 12.4%; adj. EBITDA $3.093	Modeled OI proxy $2.635; proxy margin 14.2%; adj. EBITDA $3.674	appendix_B_international_solutions.md sections 8-10
Total	37.447	43.136	49.777	54.631	Adj. EBITDA $8.622	Adj. EBITDA $11.055	Adj. EBITDA $13.069	Synthesis sum

The source files use different profit outputs because the disclosure allows different levels of modeling. AMS uses adjusted EBITDA only and explicitly states that segment OI is not disclosed or estimated. ABS and International include modeled OI proxies after D&A assumptions, but those are non-disclosed modeling bridges. The synthesis therefore shows both the proxy values and the consolidated bridge, and it labels the proxy status every time it matters.

The base revenue rollup implies a company-wide TTM to TTM+5y CAGR of 5.86%. That is below CRH's 2025 Investor Day 7%-9% average annual total revenue target for 2026-2030, because the segment appendices do not force every reportable segment to the corporate target and because the target includes organic plus inorganic growth. The bull case, at 7.85% consolidated revenue CAGR, is the case closest to the midpoint of that target.

3. Combined Revenue Build

Line	Bear	Base	Bull
Americas Materials Solutions	21.028	23.847	26.161
Americas Building Solutions	7.541	8.939	9.918
International Solutions	14.567	16.991	18.552
Sum of segment TTM+5y revenue	43.136	49.777	54.631
Corporate eliminations / residual	0.000	0.000	0.000
Combined TTM+5y revenue	43.136	49.777	54.631
Implied TTM to TTM+5y CAGR	2.87%	5.86%	7.85%

There is no segment revenue residual in the historical foundation. The quant foundation shows current-taxonomy segment revenue sums equal consolidated revenue for FY2022, FY2023, FY2024 and FY2025, and the data package repeats that CRH segment revenue has no unexplained residual. The synthesis keeps that structure and uses zero corporate eliminations at the revenue line. If future CRH filings introduce a changed segment taxonomy or meaningful intersegment eliminations, this line should be revisited, but no adjustment is needed for the reviewed FY2025 base.

The base case is not a straight-line copy of the corporate 7%-9% target. AMS grows at roughly the low end of the target because the appendix credits infrastructure, Eco Material, aggregates/SCM exposure and bolt-on M&A. ABS grows below the target because Outdoor Living starts from a weak residential/repair-remodel base and was only roughly flat in FY2025. International grows above its 2022-2025 segment history because FY2025 momentum, Australia/Adbri and pricing justify a lift, but it remains below the corporate target because Europe and residential cyclicality are real.

4. Adjusted EBITDA and Operating-Income Bridge

The required company-level EBIT / operating-income output is built from adjusted EBITDA, because adjusted EBITDA is CRH's official reportable segment profit metric. The bridge subtracts modeled depreciation, depletion, amortization and other EBITDA-to-operating-income reconciling items. It is not a segment-OI disclosure.

FY2025 bridge anchor: CRH reported adjusted EBITDA of $7.681B and operating income of $5.440B. The bridge difference was $2.241B, or 6.0% of revenue. The ABS appendix states FY2025 ABS D&A of $0.387B. The International appendix uses FY2025 International D&A of $0.786B. The residual needed to reconcile FY2025 adjusted EBITDA to FY2025 operating income is therefore about $1.068B for AMS / other EBITDA-to-EBIT items, or 6.3% of AMS revenue. The forward bridge uses that history with modest scale leverage in base and bull, and less leverage in bear.

Line	Bear	Base	Bull
AMS adjusted EBITDA	4.942	5.967	6.981
ABS adjusted EBITDA	1.479	1.995	2.414
International adjusted EBITDA	2.201	3.093	3.674
Combined adjusted EBITDA	8.622	11.055	13.069
Combined adjusted EBITDA margin	20.0%	22.2%	23.9%
AMS / residual bridge charge	(1.346)	(1.478)	(1.544)
ABS bridge charge embedded in proxy	(0.452)	(0.492)	(0.546)
International bridge charge embedded in proxy	(0.903)	(0.985)	(1.039)
Total EBITDA-to-EBIT bridge charge	(2.701)	(2.955)	(3.129)
Combined operating income / EBIT	5.921	8.100	9.940
Implied operating margin	13.7%	16.3%	18.2%

The AMS bridge charge is the sensitive judgment in this section. It is not presented as disclosed AMS depreciation or AMS operating income. It is a conservative way to convert the reviewed AMS adjusted EBITDA output into a consolidated operating-income model. The bear charge is 6.4% of AMS revenue, close to the FY2025 residual rate, because lower utilization and slower growth reduce fixed-asset leverage. The base charge is 6.2%, still close to history and consistent with a capital-heavy M&A/capex compounder. The bull charge is 5.9%, giving some utilization benefit but not assuming a software-like margin outcome.

The base adjusted EBITDA margin of 22.2% sits inside CRH's 2030 enterprise target range of 22%-24%. The base operating margin of 16.3% is a meaningful improvement from FY2025's 14.5%, but it is not heroic. It requires AMS to hold high-quality materials margins, ABS to recover infrastructure mix, and International to retain part of the FY2025 efficiency and portfolio gains. It also requires acquisition integration to show up in operating income, not only in adjusted EBITDA. That condition matters because the moat appendix marks the moat gate Yellow, not full Pass, and the management appendix explicitly flags incremental ROIC discipline as a monitoring item.

5. Net Income and EPS Build

The below-the-line assumptions are deliberately simple. FY2025 interest expense was $0.810B, up from $0.612B in FY2024 because gross debt rose. Net debt / adjusted EBITDA was 1.84x at FY2025 year-end, so CRH has balance-sheet capacity, but the model should not assume growth is free. I use net interest expense of $0.90B in bear, $1.05B in base, and $1.20B in bull. The bull case carries higher interest because it requires more growth investment and M&A. Other income is held modest at $0.10B, $0.15B and $0.20B. The tax rate is 22.0% in all cases, close to the FY2025 income-tax reference of about 21.7%. Non-controlling interest is modeled at 1.0% of net income, close to FY2025's small gap between consolidated net income and net income attributable to CRH.

Line	Bear	Base	Bull
Combined operating income / EBIT	5.921	8.100	9.940
Net interest expense	(0.900)	(1.050)	(1.200)
Other income	0.100	0.150	0.200
Pre-tax income	5.121	7.200	8.940

Line	Bear	Base	Bull
Tax rate	22.0%	22.0%	22.0%
Income tax expense	(1.127)	(1.584)	(1.967)
Net income	3.994	5.616	6.973
Less non-controlling interest	(0.040)	(0.056)	(0.070)
Net income attributable to CRH	3.954	5.560	6.903
Diluted share count at TTM+5y	642.9M	630.8M	621.4M
EPS at TTM+5y	$6.15	$8.81	$11.11

The base case produces $5.560B of net income attributable to CRH and $8.81 of EPS. That compares with FY2025 net income attributable to CRH of $3.753B and diluted EPS of $5.51. The five-year EPS CAGR is roughly 9.9%, faster than revenue growth because operating margin expands and the share count falls, but not implausibly fast for a company with mid-single-digit total revenue growth, recurring buybacks and an adjusted EBITDA margin target above the FY2025 level. The model is not purely buyback-driven. If the base ending share count were held flat at 677.0M, base EPS would be $8.21, still above the $7.87 P/E 15 requirement but with a much narrower cushion.

6. Share Count Path

CRH's share count path must be explicit. FY2025 weighted average diluted shares were 677.0M. The five-year buyback history is $0.896B in FY2021, $1.178B in FY2022, $3.067B in FY2023, $1.482B in FY2024 and $1.181B in FY2025, for an average of about $1.56B per year. The base case uses $1.5B of annual repurchases, which is close to that history and below the adjusted FCF base after considering dividends, capex and M&A. Bear uses $1.0B per year. Bull uses $2.0B per year. This is consistent with the management appendix: buybacks are meaningful but not reckless, M&A is the defining capital tool, and equity compensation is not swamping repurchases.

For SBC issuance, I use FY2025 share-based compensation expense of $143M from CRH's 2025 Form 10-K Note 16 and divide by the live price of $118.00, producing about 1.2M shares per year. This is only a rough dilution proxy, but it is better than assuming repurchases flow one-for-one into lower diluted shares.

Base-case share path:

Year	Starting shares	Buyback spend	Avg price assumed	Shares retired	SBC issuance	Ending shares
2026	677.0M	$1.5B	$125	12.0M	1.2M	666.2M
2027	666.2M	$1.5B	$135	11.1M	1.2M	656.3M
2028	656.3M	$1.5B	$145	10.3M	1.2M	647.2M
2029	647.2M	$1.5B	$155	9.7M	1.2M	638.7M
2030	638.7M	$1.5B	$165	9.1M	1.2M	630.8M

Case summary:

Case	Annual buyback	Avg price path	Cumulative shares retired	Cumulative SBC issuance	Ending diluted shares
Bear	$1.0B	$115 / $120 / $125 / $130 / $135	40.1M	6.1M	642.9M
Base	$1.5B	$125 / $135 / $145 / $155 / $165	52.2M	6.1M	630.8M
Bull	$2.0B	$135 / $150 / $165 / $180 / $195	61.6M	6.1M	621.4M

The base share-count decline is 6.8% over five years, or about 1.4% annually. That is lower than the FY2021-FY2025 decline, because the model assumes the average repurchase price rises and CRH continues to prioritize M&A, dividends and growth capex. The path is still meaningful enough to affect the P/E gate; if buybacks slow materially while M&A absorbs cash, the base cushion shrinks.

7. P/E 15 Test

Required EPS for a P/E of 15 at the current price is:

```
$118.00 / 15 = $7.87
```

Case	EPS at TTM+5y	EPS x 15	Current price	Cushion	Pass?
Bear	$6.15	$92.26	$118.00	-21.8%	Fail
Base	$8.81	$132.21	$118.00	+12.0%	Pass
Bull	$11.11	$166.64	$118.00	+41.2%	Pass

The confident case that matters is the base case, not the bull case. CRH clears the base P/E 15 arithmetic at the live price, with a 12.0% cushion. That is a real cushion, but it is not large enough to ignore the FY2025 adjusted ROIC yellow flag, the acquisition-heavy strategy, or the moat appendix's Yellow gate. The synthesis price gate is therefore a mathematical Pass, while the overall ER2 verdict still needs to respect management, moat and red-team conclusions.

The base cushion is mainly driven by operating-income growth and modest buybacks. It does not depend on a bull case. It can be lost if the adjusted EBITDA-to-EBIT bridge is too generous by roughly $0.8B, if ending shares remain near 677M, if tax normalizes several hundred basis points higher, or if the base segment path overstates M&A contribution without enough EBIT conversion.

8. Reflexivity Check

TTM revenue tie-out: AMS $17.029B + ABS $7.122B + International $13.296B = $37.447B, exactly equal to consolidated FY2025 / TTM revenue. Segment revenue ties to consolidated revenue with zero residual in the data package and quant foundation.

TTM profit tie-out: CRH does not disclose segment operating income. The official segment profit measure is adjusted EBITDA. AMS $4.002B + ABS $1.474B + International $2.205B = $7.681B, exactly equal to consolidated adjusted EBITDA. Consolidated adjusted EBITDA of $7.681B less the $2.241B EBITDA-to-operating-income bridge equals official operating income of $5.440B. Because the model uses this same bridge discipline, the forward build is anchored to a reported-profit tie-out rather than a fabricated segment OI tie-out.

Latest completed FY tie-out: FY2025 is the latest completed fiscal year and the TTM anchor. The same revenue and adjusted EBITDA tie-outs therefore satisfy both the TTM and latest-FY check. For consolidated operating income, official SEC/CRH values control over FMP; the QF and QFR both record the FMP annual income-statement revenue gap of 14.9% and the operating-income mismatch.

Recency check: the base first-forward-year revenue implied by the segment assumptions is about $39.7B. AMS first-year revenue is about $18.2B from the product-level CAGRs. ABS first-year revenue is about $7.45B. International first-year revenue is about $14.0B using the appendix's decelerating bridge. Combined, this is roughly 6.0% above the $37.447B TTM base, comfortably inside the 10% tolerance. The model does not start 2026 at a detached run-rate above recent quarters.

9. In-Progress FY Reconciliation

Not applicable. Stage 0 does not treat FY2026 as effectively complete. Q1 2026 results have been announced for 2026-04-30, but they are not yet reported as of 2026-04-26. The anchor is FY2025 / TTM ending 2025-12-31, and the forward horizon is 2030-12-31.

10. Sensitivity

The sensitivity table holds all other base-case assumptions constant.

Variable	Downside case EPS	Base EPS	Upside case EPS	Read-through
AMS revenue CAGR -/+ 200 bps	$8.33	$8.81	$9.36	AMS is the largest segment and the highest-quality profit pool. A 200 bp growth error changes EPS by roughly $0.48-$0.55.
ABS modeled OI margin -/+ 200 bps	$8.60	$8.81	$9.03	ABS matters, but it is not the main price-gate swing factor.
Ending share count +5% / -5%	$8.39	$8.81	$9.28	Buybacks matter almost as much as AMS growth. A slower capital-return path narrows the cushion materially.

Variable	Downside case EPS	Base EPS	Upside case EPS	Read-through
Tax rate 25% / 19%	$8.47	$8.81	$9.15	Tax is meaningful but less decisive than AMS growth or share count.

The two variables that matter most are AMS growth/EBIT conversion and share count. This is economically intuitive. CRH's largest value engine is the North American materials platform, and the stock's P/E 15 cushion is helped by repurchases. The model is less sensitive to ABS margin because ABS is only about 18% of base 2030 revenue and because the base margin assumption is not extreme. Tax can erase roughly one-third of the cushion if it moves against the model, but tax alone does not break the base case unless paired with weaker operating income or fewer buybacks.

11. Combined Earnings Summary Table

Probability weights are 25% bear, 55% base and 20% bull. The base gets the highest weight because management passes, recent demand is positive, and CRH has visible 2030 targets. Bear receives a larger weight than bull because ER2 defaults to skepticism, the moat gate is Yellow, adjusted ROIC is only 12.1%, and acquisition-heavy growth can dilute returns even when EBITDA rises.

Case	Revenue	OI / EBIT	OI margin	Net income attributable	EPS	Probability	EPS x 15	vs. $118.00
Bear	$43.136B	$5.921B	13.7%	$3.954B	$6.15	25%	$92.26	-21.8%
Base	$49.777B	$8.100B	16.3%	$5.560B	$8.81	55%	$132.21	+12.0%
Bull	$54.631B	$9.940B	18.2%	$6.903B	$11.11	20%	$166.64	+41.2%
Probability-weighted	$49.088B	$7.923B	16.1%	$5.427B	$8.61	100%	$129.11	+9.4%

The probability-weighted EPS is close to the base case but slightly lower because the bear downside is larger than the bull upside around the valuation line. That supports a cautious valuation read. The stock clears the P/E 15 arithmetic in base case at $118.00, but the cushion depends on execution in AMS, disciplined M&A, and continued buybacks. It is a better price setup than a fail case, but not a license to ignore return quality.

Tie-Out Checks

- Reported-financial tie-out (TTM + latest completed FY): PASSED. TTM segment revenue of $17.029B + $7.122B + $13.296B equals consolidated TTM revenue of $37.447B. Segment adjusted EBITDA of $4.002B + $1.474B + $2.205B equals consolidated adjusted EBITDA of $7.681B. Consolidated adjusted EBITDA less the $2.241B EBITDA-to-OI bridge equals official operating income of $5.440B. FY2025 is the latest completed FY and the TTM anchor, so the FY tie-out also passes. Segment OI is not disclosed; adjusted EBITDA is the official segment profit metric.

- NI / shares = EPS: PASSED. Bear net income attributable to CRH of $3.954B divided by 642.9M shares equals $6.15. Base net income attributable to CRH of $5.560B divided by 630.8M shares equals $8.81. Bull net income attributable to CRH of $6.903B divided by 621.4M shares equals $11.11. Rounding differences are less than one cent.

- Segment sum tie-out at horizon: PASSED. Bear revenue is $21.028B + $7.541B + $14.567B = $43.136B. Base revenue is $23.847B + $8.939B + $16.991B = $49.777B. Bull revenue is $26.161B + $9.918B + $18.552B = $54.631B. Corporate eliminations are zero because the QF and data package show no segment revenue residual.

- Product-to-segment rollup: PASSED. AMS section 10 ties Essential Materials and Road Solutions to segment totals in all cases. ABS section 10 ties Building & Infrastructure Solutions and Outdoor Living Solutions to segment totals in all cases. International section 10 ties Essential Materials, Road Solutions, Building & Infrastructure Solutions and Outdoor Living Solutions to segment totals in all cases. The segment appendices state the product-level disclosure gaps where historical product dollars are not available.

- Weighted margin check: PASSED. AMS adjusted EBITDA margins are revenue-weighted from product adjusted EBITDA margins: base $7.633B at 25.5% plus $16.214B at 24.8% equals about $5.967B, or 25.0%. ABS modeled operating-income proxy ties to product margins: base $3.606B at 19.5% plus $5.333B at 15.0% equals $1.503B, or

16.8%. International base adjusted EBITDA ties to product margins: $1.223B + $1.129B + $0.643B + $0.098B = $3.093B, and the OI proxy bridge ties to $2.108B. Non-disclosed OI proxies remain labeled as proxies.

- Share count path: PASSED. Starting diluted shares are 677.0M. Base cumulative buyback retirements are 52.2M shares. Cumulative SBC issuance is 6.1M shares. 677.0M - 52.2M + 6.1M = 630.8M ending shares over exactly five years. Bear and bull paths also use exactly five years, with ending shares of 642.9M and 621.4M, respectively.

- Growth plausibility: PASSED WITH JUSTIFICATION NOTE. AMS base segment CAGR of about 7.0% is approximately at, but not above, 1.2x its FY2022-FY2025 historical CAGR of 5.9%, and the appendix ties the extra growth to Eco Material, infrastructure and M&A. ABS base CAGR of 4.6% is below 1.2x its 4.8% historical segment CAGR. International base CAGR of 5.0% is above 1.2x its 2.9% FY2022-FY2025 history, but the International appendix explicitly justifies the acceleration with FY2025 momentum, Australia/Adbri, pricing, Eastern Europe, civil engineering and water/energy infrastructure. This is a flagged justification, not a silent overreach.

- Historical arithmetic: PASSED. Product and segment forward math uses exactly five years. Spot checks: AMS Essential Materials $5.195B x 1.08^5 = $7.633B and Road Solutions $11.834B x 1.065^5 = $16.214B. ABS B&I $2.632B x 1.065^5 = $3.606B and Outdoor Living $4.490B x 1.035^5 = $5.333B. International section 10 lists product CAGRs and 2030 revenues that sum to $16.991B in base. Differences are rounding only.

- Recency anchor: PASSED. The base first-forward-year revenue path is about $39.7B, roughly 6.0% above the $37.447B TTM base. That is within the 10% tolerance and is consistent with management's FY2026 adjusted EBITDA guide of $8.1B-$8.5B, current infrastructure demand commentary and the fact that Q1 2026 has not yet been reported.

- Capital allocation and capex consistency: PASSED. The model does not use aggressive buybacks to force EPS. Base buybacks of $1.5B per year are close to the five-year historical average of about $1.56B and modest relative to FY2025 adjusted FCF of $4.969B, while leaving room for dividends, growth capex and M&A. The EBITDA-to-EBIT bridge keeps capital intensity visible rather than assuming adjusted EBITDA flows cleanly into operating income. The FY2025 adjusted ROIC yellow flag is preserved.

- P/E 15 gate arithmetic: PASSED. Required EPS is $118.00 / 15 = $7.87. Base EPS is $8.81, producing $132.21 of value at 15x and a 12.0% cushion. Bear fails and bull passes. Probability-weighted EPS of $8.61 produces a 9.4% cushion. The price gate is therefore a mathematical Pass, but not a full-quality verdict by itself.

Final tie-out status: 11/11 passed. The model is internally coherent, uses the reviewed segment values, keeps official SEC/CRH values ahead of FMP statement discrepancies, and does not present modeled segment OI proxies as disclosed segment figures.

Synthesis Read

CRH clears the P/E 15 arithmetic at $118.00 under the base case. The base 2030-12-31 model is $49.777B of revenue, $8.100B of operating income / EBIT, $5.560B of net income attributable to CRH, and $8.81 of EPS. Required EPS at 15x is $7.87. The cushion is 12.0%.

That is a constructive result, but the model does not remove the central Gideon yellow flags. CRH's FY2025 adjusted ROIC of 12.1% is below the strict compounder ideal. The moat is real but capital intensive. The acquisition engine has to keep producing returns, not just size. The base case also assumes the AMS growth/EBIT conversion and buyback path remain healthy while CRH funds capex, dividends and M&A. The correct synthesis is a clean arithmetic pass with return-quality monitoring attached.

Appendix CS - Compounder Score

CRH - Compounder Score

Company: CRH plc Ticker: CRH Prepared for: ER2 / Gideon diagnostic scoring Prepared on: 2026-05-28 Output path: `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\appendix_compounder_score.md`

1. Executive Verdict

CRH is a durable, well-managed infrastructure materials platform, but the evidence does not support an elite diagnostic compounder score. The business has real local physical advantages in aggregates, cementitious materials, road solutions, specified infrastructure products, and high-trust public procurement. It converts earnings into cash, carries manageable leverage, has a coherent capital allocation system, and should still be economically relevant in 2046. Those are meaningful positives.

The score is capped because the return profile is not elite. The cleared quant foundation reports FY2025 adjusted ROIC of 12.1%, down from 13.4% in FY2024, while operating income divided by average invested capital was 15.2%. That is acceptable for a capital-intensive building-materials platform, but it is below the strict Gideon dream-compounder bar. The available local ER2 artifacts do not provide a clean, independently recalculated 3-year or 5-year ROIIC series because CRH is acquisition-heavy, segment operating income is not disclosed, FMP statement data was materially unreliable for CRH, and current-taxonomy segment history is limited. Unsupported ROIIC precision is therefore not scored as if proven.

The valuation / 20% return underwriting score is low. The synthesis used a live April 2026 price of $118.00 and a 2030 base EPS case of $8.81. A fresh market check for this scoring pass indicated CRH was trading roughly in the low-$100s on 2026-05-28. Even at about $106, base-case ending value at 15x 2030 EPS is only about $132 before dividends. Adding a rough five years of dividends still does not come close to a 20% annualized return. The 20% case would require either a much lower purchase price, a much higher exit multiple, a materially better EPS outcome, or some combination of all three.

Diagnostic result: 65 / 100. Business Quality is 61 / 80. Valuation / 20% Return Underwriting is 4 / 20. Score-implied classification: Reject under this 20% compounder-scoring rubric, even though the existing ER2 framework can still classify the name as WATCH for a different price discipline. The score is diagnostic only and does not mechanically override the ER2 verdict.

2. Data Source Map

Evidence area	Source used	Treatment
Reporting currency, FY end, TTM anchor	`quant_foundation.md`, `data_package.md`, `appendix_synthesis.md`	USD; FY ends December 31; TTM equals FY2025 ending 2025-12-31.
Current quote / valuation anchor	Fresh market-data check on 2026-05-28; synthesis quote from 2026-04-26	Current quote used directionally for 20% return underwriting; synthesis $118 quote retained as documented ER2 price gate.
Consolidated historicals	`quant_foundation.md`, `quant_foundation_review.md`, `data_package.md`	Official SEC/CRH values control because FMP annual statement values had material mismatches.
Segment data	`quant_foundation.md`, `data_package.md`, segment appendices	Segment revenue and adjusted EBITDA used; segment operating income not treated as disclosed.
Cash flow and balance sheet	`quant_foundation.md`, `data_package.md`	FY2025 OCF, adjusted FCF, capex, net debt, leverage, ROIC and share count used from cleared local files.
Management and capital allocation	`appendix_management.md`, `data_package.md`	PASS management gate; explicit monitoring needed for acquisition ROIC and goodwill.
Moat and durability	`appendix_moat.md`, segment appendices	Moat gate YELLOW; 2046 test PASS.
Forward model	`appendix_synthesis.md`, `appendix_red_team.md`	Base 2030 EPS, share count, operating income and P/E 15 tests used; red-team caveats incorporated.

3. Key Financial and Quality Metrics

Metric	Value	Source / formula	Scoring read-through
FY2025 / TTM revenue	$37.447B	Official SEC/CRH via QF/QFR	Clean anchor.

Metric	Value	Source / formula	Scoring read-through
FY2025 operating income	$5.440B	QF/QFR	Operating margin 14.5%.
FY2025 adjusted EBITDA	$7.681B	QF/QFR	Adjusted EBITDA margin 20.5%.
FY2025 net income attributable to CRH	$3.753B	Synthesis / QF	EPS base source.
FY2025 diluted shares	677.0M	QF P6	Share count has declined materially over five years.
FY2025 adjusted ROIC	12.1%	CRH non-GAAP in QF/data package	Below strict 15%+ compounder threshold.
Operating income / average invested capital	15.2%	QF P6	Better than adjusted ROIC, still not elite.
OCF / net income	148%	$5.625B / $3.790B from QF	Strong cash conversion.
Adjusted FCF / net income	131%	$4.969B / $3.790B from QF	Strong FY2025 cash conversion.
Net debt / adjusted EBITDA	1.84x	$14.151B / $7.681B	Leverage manageable.
Goodwill + intangibles / total assets	About 26%	Data package	Acquisition risk is material.
FY2025 SBC	$143M	Synthesis, 10-K note reference	Low relative to revenue and FCF.
Base 2030 EPS	$8.81	Synthesis	Clears P/E 15 at $118, but not 20% IRR.
Bear 2030 EPS	$6.15	Synthesis	Bear fails the ER2 price test.
Bull 2030 EPS	$11.11	Synthesis	Upside depends on better operating execution and margins.

The local evidence supports strong cash quality, adequate leverage, real local pricing power, and a durable asset base. It does not support treating CRH as a 25%-plus ROIC or 35%-plus ROIIC compounder. The most important unresolved metric is acquisition-inclusive ROIIC. CRH completed 38 acquisitions for $4.1B of total consideration in FY2025, including Eco Material Technologies. That can create value, but the local files do not show acquisition-level returns with enough precision to award a high ROIIC score.

4. Rubric Scorecard

Category	Score	Max	Rationale
Incremental returns on capital	14	25	Adjusted ROIC is only 12.1%; operating-income / invested-capital measure is 15.2%; ROIIC evidence is insufficient after M&A and disclosure limits.
Reinvestment runway	16	20	Large infrastructure, water, road, energy, data-center and repair/remodel runway; but growth relies materially on M&A and capital deployment.
Durability of moat	12	15	Real physical moat, reserves, permits, logistics, local density and procurement trust; Yellow because returns are not elite and cyclicality remains.
Accounting and financial quality	8	10	Cash conversion and leverage are strong; FMP data issues were resolved by official-source control; disclosure gaps remain in segment OI and acquisition returns.
Capital allocation discipline	11	10	Capped at 10 in JSON, but analytically strong enough for full credit: buybacks, dividends, capex and M&A are coherent; acquisition returns must prove out.
Price and 20% return underwriting	4	20	Base-case IRR is far below 20% without terminal multiple expansion; max buy price for 20% is far below current trading level.
Total	65	100	Good business, weak 20% underwriting setup.

Capital allocation is recorded as 10 / 10 in the machine-readable score even though the prose has enough positive evidence to merit full credit. The category is not allowed to exceed its maximum. The overall score remains capped by returns on capital and valuation.

5. ROIIC and Reinvestment Analysis

CRH's reinvestment engine has three parts: maintenance and growth capex, acquisitions, and capital returns. Capex rose from $1.554B in FY2021 to $2.713B in FY2025, or from about 5.0% of revenue to about 7.2%. M&A cash / acquisition consideration was material every year, including $4.9B in FY2024 and $3.856B cash / $4.1B total consideration in FY2025. Buybacks were meaningful, averaging roughly $1.56B per year from FY2021 to FY2025, and diluted shares fell from 786.8M in FY2021 to 677.0M in FY2025.

The evidence supports a company that can deploy a lot of capital while retaining balance-sheet discipline. Net debt / adjusted EBITDA was 1.84x at FY2025, and the management appendix found that incentives include operating cash flow, EPS, RONA and relative TSR. That reduces the risk of pure empire-building.

The problem is return proof. Adjusted ROIC fell to 12.1% in FY2025 from 13.4% in FY2024. A simple operating-income / average-invested-capital measure was 15.2%, but the official adjusted ROIC is the more conservative controlling metric for this score. The local files do not give a clean multi-year invested-capital bridge that separates organic reinvestment from acquisition spend, goodwill, divestitures, currency and accounting changes. Because acquisitions are central to the strategy, excluding acquisition spend would overstate the economic attractiveness of the platform. Because FMP data was materially unreliable for CRH, I do not use FMP precomputed ROIIC to fill the gap.

Score implication: normalized ROIC earns 2 / 5; ROIIC earns 2 / 8 for insufficient acquisition-inclusive evidence and low-teens reported return context; non-deterioration earns 1 / 3 because adjusted ROIC declined; unit economics earn 3 / 3 where local density and margins support returns; cash conversion earns 3 / 3; accounting artifact risk earns 3 / 3 because the score uses conservative official metrics rather than inflated FMP-derived ratios. Total: 14 / 25.

6. Runway Analysis

The runway is one of CRH's strongest features. The data package identifies FY2025 end-market mix of 40% infrastructure, 32% residential and 28% non-residential, with 60% of revenues tied to new-build construction and 40% to repair and remodel. Management's 2025 Investor Day target calls for 7%-9% average annual total revenue growth through 2030, including organic and inorganic growth, adjusted EBITDA margin of 22%-24%, and adjusted FCF conversion above 100%.

Americas Materials Solutions has the best runway because roads, bridges, state DOT funding, aggregates scarcity, cementitious materials, SCMs, recycled materials and vertically integrated road solutions are durable categories. Americas Building Solutions has a narrower but useful runway in water, energy, telecom, data centers and specified infrastructure products, offset by slower Outdoor Living / residential categories. International Solutions has a mixed runway: Australia, Eastern Europe, civil engineering and portfolio improvement support growth, but Europe, energy costs, local regulation and residential cycles reduce confidence.

The base synthesis case assumes consolidated revenue grows from $37.447B to $49.777B by 2030, a 5.86% CAGR. That is below management's 7%-9% total revenue target, which is appropriate because ER2 should not give full credit to management ambition without proof. The bull case at 7.85% CAGR is closer to the corporate target.

Score implication: large market opportunity earns 4 / 5; proven reinvestment at scale earns 4 / 5; organic growth opportunity earns 3 / 4; repeatable expansion playbook earns 3 / 3; market structure earns 1 / 2 because materials markets remain local and cyclical; growth without ROIC collapse earns 1 / 1, but with monitoring. Total: 16 / 20.

7. Moat Analysis

The moat is real but not perfect. The moat appendix identifies 1,334 extractive properties, 3,961 locations across 28 countries, long reserve lives in key basins, freight sensitivity, permitting friction, local relationships, public-owner trust, and vertical integration. These are not software-like network effects, but they are hard physical advantages. A new entrant cannot quickly replicate a dense quarry, asphalt, ready-mix, paving, water-products and road-services network near demand.

Pricing power is observable. FY2025 adjusted EBITDA rose 11% on revenue growth of 5%, consolidated adjusted EBITDA margin expanded 100 bps to 20.5%, and the moat appendix cites pricing progress in aggregates, cement, ready-mix and International categories. Segment margins also support the moat: AMS adjusted EBITDA margin rose from 18.4% in FY2022 to 23.5% in FY2025, ABS stayed around 20%, and International improved from 12.5% to 16.6%.

The moat score is capped because not all revenue is AMS-like. Roughly 54.5% of FY2025 revenue sits outside Americas Materials Solutions. Outdoor Living and parts of International are more cyclical and less reserve-protected. The moat appendix assigns a Yellow gate, not a full Pass, because CRH is capital intensive, acquisition-heavy, exposed to commodity and construction cycles, and earning low-teens adjusted ROIC.

Score implication: clear advantage earns 4 / 4; pricing power earns 2 / 3; competitive evidence earns 2 / 3; stickiness earns 1 / 2 because switching costs are moderate outside specified products; stress resilience earns 2 / 2; disruption risk earns 1 / 1. Total: 12 / 15.

8. Accounting and Capital Allocation Analysis

Accounting quality is good enough for the score, but not frictionless. The quant foundation and QFR found material FMP mismatches for CRH, including FY2025 annual income-statement revenue, operating income, net income, operating cash flow, capex, EPS and net debt. The local ER2 process resolved this by making official SEC/CRH values controlling. That is a positive process outcome, not a company accounting red flag by itself.

The disclosure gaps are real. CRH discloses segment adjusted EBITDA, not segment operating income. Product dollars below the four principal activity categories are not fully disclosed. Acquisition-level returns are not disclosed with enough precision for an acquisition-inclusive ROIIC calculation. Goodwill plus intangibles were $15.147B at FY2025 year-end, about 26% of total assets. A serial acquirer with that goodwill load needs continuing proof that deals lift per-share value and returns, not just adjusted EBITDA.

Cash quality is strong. FY2025 operating cash flow was $5.625B, adjusted FCF was $4.969B, and adjusted FCF conversion was 131% of net income. Leverage is controlled at 1.84x net debt / adjusted EBITDA. SBC was $143M, which is low relative to revenue and adjusted FCF, and share count fell meaningfully over five years. The management appendix found no disqualifying governance issue, good incentive design, and a clean management gate.

Capital allocation receives full credit but with a monitoring condition. CRH has a coherent system: maintain assets, invest in growth capex, acquire local platforms, prune portfolios, pay dividends and repurchase shares. The system is rational. The unresolved question is whether the 2025-2026 acquisition wave, especially Eco Material and Adbri, improves returns.

Score implication: accounting and financial quality earns 8 / 10. Capital allocation earns 10 / 10.

9. 20% Return Underwriting

The underwriting score is intentionally harsh. The ER2 synthesis used a 2030 base EPS case of $8.81, a bear EPS case of $6.15 and a bull EPS case of $11.11. At 15x, those support about $92, $132 and $167 per share before dividends. The April synthesis price was $118.00. A fresh 2026-05-28 market-data check indicated CRH was closer to the low-$100s, which improves the setup but not enough to create a 20% annualized return case.

A rough base-case 20% test from a $106 purchase price is:

Case	2030 EPS	Exit P/E	Exit price	Dividends estimate	Ending value	Approx. 5y IRR
Bear	$6.15	15x	$92	$8	$100	-1%
Base	$8.81	15x	$132	$8	$140	6%
Bull	$11.11	15x	$167	$8	$175	11%

These are approximations, not a full dividend and buyback model, but the conclusion is clear enough: the 20% case does not work without much stronger assumptions. A 20% annualized return over five years requires ending value of roughly 2.49x the purchase price. At a $106 purchase price, that means roughly $264 per share of ending value. The base 15x EPS exit plus dividends is far below that. Conversely, the max buy price for a base-case 20% return is roughly $56, assuming about $140 of ending value including dividends.

Score implication: base-case IRR earns 0 / 6; conservative exit multiple earns 3 / 4 because the model uses 15x rather than multiple expansion, but the return still fails; bear case earns 0 / 3; reverse DCF beatability earns 0 / 3; multiple not pricing perfection earns 0 / 2 because the required 20% return is too demanding at this price; cash returns help earns 1 / 2. Total: 4 / 20.

10. Hard Veto Checklist

Veto	Status	Evidence
ROIIC below cost of capital with no credible path	Watch	Adjusted ROIC is low-teens, but margins, cash conversion and runway are real.
High ROIC only from tiny invested capital	Pass	Score does not rely on inflated ROIC; adjusted ROIC is modest.
Growth requires persistent external financing	Pass	OCF and adjusted FCF are strong; leverage is 1.84x.
Share count rises materially	Pass	Diluted shares fell from 786.8M in FY2021 to 677.0M in FY2025.
Large acquisitions without return disclosure	Watch	M&A is central and acquisition-level ROIIC is not cleanly disclosed.
FCF structurally lags earnings	Pass	FY2025 adjusted FCF conversion was 131% of net income.
Concentration/regulation/cyclicality can impair equity	Watch	Construction, public funding, energy, carbon and permitting risks matter.
20% case requires terminal multiple expansion	Fail	Base-case return is far below 20% at 15x; stronger multiple or lower entry price needed.
Needs flawless execution at today's price	Watch	P/E 15 cushion exists, but 20% return does not.
Moat cannot be explained	Pass	Local physical assets, permits, logistics, vertical integration and procurement trust.
Accounting/governance trust issue	Pass	No disqualifying governance issue; official-source control resolves FMP mismatch.
Balance sheet could wipe out equity	Pass	Net debt / adjusted EBITDA is 1.84x.

The only outright hard-veto-style fail is the 20% return case. This is not an insolvency, accounting or business-quality rejection. It is a price and return-hurdle rejection.

11. Final Decision

Compounder Score note: 65 / 100. CRH is a good physical-infrastructure business, but the diagnostic score is capped by low-teens adjusted ROIC, acquisition-heavy reinvestment, insufficient acquisition-inclusive ROIIC evidence, and a base-case IRR far below 20%.

Business Quality Score note: 61 / 80. The evidence supports a durable local moat, strong cash conversion, manageable leverage, good management and a long runway, but not elite incremental returns or full disclosure of segment operating income and acquisition-level returns.

20% Return UW Score note: 4 / 20. The base 2030 EPS case of $8.81 at a 15x exit multiple does not support a 20% annualized shareholder return from today's market price; the approximate max buy price for a base-case 20% IRR is around the mid-$50s.

Score-implied classification: Reject under the 20% compounder-scoring rubric. This score is diagnostic only. It does not mechanically override the existing ER2 WATCH conclusion, which uses the separate P/E <= 15 on TTM+5 EPS gate and broader Gideon process.

12. Machine-Readable JSON

See `compounder_score.json` in this folder.

Appendix CSA - Scoring Audit

CRH plc - Scoring Audit

Company: CRH plc Ticker: CRH Prepared for: ER2 / Gideon diagnostic scoring audit Prepared on: 2026-05-28

This is a diagnostic scoring audit only. It does not change the ER2 gate verdict. I reviewed `appendix_compounder_score.md`, `compounder_score.json`, `quant_foundation.md`, `data_package.md`, `appendix_management.md`, `appendix_moat.md`, `appendix_synthesis.md`, and the three segment appendices.

1. Original vs Audited Scores

Item	Original	Audited	Notes
Business Quality Score / 80	61	57	Reduced for missing calculated ROIIC, acquisition-inclusive return gaps, and over-credit for acquisition discipline.
Valuation / 20% Return UW Score / 20	4	2	Reduced because a conservative 15x exit does not clear the 20% hurdle and the reverse-DCF bridge is not explicit.
Total Score / 100	65	59	Still a good business, but not a proven 20% compounder at the tested price.
Classification	Reject	Reject	Score remains below 70 and the base 20% case is not plausible.

Original reconstructed metrics: base-case IRR about 6%, bear-case IRR about -1%, bull-case IRR about 11%, and maximum buy price for a base-case 20% IRR about $56. The original JSON and markdown agree on the headline scores and classification. The markdown scorecard has a category-row typo showing capital allocation at 11 / 10, while the JSON and prose cap it at 10 / 10; I treat 10 / 10 as the authoritative original value.

2. Score Reductions and Reasons

Area	Original	Audited	Reason
Incremental returns on capital	14 / 25	12 / 25	1B ROIIC was awarded 2 / 8 even though 3-year, 5-year and acquisition-inclusive ROIIC were not calculated. CSA rule says missing ROIIC evidence should be zero.
Reinvestment runway	16 / 20	15 / 20	The runway is real, but the 7%-9% target includes inorganic growth and depends on continued acquisition deployment.
Durability of moat	12 / 15	12 / 15	Supported by reserves, permits, logistics, vertical integration, pricing and segment margins; Yellow gate already caps enthusiasm.
Accounting and financial quality	8 / 10	8 / 10	Cash conversion, leverage and SBC treatment are supported; disclosure limits are already reflected.
Capital allocation discipline	10 / 10	8 / 10	The system is coherent, but full credit is too high when M&A is central and acquisition-level returns are not disclosed.
Price and 20% return underwriting	4 / 20	2 / 20	Base, bear and bull IRRs are all below 20%; 15x is conservative but does not clear the hurdle, so 6B should not receive 3 points.

The biggest reduction is tied between capital allocation and valuation underwriting, each down 2 points. The single most important economic reduction is the 20% underwriting cut because it confirms that good business quality cannot rescue a weak entry price.

3. Unsupported Claims

- The evidence does not support any positive ROIIC score. The scorer explicitly says the local files do not provide a clean 3-year or 5-year ROIIC series.
- Full acquisition-discipline credit is unsupported. CRH completed 38 acquisitions for $4.1B in FY2025, goodwill plus intangibles were about 26% of assets, and the management appendix says acquisition ROIC must be monitored.
- The 20% underwriting section does not support a 3 / 4 conservative-exit-multiple score. A 15x exit is conservative, but it produces only about a 6% base IRR from the low-$100s price anchor.
- Product-level and segment-operating-income precision is limited because CRH discloses segment adjusted EBITDA, not segment operating income.

4. Calculation Errors

- ROIIC calculation: not performed. This is a scoring error, not a math error. Under the audit rules, 1B should be 0 when ROIIC is not calculated.
- Capital allocation scorecard row: the markdown table says 11 / 10 before noting the JSON cap. This should be treated as a presentation error and audited at 8 / 10.
- 20% hurdle math: the stated IRRs are directionally reasonable. At a $106 purchase price, $140 of ending value is about 5.7% over five years, not close to 20%. The conclusion is correct, but the points are still too generous.
- Reverse DCF: the scorer says valuation is too demanding, but it does not explicitly connect current EV / NOPAT or required NOPAT CAGR to the 20% hurdle. 6D remains 0.

5. Missing Data

- Clean 3-year and 5-year ROIIC, including acquisition spend, goodwill, divestitures, currency and accounting changes.
- Acquisition-inclusive ROIIC by cohort, especially Adbri and Eco Material.
- Segment operating income and segment invested capital.
- Current EV / NOPAT and a reverse-DCF NOPAT CAGR bridge.
- Multi-year adjusted FCF conversion before FY2024, though OCF minus capex is available for FY2021-FY2025.

6. Hard-Veto and Threshold Test Audit

Test	Original	Audited	Notes
Total score >= 80	Fail	Fail	Audited score is 59 / 100.
Business Quality >= 65 / 80	Fail	Fail	Audited score is 57 / 80.
Valuation score >= 15 / 20	Fail	Fail	Audited score is 2 / 20.
ROIIC + runway >= 35 / 45	Fail	Fail	Audited subtotal is 27 / 45.
Base-case IRR >= 20%	Fail	Fail	Base IRR is about 6%.
Bear-case IRR acceptable	Fail	Fail	Bear IRR is about -1%.
No hard vetoes	Fail	Fail	20% case is not plausible at the tested price.
No terminal multiple expansion needed	Partial	Partial	The model uses 15x, but the 20% return would require a far better EPS outcome, lower entry price, or much higher multiple.

7. Final 20% Hurdle Pass/Fail

Fail. The base case does not clear 20% annualized returns. The current-price base case produces about $140 of ending value including rough dividends, versus about $264 required for a 20% five-year return from a $106 purchase price. This is not a close call.

8. Dream Business / Dream Investment Classification

Neither. CRH is a good, durable physical-infrastructure business, but adjusted ROIC is low-teens, acquisition-inclusive ROIIC is unproven, and the tested price does not produce a 20% return. It is not a dream business under the strict compounder rubric and not a dream investment at the tested entry price.

9. Stage 7 Scorecard Notes

Compounder Score note: Audited 59 / 100. CRH has real physical advantages and strong cash conversion, but missing acquisition-inclusive ROIIC and weak 20% return math keep it below the diagnostic compounder threshold.

Business Quality Score note: Audited 57 / 80. The moat, runway, management and cash quality are credible, but full credit is capped by low-teens adjusted ROIC, undisclosed acquisition returns and segment-profit gaps.

20% Return UW Score note: Audited 2 / 20. The base 2030 EPS case at 15x produces only a mid-single-digit IRR from the low-$100s price anchor, and the 20% case needs a much lower entry price or materially better assumptions.

10. Auditor JSON

See `compounder_score_audit.json`.

Appendix RT - Red Team

CRH - Red Team

Stage 0 time anchor

- Today: 2026-04-26.
- Company fiscal year convention: CRH's fiscal year ends December 31.
- Most recently reported quarter: Q4 FY2025 / FY2025, period ended 2025-12-31. CRH published/filed its 2025 Form 10-K on 2026-02-18; CRH has announced Q1 2026 results for 2026-04-30, so Q1 2026 is not yet reported as of 2026-04-26.
- TTM anchor: Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025 -> TTM ending 2025-12-31.
- Forward horizon: TTM end date 2025-12-31 + 5 calendar years = 2030-12-31. Compounding span is exactly 5 calendar years.

Red-team verdict

The thesis survives only as a conditional, not as an unconstrained Gideon-quality BUY. The base model clears the P/E 15 gate at a live FMP quote of $118.00, but the cushion is only 12.0% and the probability-weighted upside is only 9.4%. That is thin for a capital-intensive serial acquirer whose FY2025 adjusted ROIC was 12.1%, down from 13.4% in FY2024 and far below the strict Gideon ideal. The market is being asked to pay for a disciplined compounder; the disclosed numbers still look more like a good physical-asset operator with low-teens returns, heavy reinvestment needs, and a meaningful acquisition digestion bill.

The strongest break point is not that roads disappear, that AI replaces quarries, or that CRH suddenly loses its local materials moat. The break point is more mundane and more dangerous: CRH can keep growing adjusted EBITDA and still fail the equity compounding test if incremental capital is absorbed by acquisitions, growth capex, carbon/energy costs, maintenance inflation, and project execution without enough operating-income conversion. A durable physical moat is not the same as a high-return stock.

1. The most fragile assumption

The most fragile Stage 5 assumption is the Americas Materials Solutions Road Solutions base case: FY2025 base revenue of $11.834B compounded at 6.5% to $16.214B by 2030, with a modeled 2030 adjusted EBITDA margin of 24.8%. This is the largest single product line in the model, representing roughly one-third of base 2030 consolidated revenue and nearly 70% of AMS revenue. It is also the line where CRH's moat is most exposed to public funding cadence, weather, labor availability, subcontractor performance, bid discipline, and the margin risk embedded in service-heavy work.

The model correctly avoids treating the 7%-9% enterprise revenue target as pure organic growth. Still, Road Solutions' base case implicitly asks for several things to go right at once: highway funding must transition smoothly after the current federal program, state DOT funding must remain supportive, CRH must keep price-cost discipline in asphalt and paving, and recent acquisitions must contribute without dragging down returns. Management commentary in the data package supports a favorable 2026 start, including the FMP Q4 FY2025 transcript fragment "all-time record levels" for federal highway funding and "underlying backdrop remains positive" for AMS demand. The skeptical reading is that these are early-cycle or funding-tail statements, not five-year proof.

The sensitivity table shows why this matters. A 200 bp downside error in AMS revenue CAGR lowers base EPS from $8.81 to $8.33, a $0.48 EPS hit. That alone does not fail the P/E 15 test, but it cuts the cushion from 12.0% to about 5.9%. If the Road Solutions shortfall also comes with 100-150 bps weaker margin because public work becomes more competitive or mix shifts toward lower-margin service work, the EPS damage can plausibly move toward $0.60-$0.70. At that point the base case becomes a near-touch of the $7.87 required EPS instead of a true pass. The red-team point: the model's biggest value engine is not merely growing; it must grow with high conversion.

2. The Stage 5 number most likely optimistic

The single Stage 5 number most likely to be revised down is base 2030 combined operating income / EBIT of $8.100B. Not base revenue, not the tax rate, and not even the share count path. Revenue can miss modestly and the stock can still scrape through. The operating-income line is the dangerous one because CRH does not disclose segment operating income. The segment appendices use adjusted EBITDA or modeled operating-income proxies, and the synthesis uses a consolidated EBITDA-to-EBIT bridge. That bridge is well labeled, but it is still a model judgment sitting on top of a capital-heavy acquisition compounder.

The base case subtracts a total EBITDA-to-EBIT bridge charge of $2.955B against $11.055B of adjusted EBITDA, producing $8.100B of operating income and a 16.3% operating margin. The synthesis itself says the price gate can be lost if the EBITDA-to-EBIT bridge is too generous by roughly $0.8B. That is not a remote risk. FY2025 capex was $2.713B, including $1.742B of growth capex, while acquisition consideration was about $4.1B. Goodwill and intangibles are already a material part of the balance sheet. A business that keeps buying assets and adding capacity can produce more adjusted EBITDA while depreciation, depletion, amortization, acquisition costs, integration spend, maintenance capex, environmental obligations, and impairment risk eat more of the value than the model assumes.

This is especially important because the live FMP statement checks continue to be noisy for CRH, and the quant foundation correctly lets official SEC/CRH values control. The red team is not using FMP statement mismatches to change the base. It is using them as a reminder that precision is already fragile. When the actual disclosed segment profit metric is adjusted EBITDA, any clean-looking segment OI build deserves a haircut unless management proves incremental capital is earning up.

3. Strongest bear case

The short-seller version is simple: CRH is an excellent roll-up operator whose stock is being underwritten as an elite compounder before the return evidence justifies it. The company has real local moats in aggregates, roads, water products, and cementitious materials, but it is paying up for scarce assets at the same time that peers and private buyers want the same reserves and infrastructure exposure. Over the next two years, adjusted EBITDA can keep rising while adjusted ROIC stays around 11%-12%, net debt remains higher than pre-2025 levels, and operating income fails to compound fast enough to support a 15x through-cycle multiple at today's price.

Mechanism: acquisition return dilution and operating-income conversion leakage, concentrated in AMS and International but visible at the consolidated level. Timeline: FY2026-FY2027, because the 2025 acquisition wave, Eco Material integration, Adbri synergies, Construction Accessories divestiture effects, and stepped-up growth capex should start showing whether they are high-return or merely high-activity. Observable anchor: adjusted ROIC and the adjusted EBITDA-to-operating-income bridge. If adjusted EBITDA grows but adjusted ROIC remains below 12% and operating income growth trails adjusted EBITDA growth, the bear case is being validated.

4. Cross-examination of management commentary

First, management's "$40 billion of financial capacity" message is a double-edged sword. The Investor Day release defines it as available cash and debt financing after maintenance capex, and the release also says deployment depends on value opportunities. The bullish read is disciplined optionality. The skeptical read is that CRH has created a very large spending narrative around an industry where the best assets are scarce, local, and increasingly expensive. If financial capacity becomes a pressure to transact, then the $40B number is not a moat; it is a temptation. The first evidence of overpromising would be adjusted ROIC failing to recover even as acquisition revenue and adjusted EBITDA rise.

Second, the Q4 transcript's Road Solutions optimism rests on funding and backlog conditions that are monitorable but not permanent. Management highlighted record highway funding and remaining IIJA runway. The problem is that the Stage 5 horizon runs to 2030-12-31, not to the 2026 construction season. Martin Marietta's FY2026 guidance is instructive: it expects only 1%-3% aggregates volume growth and 4%-6% ASP growth. Vulcan's Q4 2025 release also showed a mixed picture: full-year adjusted EBITDA rose, but Q4 adjusted EBITDA margin fell year over year and aggregates cash gross profit per ton was lower in Q4. Peers still show pricing power, but they do not show a frictionless volume/margin boom. If CRH's Road Solutions backlog converts at lower margin, AMS may still grow revenue while losing the EPS cushion.

Third, the data-center and water infrastructure story in Americas Building Solutions is credible but can be overcapitalized. The ABS appendix sensibly models base growth below the corporate target, yet the red team still worries about the B&I margin step-up. ADS, a focused water-management competitor, reported only 0.4% net sales growth in its December 2025 quarter while describing a challenging and mixed end-market backdrop. ADS also posted a much higher adjusted EBITDA margin than CRH's ABS, which means focused competitors can be both aggressive and profitable in the water/stormwater value chain. If CRH's B&I demand is real but competitive, the first miss will show up as ABS adjusted EBITDA margin stalling rather

than revenue collapsing.

5. Stage 5 tie-out reverification

The recency anchor is not stale in a simple arithmetic sense. FY2025 is the right TTM base, Q1 2026 is not yet reported as of 2026-04-26, and the base first-forward-year revenue path is only about 6% above FY2025 revenue. The latest FY2025 quarterly trend also does not show a consolidated collapse: Q4 revenue was up 6%, Q4 adjusted EBITDA was up 14%, and the company guided FY2026 adjusted EBITDA to $8.1B-$8.5B. The red-team issue is not a stale start. It is whether the start is being extrapolated into 2030 with too little penalty for funding transition and capital intensity.

The share count path is plausible but not free. The base assumes $1.5B of annual repurchases, producing 630.8M diluted shares by 2030 after SBC issuance. That is close to the five-year buyback average, and flat shares would still leave EPS at $8.21, above the $7.87 requirement. But the base cushion would then be much thinner, and the buyback assumption competes with the company's own preferred uses of capital: M&A, growth capex, dividends, and balance-sheet flexibility. In FY2025 CRH deployed about $4.1B to acquisitions, $1.7B to growth capex, about $1.0B to dividends and $1.2B to buybacks. This is not an asset-light repurchase story.

The product CAGR that most exceeds clean peer evidence is not ABS Outdoor Living, which the model restrains, but the combination of AMS Road Solutions at 6.5% and International B&I at 6.5%. Both may happen, but both lean on infrastructure, data centers, water, energy, and reindustrialization at the same time. That creates correlation. If large project timing slips, if power availability slows data center construction, if public budgets get delayed, or if contractors push back on price, the same macro theme weakens several model lines together.

6. Forced-exit signal

Exit if AMS adjusted EBITDA margin for the combined Q2 FY2026 plus Q3 FY2026 construction season is below 25.5%, unless the miss is fully explained by a one-time weather event and recovered in backlog and Q4 pricing. The benchmark is Q2+Q3 FY2025 AMS adjusted EBITDA of $2.796B on $10.146B of revenue, or about 27.6%. A fall below 25.5% would be more than 200 bps of seasonal margin compression in the business that is supposed to be CRH's highest-quality profit pool.

That signal is better than watching consolidated revenue because CRH can buy revenue. It is better than watching FY2026 adjusted EBITDA alone because acquired EBITDA can mask weaker conversion. It is better than waiting for FY2026 ROIC because the stock can re-rate before annual ROIC is disclosed. If AMS margins crack in the strongest seasonal quarters while management is still talking about record funding and backlogs, the model's central assumption about AMS growth and EBIT conversion is wrong. The synthesis should then be rewritten around the bear case, not around a narrower base-case pass.

7. What would make the thesis wrong

The thesis is wrong if CRH's connected portfolio turns out to be more valuable to management's M&A narrative than to shareholders' incremental returns. Specifically, if FY2026-FY2027 shows adjusted EBITDA growth but adjusted ROIC does not recover above FY2024's 13.4%, the stock should not be treated as a high-quality compounder. It should be treated as a good cyclical materials platform with a lower warranted multiple and a higher burden of proof.

The most important unresolved issue is acquisition-level transparency. Management can credibly describe Eco Material synergies, Adbri momentum, local sourcing relationships, and connected-portfolio benefits. But the outside investor still cannot see acquisition-level ROIC, segment operating income, product operating income, or the true organic/inorganic split at the precision needed to bless a low-teens ROIC roll-up. The moat appendix is right that the physical moat is real. The red team adds: a real moat at low incremental returns is not enough for Gideon.

Final red-team conclusion: conditional. The base arithmetic survives, but the quality bar does not clear cleanly. Position sizing should reflect that the bear case is not a recession fantasy; it is a very plausible scenario in which CRH grows, spends, and integrates, yet the equity earns mediocre returns because the operating-income bridge and ROIC fail to improve. The synthesis should carry a prominent warning that the P/E 15 pass is numerically valid but fragile.

Source log

- Internal ER2 inputs reviewed: `appendix_synthesis.md`, all three segment appendices, `appendix_management.md`, `appendix_moat.md`, `data_package.md`, `quant_foundation.md`, and `quant_foundation_review.md`.

- Live FMP pulls saved under `raw/rt`: `quote`, `profile`, quarterly `income-statement`, annual `cash-flow-statement`, `earning-call-transcript-dates`, and Q4 FY2025 `earning-call-transcript` for CRH.
- CRH FY2025 results release: https://www.crh.com/media/press-releases/2026/crh-reports-q4-and-fy-2025-results/
- CRH 2025 Form 10-K, SEC EDGAR: https://www.sec.gov/Archives/edgar/data/849395/000162828026009043/crh-20251231.htm
- CRH Investor Day 2025 release: https://www.crh.com/media/press-releases/2025/crh-sets-out-next-era-of-growth-and-five-year-targets-at-investor-day/
- CRH Q1 2026 result-date confirmation: https://www.crh.com/media/press-releases/2026/crh-confirms-date-for-q1-2026-results/
- Peer and outside checks: Vulcan Materials Q4/FY2025 release, Martin Marietta Q4/FY2025 release, and Advanced Drainage Systems Q3 FY2026 release.

Appendix D - Data Package (Raw Historicals)

CRH - Data Package (Subagent D)

Company: CRH plc Ticker: CRH Prepared for: ER2 / Gideon Wave 1 Prepared on: 2026-04-26 Primary output path: `C:\Users\Admin\OneDrive\GPT\ER 2.0\CRH\data_package.md`

Stage 0 time anchor

- Today: 2026-04-26.
- Company fiscal year convention: CRHâ€™s fiscal year ends December 31.
- Most recently reported quarter: Q4 FY2025 / FY2025, period ended 2025-12-31. CRH published/filed its 2025 Form 10-K on 2026-02-18; CRH has announced Q1 2026 results for 2026-04-30, so Q1 2026 is not yet reported as of 2026-04-26.
- TTM anchor: Q1 FY2025 + Q2 FY2025 + Q3 FY2025 + Q4 FY2025 -> TTM ending 2025-12-31.
- Forward horizon: TTM end date 2025-12-31 + 5 calendar years = 2030-12-31. Compounding span is exactly 5 calendar years.

Source and verification log

All historical tables use `quant_foundation.md` as the reconciled source of truth where it gives a value. Live sources were fetched again for this D package and saved under `raw\d`. No local data warehouse cache was read.

Source family	Live source used in this run	D raw file / note
FMP annual statements	`https://financialmodelingprep.com/stable/income-statement?symbol=CRH&period=annual&limit=8`; `balance-sheet-statement`; `cash-flow-statement`; `key-metrics`; `ratios`	`raw\d\fmp_*_annual_live.json`
FMP product segmentation	`https://financialmodelingprep.com/stable/revenue-product-segmentation?symbol=CRH&period=annual` and `period=quarter`	`raw\d\fmp_revenue_product_segmentation_*_live.json`
FMP transcripts	`https://financialmodelingprep.com/stable/earning-call-transcript?symbol=CRH&year=2025&quarter=1..4` and transcript dates	`raw\d\fmp_transcript_2025_q*_live.json`; dates file confirms Q1 2025 call 2025-05-06, Q2 2025 call 2025-08-07, Q3 2025 call 2025-11-06, Q4 2025 call 2026-02-19
SEC filings	2025 Form 10-K, 2025 Q1/Q2/Q3 Form 10-Qs, 2022 Form 20-F, 2023 Form 10-K, SEC companyfacts for CIK 0000849395	`raw\d\sec_*_live.*`
CRH IR quarterly releases	Q1 2025, Q2 2025, Q3 2025, Q4/FY2025 CRH results pages and FY2025 PDF	`raw\d\crh_ir_*_live.html`, `raw\d\crh_fy2025_results_announcement_live.pdf`
CRH Investor Day	2025 Investor Day release and main presentation	`raw\d\crh_ir_investor_day_2025_release_live.html`, `raw\d\crh_investor_day_2025_main_presentation_live.pdf`
Corporate actions	Eco Material completion, S&P 500 inclusion, buyback, dividend, LSE delisting/preference-share review	`raw\d\crh_*_live.html`

Important control point: FMP is not clean for CRH. The verified quant foundation and QFR already cleared this exception. FMP product/service annual segmentation matches the official 2025 product/service totals but carries a wrong `reportedCurrency` label. FMP's 2025 Q4 product/service row is not standalone Q4; it equals official H2 2025. FMP's annual income/cash-flow statement endpoint also materially understates FY2025 official revenue, operating income, net income, operating cash flow and capex. Official SEC/CRH values control wherever this package gives a CRH operating, cash-flow, segment or balance-sheet value.

1. Reporting structure & taxonomy

CRH is organized into three reportable segments across two divisions. The Americas division includes Americas Materials Solutions and Americas Building Solutions. The International division is reported as International Solutions. The current segment labels used throughout this file are the labels specified by the orchestrator and verified in the 2025 Form 10-K.

Segment	FY2025 revenue ($B)	% of total revenue	FY2025 adjusted EBITDA ($B)	FY2025 adjusted EBITDA margin	One-line description	Source
Americas Materials Solutions	17.029	45.5%	4.002	23.5%	Aggregates, cementitious materials, ready-mixed concrete, asphalt, paving and construction services in North America.	2025 Form 10-K; QF P2
Americas Building Solutions	7.122	19.0%	1.474	20.7%	Products that connect and protect infrastructure plus outdoor-living products, primarily in North America.	2025 Form 10-K; QF P2
International Solutions	13.296	35.5%	2.205	16.6%	Materials, road solutions, building and infrastructure products and outdoor-living products across Europe, Australia and other non-U.S. markets.	2025 Form 10-K; QF P2
Total	37.447	100.0%	7.681	20.5%	CRH consolidated.	2025 Form 10-K; FY2025 results release

Current product/activity taxonomy is richer than FMP's generic Product and Service labels. CRH discloses four principal activities and product categories in the 2025 Form 10-K: Essential Materials, Road Solutions, Building & Infrastructure Solutions and Outdoor Living Solutions. The 2025 10-K gives a three-year current-taxonomy table for FY2023-FY2025 and a 2025 bridge by reportable segment. That is the correct taxonomy for downstream segment agents. FMP's Product and Service labels should not be assigned to a single reportable segment.

Product/activity category	FY2025 revenue ($B)	FY2024 revenue ($B)	FY2023 revenue ($B)	Segment mapping
Essential Materials	10.374	9.560	9.459	Americas Materials Solutions and International Solutions
Road Solutions	17.089	16.310	15.666	Americas Materials Solutions and International Solutions
Building & Infrastructure Solutions	4.868	4.567	4.698	Americas Building Solutions and International Solutions
Outdoor Living Solutions	5.116	5.135	5.126	Americas Building Solutions and International Solutions
Total revenues	37.447	35.572	34.949	Ties to consolidated revenue

Geography is material because CRH is increasingly North America weighted. The 2025 Form 10-K primary geographic-market table reports $22.834B of FY2025 revenue in the United States, $3.473B in Rest of World, $3.767B in the United Kingdom and $7.373B in Rest of Europe. By this definition, U.S. revenue was 61.0% of FY2025 total revenue. In the 10-K business overview, management also reports FY2025 end-market mix as 40% infrastructure, 32% residential and 28% non-residential, with 60% of revenues tied to new-build construction and 40% to repair and remodel activity.

Taxonomy stability: current segment/product taxonomy is comparable for FY2023-FY2025 in the 2025 10-K tables and for FY2022 in the verified quant foundation's official-source extraction. FY2021 is pre-current-taxonomy for segment analysis and was reported under older IFRS/20-F labels such as Americas Materials, Building Products and Europe Materials. Downstream subagents should not splice FY2021 old-taxonomy segment data into current segment CAGR calculations. For consolidated historicals, FY2021 can be shown as a legacy official reference; for current segment historicals, comparable dollar disclosure starts at FY2022 in QF and at FY2023 in the latest 10-K product/activity table.

2. Consolidated historicals

All figures are $ billions except EPS and shares. FY2022-FY2025 values follow the verified quant foundation and SEC official values. FY2021 is included as a legacy IFRS official reference from the 2022 Form 20-F/SEC companyfacts, because QF's main current-taxonomy tables start later.

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue	30.981	32.723	34.949	35.572	37.447	FY2021 20-F; FY2022-FY2025 SEC/QF

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Operating income	3.585	3.809	4.186	4.925	5.440	FY2021 20-F operating profit; FY2022-FY2025 SEC/QF
Operating margin	11.6%	11.6%	12.0%	13.8%	14.5%	Calculated
Net income	2.621	3.889	3.072	3.521	3.790	FY2021 20-F; FY2022-FY2025 SEC/QF
Diluted EPS	3.26	5.11	4.33	5.02	5.51	FY2021 20-F; FY2022-FY2025 SEC companyfacts/10-K
Diluted share count (M)	786.8	764.1	729.2	689.5	677.0	FY2021 derived from attributable income/EPS; FY2022-FY2025 SEC companyfacts/10-K
Capex	1.554	1.523	1.817	2.578	2.713	SEC companyfacts; FY2025 QF
FCF before dividends (OCF - capex)	2.656	2.431	3.200	2.411	2.912	SEC companyfacts calculation
Adjusted FCF where CRH discloses it	n/d	n/d	n/d	4.2	4.969	FY2025 release/QF; FY2024 comparator in FY2025 release
Adjusted ROIC, company non-GAAP	n/d	n/d	n/d	13.4%	12.1%	FY2025 10-K/QF
Operating income / average invested capital	n/d	n/d	n/d	16.7%	15.2%	FY2025 10-K/QF

ROIC note: for FY2025, the official non-GAAP return-quality reference is adjusted ROIC of 12.1%, down from 13.4% in FY2024. The 10-K also provides operating income as a percentage of average invested capital of 15.2% for FY2025 and 16.7% for FY2024. These are the controlling return metrics for the disqualifier sweep. I am not filling FY2021-FY2023 adjusted ROIC from FMP because FMP's statement base is not clean for CRH and because QF did not clear those older ROIC values.

The tax-rate base embedded in the FY2025 company ROIC framework is the official income tax expense of $1.041B on income before tax and equity-method income of $4.805B, or about 21.7%. A simple NOPAT proxy using FY2025 operating income of $5.440B and that tax rate gives about $4.26B. The company-disclosed adjusted ROIC remains the controlling return metric because the denominator and non-GAAP adjustments are supplied in the 10-K reconciliation.

3. Segment historicals

CRH's official segment profit metric is adjusted EBITDA, not segment operating income. Segment operating income is not separately disclosed in the same form as consolidated operating income. The tables below therefore use revenue, adjusted EBITDA and adjusted EBITDA margin. All figures are $ billions except percentages.

Americas Materials Solutions

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue	n/c	14.324	15.435	16.173	17.029	QF P2, 2025 10-K
YoY %	n/c	n/c	7.8%	4.8%	5.3%	Calculated
Adjusted EBITDA	n/c	2.638	3.059	3.745	4.002	QF P2, 2025 10-K
Adjusted EBITDA margin	n/c	18.4%	19.8%	23.2%	23.5%	Calculated

AMS is the largest segment and the main driver of CRH's North America infrastructure exposure. In FY2025, AMS revenue grew 5%, adjusted EBITDA grew 7%, and margin expanded 30 bps. The FY2025 release attributes the annual performance to acquisition contribution, pricing progress, improved second-half volumes, disciplined cost management and operational efficiencies.

Americas Building Solutions

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue	n/c	6.188	7.017	7.059	7.122	QF P2, 2025 10-K
YoY %	n/c	n/c	13.4%	0.6%	0.9%	Calculated
Adjusted EBITDA	n/c	1.219	1.442	1.389	1.474	QF P2, 2025 10-K

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Adjusted EBITDA margin	n/c	19.7%	20.6%	19.7%	20.7%	Calculated

ABS had modest revenue growth in FY2025 but converted it into 6% adjusted EBITDA growth and a 100 bps margin lift. The release points to business improvements, asset optimization, acquisition contribution, energy/data-center demand and water infrastructure demand offsetting subdued residential activity and weather.

International Solutions

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue	n/c	12.211	12.497	12.340	13.296	QF P2, 2025 10-K
YoY %	n/c	n/c	2.3%	-1.3%	7.7%	Calculated
Adjusted EBITDA	n/c	1.531	1.675	1.796	2.205	QF P2, 2025 10-K
Adjusted EBITDA margin	n/c	12.5%	13.4%	14.6%	16.6%	Calculated

International Solutions was the strongest FY2025 margin improver: revenue increased 8%, adjusted EBITDA increased 23%, and margin expanded 200 bps. Management attributes this to favorable pricing, acquisitions, operational efficiencies, divestitures of lower-return activity and a good contribution from Australia following Adbri.

4. Product / sub-segment historicals

The most granular clean dollar disclosure is not aggregates/cement/asphalt/ready-mix by segment in annual dollars. The 2025 10-K discloses product/activity categories in dollars for FY2023-FY2025 and their cross-segment composition. Those are the controlling product dollars. For materials sub-lines such as aggregates, cement, asphalt, ready-mixed concrete and paving, CRH generally discloses volume and price movements rather than annual revenue dollars. Those growth indicators are useful but should not be turned into fabricated dollar histories.

Dollar-disclosed product/activity categories

Product/activity	What it is	Dollar disclosure?	FY2023 revenue ($B)	FY2024 revenue ($B)	FY2025 revenue ($B)	Source
Essential Materials	Aggregates and cementitious materials used across construction and infrastructure.	Yes, category dollars by year and segment.	9.459	9.560	10.374	2025 10-K revenue note
Road Solutions	Road materials, asphalt, ready-mixed concrete, paving and construction services.	Yes, category dollars by year and segment.	15.666	16.310	17.089	2025 10-K revenue note
Building & Infrastructure Solutions	Products that connect/protect water, energy, telecom and complex commercial infrastructure.	Yes, category dollars by year and segment.	4.698	4.567	4.868	2025 10-K revenue note
Outdoor Living Solutions	Hardscapes, masonry, fencing, railing and lawn/garden products.	Yes, category dollars by year and segment.	5.126	5.135	5.116	2025 10-K revenue note
Product revenues	Broad revenue-recognition line, not a business product category.	Yes, but not segment-specific.	26.156	26.699	28.754	2025 10-K income statement/QF
Service revenues	Broad revenue-recognition line, mainly over-time construction/service activity.	Yes, but not segment-specific.	8.793	8.873	8.693	2025 10-K income statement/QF

FY2025 product/category bridge by segment

Principal activity	AMS ($B)	ABS ($B)	International ($B)	Total ($B)
Essential Materials	5.195	0.000	5.179	10.374
Road Solutions	11.834	0.000	5.255	17.089
Building & Infrastructure Solutions	0.000	2.632	2.236	4.868

Principal activity	AMS ($B)	ABS ($B)	International ($B)	Total ($B)
Outdoor Living Solutions	0.000	4.490	0.626	5.116
Total revenues	17.029	7.122	13.296	37.447

Products with growth-only or volume/price disclosure

Segment	Product/sub-line	Disclosure method	FY2025 / latest trend	Source
AMS	Aggregates	Volume and price disclosed, not annual dollars.	FY2025 aggregates volume +4%; price +4%, with adverse mix effects. Q4 volume +6%; price +3%.	FY2025 results release
AMS	Cement	Volume and price disclosed, not annual dollars.	FY2025 cement volume +1%; price +1%. Q4 volume +1%; price in line.	FY2025 results release
AMS	Asphalt	Volume and price disclosed, not annual dollars.	FY2025 asphalt volume +4%; price in line. Q4 volume +7%; price in line.	FY2025 results release
AMS	Ready-mixed concrete	Volume and price disclosed, not annual dollars.	FY2025 volume +3%; price +2%. Q4 volume +1%; price +4%.	FY2025 results release
AMS	Paving and construction	Revenue growth only, not dollars.	FY2025 revenue +2%, with construction backlogs ahead of the prior year. Q4 revenue +3%.	FY2025 results release
ABS	Building & Infrastructure Solutions	Product category dollars disclosed; sub-line dollars not disclosed.	FY2025 category revenue +2%; supported by energy, data center and water infrastructure activity.	2025 10-K; FY2025 release
ABS	Outdoor Living Solutions	Product category dollars disclosed; sub-line dollars not disclosed.	FY2025 category revenue was in line/down slightly; residential repair/remodel was resilient but new-build remained subdued.	2025 10-K; FY2025 release
International	Aggregates/cement	Volume and price disclosed, not annual dollars.	Q4 aggregates volume +7%; cement volume +2%; cement price +1%; aggregates price in line. FY2025 International total revenue +8%.	FY2025 release
International	Asphalt/ready-mix/paving	Volume/price and qualitative disclosure, not annual dollars.	Q4 asphalt price +4%, volume -7%; ready-mixed concrete volume +5%, price +1%; paving/construction affected by divestitures.	FY2025 release

No back-solved product dollars are included in this package. The clean rule for downstream agents: use dollar-disclosed categories only; use volume/price/growth indicators for sub-line direction; do not derive aggregates, cement, asphalt, ready-mix or paving revenue dollars unless a later source explicitly discloses them.

5. Most recent quarterly trend

Company FY ends December 31. Most recently completed fiscal quarter at time of writing: FY2025 Q4, covering 2025-10-01 to 2025-12-31, reported on 2026-02-18 via `https://www.crh.com/media/press-releases/2026/crh-reports-q4-and-fy-2025-results/` and discussed on the 2026-02-19 FMP transcript.

Consolidated quarterly trend

Quarter	Revenue ($B)	YoY %	Operating income ($B)	Net income ($B)	Adjusted EBITDA ($B)	Adj. EBITDA margin	Source
Q1 FY2025	6.756	+3%	0.018	-0.098	0.495	7.3%	SEC Q1 results; Q1 10-Q
Q2 FY2025	10.206	+6%	1.935	1.332	2.463	24.1%	SEC Q2 results; Q2 10-Q
Q3 FY2025	11.069	+5%	2.081	1.519	2.695	24.3%	CRH Q3 release; Q3 10-Q

Quarter	Revenue ($B)	YoY %	Operating income ($B)	Net income ($B)	Adjusted EBITDA ($B)	Adj. EBITDA margin	Source
Q4 FY2025	9.416	+6%	1.406	1.037	2.028	21.5%	SEC/CRH FY2025 results release
FY2025 / TTM	37.447	+5%	5.440	3.790	7.681	20.5%	2025 10-K; QF

Segment quarterly trend

Quarter	Segment	Revenue ($B)	Revenue YoY	Adjusted EBITDA ($B)	Adjusted EBITDA YoY	Margin	Source
Q1 FY2025	AMS	2.243	+2%	0.059	+293%	2.6%	Q1 10-Q and Q1 release
Q1 FY2025	ABS	1.682	-1%	0.287	-7%	17.1%	Q1 10-Q and Q1 release
Q1 FY2025	International	2.831	+7%	0.149	+22%	5.3%	Q1 10-Q and Q1 release
Q2 FY2025	AMS	4.509	+2%	1.241	+4%	27.5%	Q2 10-Q and Q2 release
Q2 FY2025	ABS	2.159	+2%	0.501	+5%	23.2%	Q2 10-Q and Q2 release
Q2 FY2025	International	3.538	+13%	0.721	+23%	20.4%	Q2 10-Q and Q2 release
Q3 FY2025	AMS	5.637	+6%	1.555	+5%	27.6%	Q3 10-Q
Q3 FY2025	ABS	1.797	+2%	0.432	+22%	24.0%	Q3 10-Q
Q3 FY2025	International	3.635	+5%	0.708	+15%	19.5%	Q3 10-Q
Q4 FY2025	AMS	4.640	+9%	1.147	+9%	24.7%	FY2025 results release
Q4 FY2025	ABS	1.484	-1%	0.254	+2%	17.1%	FY2025 results release
Q4 FY2025	International	3.292	+6%	0.627	+33%	19.0%	FY2025 results release

Product/category quarterly revenue trend

Quarter	Essential Materials ($B)	Road Solutions ($B)	Building & Infrastructure ($B)	Outdoor Living ($B)	Source
Q1 FY2025	1.938	2.502	1.074	1.242	Q1 10-Q
Q2 FY2025	2.741	4.536	1.282	1.647	Q2 10-Q
Q3 FY2025	2.977	5.574	1.272	1.246	Q3 10-Q
Q4 FY2025	2.718	4.477	1.240	0.981	Derived: FY2025 10-K less Q3 YTD 10-Q
FY2025	10.374	17.089	4.868	5.116	2025 10-K

Quarterly product/category check: Q1+Q2+Q3+Q4 equals FY2025 for each category. Q4 is derived from official FY2025 minus official nine-month 2025 totals because the FY2025 results release provides Q4 segment revenue and product commentary but the annual 10-K provides the clean full-year category table.

6. Management commentary on forward growth

Copyright note: the "quote fragment" column uses short verified fragments from live-fetched transcripts or IR pages. The interpretation column paraphrases the surrounding management commentary and should be used for modeling context. Do not treat the paraphrase as a verbatim transcript quote.

Americas Materials Solutions

Source	Speaker	Short verified quote fragment	Topic	Modeling interpretation
Q4 FY2025 call, 2026-02-19 FMP transcript	Randy Lake, COO	"underlying backdrop remains positive"	Transportation, water and reindustrialization demand	AMS enters 2026 with management pointing to public infrastructure, water systems and reindustrialization as demand supports.

Source	Speaker	Short verified quote fragment	Topic	Modeling interpretation
Q4 FY2025 call, 2026-02-19 FMP transcript	Jim Mintern, CEO	"all-time record levels"	2026 federal highway funding	Highway funding is a meaningful AMS/Road Solutions support. Management also discussed remaining IIJA highway funds and state DOT funding.
Q3 FY2025 release, 2025-11-05 CRH IR	Jim Mintern, CEO	"favorable underlying demand"	Q3 AMS and consolidated demand	Q3 demand was still positive despite strong comparisons; CRH raised the FY2025 adjusted EBITDA midpoint.
Q2 FY2025 results release, 2025-08-06 SEC/CRH IR	Jim Mintern, CEO	"active pipeline of opportunities"	M&A in materials platforms	AMS was already active in bolt-ons before Eco Material closed. Model should separate base organic growth from acquisition contribution.
Investor Day release, 2025-09-30 CRH IR	Jim Mintern, CEO	"raising our ambition to 2030"	Long-range targets	2026-2030 targets include 7%-9% average annual revenue growth including M&A and organic growth, not pure same-store growth.

Americas Building Solutions

Source	Speaker	Short verified quote fragment	Topic	Modeling interpretation
Q2 FY2025 results release, 2025-08-06 SEC/CRH IR	Management release	"strong demand in water infrastructure"	Building & Infrastructure Solutions	Water infrastructure and data-center demand are the main offset to weaker residential new-build conditions.
Q4 FY2025 call, 2026-02-19 FMP transcript	Jim Mintern, CEO	"strong performance really came from"	Infrastructure business within ABS	The stronger ABS profit story is not outdoor living; it is infrastructure exposure, especially below-ground products for energy, water, communications and data centers.
Q1 FY2025 results release, 2025-05-05 CRH IR	Jim Mintern, CEO	"well positioned for another year"	Full-year growth outlook	Despite Q1 weather and residential softness, management reaffirmed positive full-year demand.
FY2025 results release, 2026-02-18 CRH IR	Management release	"data center end-market"	Reindustrialization	The release specifically links ABS Building & Infrastructure growth to energy sector and data-center activity.

International Solutions

Source	Speaker	Short verified quote fragment	Topic	Modeling interpretation
Q4 FY2025 call, 2026-02-19 FMP transcript	Jim Mintern, CEO	"really good momentum"	International 2026 outlook	Management described Eastern Europe, Western Europe and Australia as entering 2026 with positive momentum, though country-level conditions remain mixed.
Q4 FY2025 call, 2026-02-19 FMP transcript	Jim Mintern, CEO	"another strong year"	International growth	Management expects continued International progress, supported by Eastern Europe, early residential signs in France/U.K. and Australia synergy delivery.
Q2 FY2025 release, 2025-08-06 CRH IR	Management release	"sustained pricing momentum"	International margin	International's 2025 revenue and margin expansion relied on pricing, acquisitions and operational efficiency.

Source	Speaker	Short verified quote fragment	Topic	Modeling interpretation
Q4 FY2025 results release, 2026-02-18 CRH IR	Management release	"operational efficiencies"	Margin expansion	The 200 bps FY2025 International margin expansion should not be modeled as only volume-driven; efficiency and portfolio actions matter.

Capital allocation and enterprise guidance

Source	Speaker	Short verified quote fragment	Topic	Modeling interpretation
Investor Day release, 2025-09-30 CRH IR	Jim Mintern, CEO	"$40 billion of financial capacity"	2026-2030 deployment capacity	This is after maintenance capex and includes cash/debt financing capacity for growth investments and shareholder returns.
Investor Day release, 2025-09-30 CRH IR	CRH	"7% and 9%"	2026-2030 revenue growth target	Revenue growth target is total revenue growth, explicitly including organic and inorganic growth.
Q4 FY2025 call, 2026-02-19 FMP transcript	Nancy Buese, CFO	"robust balance sheet"	Leverage and optionality	Management frames 1.8x net debt/adjusted EBITDA as enough capacity to keep acquiring and returning capital.
FY2025 results release, 2026-02-18 CRH IR	CRH	"$8.1bn to $8.5bn"	FY2026 adjusted EBITDA outlook	2026 starting point is management's outlook for adjusted EBITDA of $8.1B-$8.5B and net income of $3.9B-$4.1B.

Guidance bridge: CRH's 2025 Investor Day targets are 2026-2030 average annual total revenue growth of 7%-9%, adjusted EBITDA margin of 22%-24% by 2030, and average annual adjusted FCF conversion above 100%. These are not segment-specific forecasts, but they anchor the synthesis agent's consolidated base case. Segment agents should test whether AMS infrastructure funding, ABS water/reindustrialization demand and International pricing/acquisition synergy can credibly support those consolidated targets without assuming every segment grows at the same rate.

7. Capital allocation history

Figures are $ billions. R&D is not separately disclosed by CRH as a material line item in the income statement; FMP also reports zero R&D expense. M&A is cash paid to acquire businesses net of cash acquired where available; FY2025 management also reports 38 acquisitions for total consideration of $4.1B, which differs from the cash-flow line due to timing, deferred consideration and deal accounting.

Year	Capex	Capex / revenue	R&D	R&D / revenue	Buybacks	Dividends	M&A cash / acquisition consideration	Source
FY2021	1.554	5.0%	n/d	n/d	0.896	0.938	1.494	SEC companyfacts IFRS/2022 20-F
FY2022	1.523	4.7%	n/d	n/d	1.178	0.931	3.253	SEC companyfacts/2023 10-K
FY2023	1.817	5.2%	n/d	n/d	3.067	1.688	0.640	SEC companyfacts/2025 10-K
FY2024	2.578	7.2%	n/d	n/d	1.482	0.956	4.900	SEC companyfacts/2025 10-K
FY2025	2.713	7.2%	n/d	n/d	1.181	0.996	3.856 cash; 4.1 total consideration	SEC companyfacts; FY2025 release/QF

Management's 2025 capital allocation message is aggressive but still balance-sheet constrained. In FY2025 CRH generated $5.625B of operating cash flow and reported adjusted FCF of $4.969B, while deploying $4.1B into acquisitions, $1.742B into growth capex, $0.971B into maintenance capex, about $1.0B into dividends and $1.2B into buybacks. Net debt rose to $14.151B but net debt/adjusted EBITDA remained 1.84x. The model should therefore assume M&A and buybacks are recurring tools, not one-off events, while still stress testing leverage if acquisition deployment stays high.

8. Balance sheet snapshot (FY2025)

Item	$B	Source / calculation
Cash and equivalents	4.096	2025 10-K/QF
Restricted cash	0.051	2025 10-K/QF
Short-term investments	0.000	FMP balance sheet; no separate official ST investment balance disclosed in QF
Current debt	1.175	2025 10-K balance sheet
Long-term debt	16.478	2025 10-K balance sheet
Total debt, current + long-term	17.653	2025 10-K/QF
Finance lease liabilities	0.534	FY2025 results release/QF
Derivative financial instruments, net	0.060	FY2025 results release/QF
Net debt	14.151	Debt + leases + derivative net - cash; QF
Adjusted EBITDA	7.681	2025 10-K/QF
Net debt / adjusted EBITDA	1.84x	14.151 / 7.681
Goodwill	13.099	2025 10-K
Intangible assets, net	2.048	2025 10-K
Goodwill + intangibles	15.147	2025 10-K
Shareholders' equity attributable to CRH	24.004	2025 10-K
Tangible book value	8.857	24.004 - 15.147

Balance-sheet read-through: leverage is green for the Stage 1 gate, but goodwill/intangibles are meaningful after years of acquisitions. Goodwill plus intangibles equaled about 26% of total assets at FY2025 year-end. The acquisition-heavy strategy must keep producing synergies and returns to avoid future impairment risk. Interest expense was $810M in FY2025 versus $612M in FY2024, primarily due to higher gross debt balances.

9. Recent corporate actions (last 12 months)

- 2025-05-05 / Q1 2025: CRH completed eight acquisitions for total consideration of $0.6B in Q1, declared a $0.37 quarterly dividend and continued its quarterly $0.3B buyback cadence. Source: Q1 2025 results release and Q1 10-Q.
- 2025-07-29: CRH agreed to acquire Eco Material Technologies for $2.1B. Eco Material is a North American supplier of supplementary cementitious materials, with a national network of fly ash, pozzolan, synthetic gypsum and green cement operations. Source: CRH acquisition announcement.
- 2025-09-22: CRH completed the Eco Material Technologies acquisition. The transaction is allocated to Americas Materials Solutions and is the largest 2025 acquisition. Source: CRH completion announcement and FY2025 10-K.
- 2025-09-30: CRH held Investor Day 2025 and set 2026-2030 targets: total revenue growth of 7%-9% annually, adjusted EBITDA margin of 22%-24% by 2030 and adjusted FCF conversion above 100%. Source: CRH Investor Day release and presentation.
- 2025-12-08: CRH was selected to join the S&P 500, effective before market open on 2025-12-22. Source: CRH S&P 500 inclusion release.
- 2026-02-18: CRH reported FY2025 results, declared a $0.39 quarterly dividend, announced another $0.3B buyback tranche to run from 2026-02-19 to no later than 2026-04-28, and gave FY2026 net income guidance of $3.9B-$4.1B and adjusted EBITDA guidance of $8.1B-$8.5B. Source: FY2025 results release and buyback/dividend releases.
- 2026-03-13: CRH announced intention to delist ordinary shares and 7% preference shares from the LSE and, subject to shareholder approval, cancel preference shares and delist 5% preference shares from Euronext Growth Dublin. Source: CRH LSE delisting/preference share cancellation release. This is a governance/listing-structure item, not an operating red flag, but management/governance subagent should review shareholder-process details.

10. Open data gaps and caveats

- FMP annual income-statement self-check fails by design for CRH: the live FMP FY2025 income-statement row shows revenue of $31.871B versus official SEC/CRH revenue of $37.447B, a gap of about 14.9%. This is the known QF/QFR caveat. Official SEC/CRH numbers control.
- FMP quarterly product segmentation has a mislabeled 2025 Q4 row: Product $15.223B plus Service $5.262B equals $20.485B, which ties to official H2 2025, not standalone Q4. Official Q4 is Product $7.136B, Service $2.280B and total revenue $9.416B.
- Segment operating income is not disclosed in the same format as consolidated operating income. CRH's segment profit metric is adjusted EBITDA. Segment agents should not fabricate segment operating income.
- Product dollars below the four principal activity categories are not separately disclosed. Aggregates, cement, asphalt, ready-mix and paving have volume, price or revenue-growth commentary, but not clean annual dollar histories.
- Current-taxonomy product/activity dollars are clean for FY2023-FY2025. FY2022 segment data is available from QF in the current segment labels, but FY2021 segment data was reported under older IFRS/20-F taxonomy and is not comparable.
- R&D is not separately disclosed as a material line item. Treat CRH as an asset-heavy building-materials company with capex and M&A as the main reinvestment lines, not as an R&D-led business.
- Direct CRH Q1 2025 and Q2 2025 PDF downloads from the IR media URLs failed after one exact retry each with connection-closed errors. The live CRH HTML pages, SEC results exhibits and SEC Form 10-Qs were successfully fetched and used instead; no cache fallback was used.
- Management quote fields in Section 6 use short verified fragments for copyright compliance. The surrounding context is paraphrased from live-fetched transcripts/releases.

Self-verification record

- Largest segment latest-quarter growth: FY2025/Q4 AMS total revenues were 9% ahead of Q4 2024. Confirmed in live-fetched SEC/CRH FY2025 results release (`raw\d\sec_fy2025_results_live.htm`) and CRH IR results page.
- Management quote check: FMP transcript endpoint for CRH FY2025 Q4 returned date `2026-02-19`, matching the expected call date one day after the 2026-02-18 results release. The quote fragment "underlying backdrop remains positive" appears in the live transcript content.
- FY2025 revenue check: FMP annual income statement does not tie within 1%; it returned $31.871B versus official $37.447B. This exception is not repaired by substitution from cache; it is logged and official SEC/CRH values control per QF/QFR.