

Building Products

2024 outlook: prefer new construction > R&R; upgrade BLDR on stronger starts

Rating Change

4Q23 & '24 outlook: selective until we see R&R inflection

Building products stocks outperformed the market in 2023 (+42% vs. S&P 500 +24%) as the new construction outlook improved and margins of many repair & remodel companies proved to be more resilient than expected despite a challenging demand environment. Investor sentiment has turned more positive, and valuations are higher, but end market performance remains mixed. We upgrade Builders FirstSource (BLDR) to Buy to reflect the stronger US single family starts outlook. We revise ests/POs for stocks under our coverage.

Still prefer new construction over R&R; Upgrade BLDR

We upgrade Builders FirstSource to Buy (from Neutral). BLDR is the best positioned in our coverage for stronger single-family starts, potential increase in lumber prices and homebuilders' shift to more value-add services. We reiterate our Underperform ratings on Masco, Fortune Brand and Mohawk given our continued cautious outlook on repair and remodel. Stocks have rallied >30% from the lows in October despite still challenging end market trends. In R&R, we prefer composite decking companies (TREX, AZEK) that will benefit from ongoing material conversion with upside to 1H24 consensus estimates.

We are cautious on repair & remodel trends in 1H24

We expect repair and remodel (R&R) spend to decline low single-digits in 2024 with weaker trends in 1H24 and potentially recover against easier comparisons later in the year. The last three years have been exceptionally volatile for R&R building products revenue as the post-COVID spike in demand was followed by supply chain disruptions, massive price hikes and extended project backlogs. End market demand normalized in late 2022 and volume declined across the industry through 2023. Consensus estimates are anticipating a better-than-normal growth trend in 1H24 compared to 2H23. We are skeptical that trends improve sequentially given the broader slowdown in discretionary spending and weak existing home sales (impacts turnover related home improvement).

New construction should benefit from stronger SF starts

We recently increased our outlook for single-family starts and expect 9% YoY growth to 1.03mm in 2024 as homebuilders increase community count and sales improve with lower mortgage rates. Our **BofA US Home Sales Indicators** (see report) suggests new home sales recovery will likely continue into 2024 supported by the pullback in rates.

Labor shortages are a secular (and investible) theme

Labor shortages (new construction and remodeling) continue to worsen. We think beneficiaries include companies that: 1) provide services (or installation) that reduce cycle times for homebuilders (TopBuild), 2) manufacture products that reduce build cycle times (Builders FirstSource), or 3) manufacture products that require less maintenance for homeowners (composite decking - TREX and AZEK).

Capital allocation still important to valuation

Valuations are near the high-end of historical ranges. Balance sheets remain historically strong across the sector. How companies allocate cash could determine if valuations rerate (accretive M&A, share repurchase) or de-rate (add capacity, dilutive M&A).

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Equity **United States Building Products**

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Exhibit 1: Rating change

Upgrading BLDR to Buy from Neutral

Company	New Rating	g Old Rating
BLDR	Buy	Neutral
Source: BofA Glo	bal Research	
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Exhibit 2: Price objectives

We are raising POs 20%+ on avg

Building		
Products	New PO	Old PO
AWI	\$110	\$88
BLD	\$410	\$327
BLDR	\$200	\$153
FBIN	\$72	\$56
MAS	\$63	\$52
MHK	\$95	\$80
OC	\$165	\$149
Outdoor Living	New PO	Old PO
HAYW	\$12	\$10
AZEK	\$45	\$36

Source: BofA Global Research

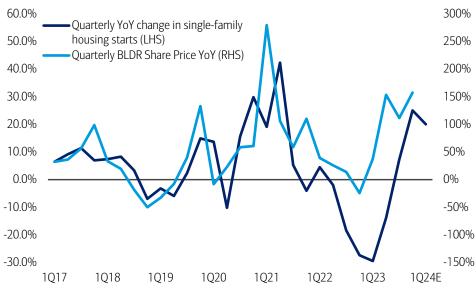
Upgrade BLDR to Buy

Upgrade Builders FirstSource to Buy

We upgrade Builders FirstSource to Buy (from Neutral) and raise our PO to \$200 (from \$153) now based on 9x 2025E EV/EVITDA (was 8.5x 2024E). Our upgrade reflects: 1) positive inflection of single-family housing starts (2/3 of BLDR revenue), 2) ongoing shift to off-site and value-add products from homebuilders due to the tight labor market, and 3) potential revenue and margin upside from higher lumber prices.

Exhibit 3: BLDR stock performance vs. US housing starts

BLDR's stock price is often driven by expectations for US housing starts



Source: US Census Bureau, Bloomberg

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We expect BLDR earnings at the low-end of its bull case scenario

In 2024, we expect single-family housing starts to increase 9% YoY to 1.03mm (+20% YoY in 1Q24 against a low base). BLDR generates around $2/3^{rd}$ of revenue from single-family new construction. We raise our 2024E estimates by 11% (13% above consensus), which is at the low-end of BLDR's bull case scenario provided last quarter.

Exhibit 4: We forecast earnings at the high-end of BLDR's base case in 2024

BLDR earnings and single-family starts scenarios compared to BofA assumptions

2024 Outlook	BLDR's Bear Case	BLDR's Base Case	BLDR's Bull Case	BofA Estimates
SF Housing Starts (YoY)	(4%) to 2%	2% to 8%	8% to 14%	9%
Commodity Price	\$375 to \$425	\$400 to \$450	\$425 to \$475	~\$450
Total Sales	\$16.2B to \$17.7B	\$17.3B to \$18.8B	\$18.4B to \$19.9B	\$17.9B
Adj. EBITDA	\$2.1B to \$2.5B	\$2.4B to \$2.8B	\$2.7B to \$3.1B	\$2.7B
Adj. EBITDA Margin	13% to 14%	14% to 15%	15% to 16%	14.8%

Source: Company filing, BofA Global Research

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Higher lumber prices could drive additional upside to forecasts

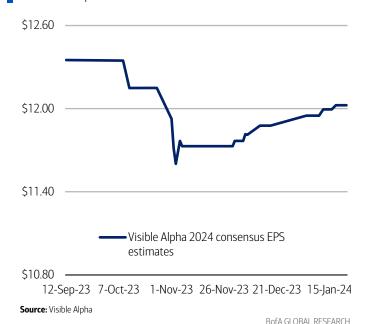
BLDR's lumber and lumber sheets segment (roughly 25% of revenue with ~70% lumber, ~30% OSB) is highly correlated with lumber and OSB prices. BLDR's estimated base commodity price was slightly above \$400/mbf when the company last provided business. Lumber futures pricing has increased by roughly 16% in the last three months and consensus estimates ae generally unchanged.



Exhibit 5: Lumber futures are 16% since BLDR reported 3Q earnings... Lumber Futures March 2024 (USD/1,000 board feet)



Exhibit 6: ...consensus estimates are up just 3% over the same period BLDR Visible Alpha consensus estimates



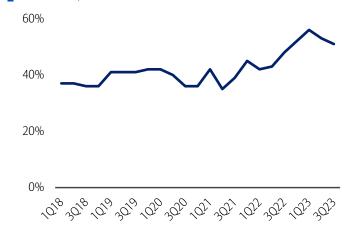
BLDR well positioned to benefit from a tight labor market

BLDR offers a wide range of products and services that help homebuilders improve building efficiency including trusses, wall panels, millwork, windows and doors.

Value-added products have been the fastest growing portion of the business and have driven market share gains (see Exhibit 7). These products made up 51% of revenues in 3Q23 vs. just 37% in in 1Q18. Management continues to invest in these products and believe they can capture more market share in single-family new construction, multifamily, and professional remodeling. Management is aiming to grow value-added revenues at a 10% compound annual growth rate (CAGR). In addition to organic growth, BLDR is focused on tuck-in acquisitions that will add to the value-added offering.

Value-added products also provide a margin benefit for BLDR. Historically, management estimated value-add carried 700-1000bps higher margin than commodity products, but we believe margins are even higher following \$100mm+ in automation investments.

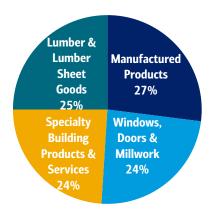
Exhibit 7: Value-Added mix (percent of total sales) Value-Added products are now above 50% of sales



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Exhibit 8: Product mix (3Q23)

Value-added products were 51% of revenues in 3Q23



Source: Company reports

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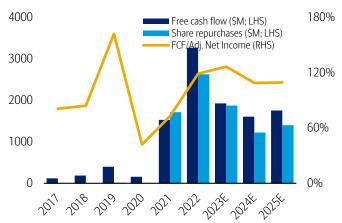
Source: Company reports

Capital allocation could also drive upside

BLDR expects to generate between \$5.5bn to \$8.5bn of deployable capital in 2024E-2026E and plans to allocate between: 1) \$1.0bn to organic growth initiatives by investing in digital and value-add products 2) \$1.5bn to M&A opportunities by pursuing tuck-in acquisitions to enhance capabilities and increase market share and 3) a range of \$3.0bn to \$6.0bn to continuing share repurchases at attractive long-term cost basis (depending on leverage range of 1.0x to 2.0x). BLDR generates a significant amount of free cash flow with limited capital expenditure needed to drive growth. Capital expenditures are just slightly above 2.0% of total sales. At the same time, the company has significantly reduced its leverage ratio to 1.1x net debt/EBITDA (1.5x base business leverage) from 4.2x in 2017 and 2.5x in 2019. We model >\$1.6B, annually, in free cash flow in 2023 and 2024 (~10% free cash flow yield at the current valuation).

Exhibit 9: BLDR free cash flow and share repurchases

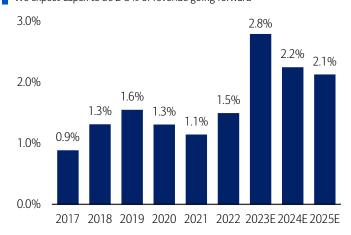
BLDR generates significant FCF, a portion of which is used for repurchases



Source: Company reports, BofA Global Research estimates

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Exhibit 10: Capital expenditures as a percent of sales We expect Capex to be 2-3% of revenue going forward



Source: Company reports, BofA Global Research estimates



Key themes for 4Q23 and 2024

We see four key themes for 2024:

- We expect a robust recovery in new construction. We expect single-family housing starts to grow 9% YoY in 2024, which will be partially offset by a significant decline in multi-family starts.
- 2. We expect repair and remodel (R&R) spend to decline low single-digit with weaker trends in 1H24 and potential recovery against easier comparisons later in the year.
- 3. Labor shortages (new construction and remodeling) continue to worsen.
- 4. How companies allocate cash could determine is valuations re-rate (accretive M&A, share repurchase) or de-rate (add capacity, dilutive M&A).

Theme #1: New construction should recover

We now expect single-family housing starts to increase 20% YoY in 1Q24 against a depressed base from last year (1Q23 SF starts declined -29% YoY). In 2024, we continue to expect single-family housing starts to increase 9% YoY to 1.03mm (unchanged). For total housing starts in 2024, we expect starts to decline (3.5%) YoY to 1.36mm with $\sim\!\!16\%$ decline in multi-family starts offsetting the increase in single-family starts. Homebuilders continue to support sales through building more affordable (smaller) homes, offering rate buydowns and selective price reductions.

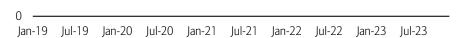
In the most recent Zonda survey, 74% of builders expect starts to increase in 2024, supported by higher lot supply. 35% of builders expect to increase starts by more than 10% in 2024.

Exhibit 11: Single-family housing starts (thousands, SAAR)

Housing starts began to recover in the spring of 2023







Source: US Census Bureau



Exhibit 12: Single-family housing starts (thousands)

We expect single-family new home starts to increase 9% in 2024

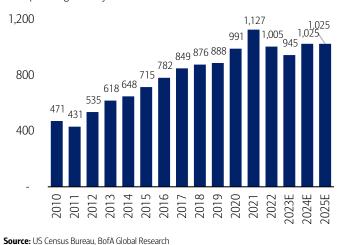
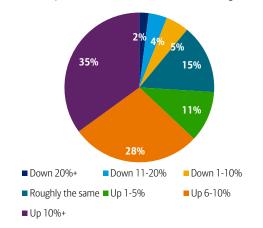


Exhibit 13: What is your plan for housing starts in 2024 vs. 2023?

74% of builders expect to increase starts in 2024, according to Zonda



Source: Zonda Builder Survey Dec 2023

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Theme #2: We are still cautious on repair & remodel

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We expect repair and remodel spend to decline low single-digits with weaker trends in 1H24 and potentially recover against easier comparisons later in the year. Our channel checks with dealers/pro contractors indicate renovation demand continues to decline YoY and moderated sequentially in 2H23 vs. 1H23 due to higher rates, weak existing home sales (impacts turnover related home improvement) and a broader slowdown in discretionary consumer spending. The last three years have been exceptionally volatile for building products revenue as the post-COVID spike in demand was followed with supply chain disruptions and massive price hikes. End market demand normalized in late 2022 and 2023, but elevated project backlogs and channel destocking have made it difficult to gauge the underlying trends. We believe 2H23 was more representative of the new normal. With that in mind, consensus estimates are anticipating a better-thannormal growth trend in 1H24 compared to 2H23. (see: Homebuilders and Building Products: Monthly building products spending snapshot: a weak finish to a down year 11 January 2024)

Exhibit 14: Monthly BAC aggregated card data at home improvement retailers (YoY and change vs 2019)

Dec 2023 spending fell 7.5% YoY, but increased 16.7% vs. Dec 2019



Dec-16 Dec-17 Dec-18 Dec-19 Dec-20 Dec-21 Dec-22 Dec-23

Source: BAC internal data

-20%

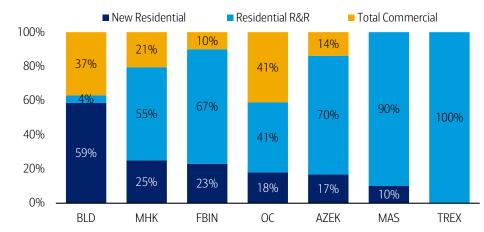


Expect muted recovery in R&R focused building product companies

We expect repair and remodel spend to decline low single-digit with weaker trends in 1H24 and potential recovery against easier comparisons later in the year.

Exhibit 15: Building products residential and commercial exposure

BLD, MHK and FBIN have the highest exposure to new residential construction



Source: BofA Global Research estimates, company reports Excludes AWI which has just 4% to the residential space

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Theme #3: Labor will remain tight

Public builders have repeatedly cited labor shortages as among the biggest long-term concerns for the industry. Construction job openings have increased over the last 4 years and spiked again in September 2023, hitting 431K openings, according to the U.S. Bureau of Labor Statistics. This labor shortage has caused significant inflation in homebuilder labor costs with average hourly earnings for construction workers and framing contractors, over the same period, increasing at an average annual pace of 4% and 5%, respectively. Today construction workers earn an average of \$37 per hour and framers make \$32 - up from \$31 and \$26 in 2019 and \$26 and \$20 in 2013. We think beneficiaries include companies that: 1) provide services (installation) that reduce cycle times for homebuilders (TopBuild), 2) manufacture products that reduce cycle times (Builders FirstSource), and 3) manufacture products that require less maintenance for homeowners (composite decking - TREX and AZEK).

Exhibit 16: Avg. hourly earnings for construction workers and framing contractors $\label{eq:construction} % \[\frac{1}{2} \left(\frac{1}{2} - \frac{1}{2} \right) \left(\frac{1}{2} - \frac{1}{2} - \frac{1}{2} \right) \left(\frac{1}{2} - \frac$

Wages have increased 4-5% annually since 2019

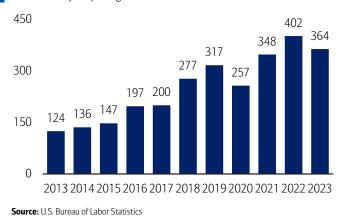


Source: U.S. Bureau of Labor Statistics Note: Seasonally adjusted. Data through Oct 2023



Exhibit 17: Avg. annual construction job openings (thousands)

Construction job openings has been elevated since 2020



Note: Seasonally adjusted

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Exhibit 18: 2023 construction job openings (thousands)

Construction job openings spiked in September



Source: U.S. Bureau of Labor Statistics

Note: Seasonally adjusted

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Theme #4: Capital allocation is key to valuation

Valuations are near the high-end of historical ranges. Balance sheets remain historically strong across the sector. How companies allocate cash could determine if valuations rerate (accretive M&A, share repurchase) or de-rate (add capacity, dilutive M&A).



Key changes to estimates and POs

On average, we model building product 2024 estimates roughly in-line with consensus, but we are above consensus on new construction leveraged building product companies and below consensus on R&R leveraged building product companies.

We expect in-line 4Q23 earnings for most building products manufacturers vs. conservative guidance but see mixed guidance for 2024 earnings with back half weighted growth for R&R companies. On average, we raise price objectives by an average of 21% to reflect: 1) roll forward of EV/EBITDA multiples to 2025E (from 2024E), and 2) higher EV/EBITDA multiples to reflect higher market multiple and lower rates.

Exhibit 19: BofA estimates vs. consensus

Our 2024 estimates are above consensus for new construction and below consensus on repair & remodel.

Building	New CY	Old CY	Consensus CY	New	New vs.	New CY	Old CY	Consensus CY	New	New vs.
Products	2023E	2023E	2023E	vs. Old	Consensus	2024E	2024E	2024E	vs. Old	Consensus
AWI	5.16	5.15	5.13	0%	1%	5.64	5.49	5.52	3%	2%
BLD	19.68	19.68	19.68	0%	0%	21.71	21.10	20.83	3%	4%
BLDR	13.75	13.75	13.28	0%	3%	13.69	12.28	12.03	11%	13%
FBIN	3.90	3.90	3.88	0%	1%	4.25	4.25	4.19	0%	1%
MAS	3.72	3.72	3.72	0%	0%	3.82	3.82	3.97	0%	-4%
MHK	9.00	9.00	9.11	0%	-1%	8.56	9.24	9.91	-7%	-14%
OC	14.02	14.00	13.96	0%	0%	12.92	13.13	13.77	-2%	-6%
Average				0%	1%				2%	-1%
Outdoor	New CY	Old CY	Consensus CY	New	New vs.	New CY	Old CY	Consensus CY	New	New vs.
Living	2023E	2023E	2023E	vs. Old	Consensus	2024E	2024E	2024E	vs. Old	Consensus
HAYW	0.57	0.57	0.53	-3%	3%	0.61	0.68	0.62	-10%	-1%
AZEK	0.88	0.87	0.90	1%	-2%	1.13	1.07	0.98	6%	15%
TREX	1.87	1.87	1.85	0%	1%	2.33	2.33	2.19	0%	6%
Average				-1%	1%				-1%	7%

Source: BofA Global Research estimates, Bloomberg

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Exhibit 20: Ratings and price objectives

We are raising price objectives for most building products companies

Building Products	New Rating	Old Rating	New PO	Old PO	New Multiple (2025 EV/EBITDA)	Old Multiple (2024 EV/EBITDA)
AWI	Buy	Buy	\$110	\$88	11.0	10.0
BLD	Buy	Buy	\$410	\$327	11.0	10.0
BLDR	Buy	Neutral	\$200	\$153	9.0	8.5
FBIN	Underperform	Underperform	\$72	\$56	10.5	10.0
MAS	Underperform	Underperform	\$63	\$52	10.0	10.0
MHK	Underperform	Underperform	\$95	\$80	5.0	5.2
OC	Buy	Buy	\$165	\$149	7.0	7.0
Outdoor Living	New Rating	Old Rating	New PO	Old PO	New Multiple (2025 EV/EBITDA)	Old Multiple (2024 EV/EBITDA)
HAYW	Underperform	Underperform	\$12	\$10	11.0	11.0
AZEK	Buy	Buy	\$45	\$36	17.0	16.0
TREX	Buy	Buy	\$90	\$90	23.0	25.0

Source: BofA Global Research estimates

Building Products 4Q company previews

Armstrong (AWI): reiterate Buy; Raise PO to \$110

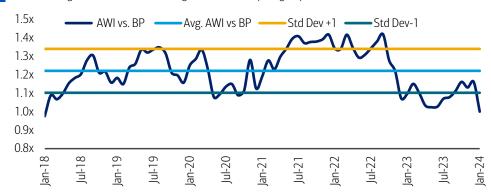
Raise estimates and PO; we are slightly above consensus on 4Q23 EPS

We raise our 2023/2024 EPS estimates <1%3% and PO to \$110 (from \$88), now based on a 11x 2025E EV/EBITDA (vs. previous 10x 2024E EV/EBITDA), as we roll forward our multiple to 2025 and increase the multiple to reflect higher market multiple and lower rates.

We think 4Q23 is on track with the guidance AWI provided last quarter. Investor focus for 4Q earnings will be the project backlog, potential margin tailwinds in 2024 (including lower natural gas costs) and price realization from the 3Q price hike. AWI should have margin tailwinds in mineral fiber on moderating inflation into 4Q (lower natural gas prices offset by higher raw materials). AWI hedged around 50% of its natural gas exposure for 2023 during 1Q23, which will delay some of the benefits from lower gas prices to 2024. Despite a challenging office construction backdrop and inflation, AWI is one of few building products companies poised to grow earnings YoY in 2023 and 2024. We reiterate our Buy rating on attractive valuation vs. history.

Exhibit 21: AWI forward EV/EBITDA relative to building products peers

AWI is trading below its historical average relative to the peer group



Source: Bloomberg Data through January 25, 2024

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Exhibit 22: Architectural Billings Index (non-resi construction activity)

ABI fell remained below 50 in December



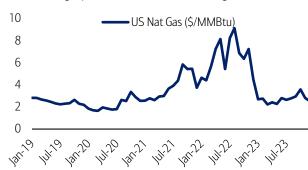
Source: AIA

Note: a score below 50 indicates declining billings; Data through Dec 2023 $\,$

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Exhibit 23: US natural gas futures

Lower natural gas prices could be a tailwind to margins in 2024



Source: Bloomberg

Note: Data through December 29, 2023



Fortune (FBIN): Reiterate Underperform; Raise PO to \$72

Maintain 2023/2024 EPS estimates; Raise PO

We maintain our 2023/2024 estimates but increase our PO to \$72 (from \$56), now based on a 10.5x 2025E EV/EBITDA (vs. previous 10x 2024E EV/EBITDA) as we roll forward our multiples to 2025 and increase the multiple to reflect higher market multiple and lower rates. We reiterate our Underperform rating primarily based on FBIN's premium valuation. We see more upside in other building product stocks in our coverage universe that trade on cheaper valuation multiples.

Exhibit 24: FBIN forward EV/EBITDA relative to building products peers

FBIN is above its historical average relative to the peer group post spin

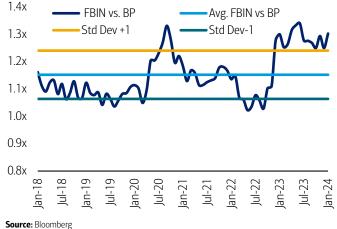
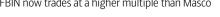
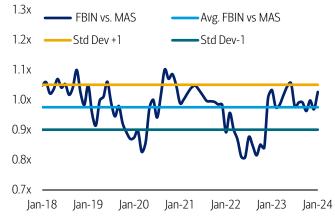


Exhibit 25: FBIN forward EV/EBITDA relative to MAS FBIN now trades at a higher multiple than Masco





Source: Bloomberg Data through January 25, 2024

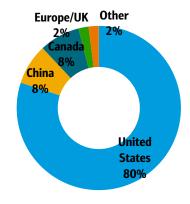
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Data through January 25, 2024

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Exhibit 26: FBIN 2022 sales by country

20% of sales come from outside the US



Source: Company reports

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Exhibit 27: 2022 FBIN North America products by channel

66% exposure to repair and remodel



Source: Company reports

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Masco (MAS): reiterate Underperform; Raise PO to \$63

Maintain below consensus 2024 EPS estimates: Raise PO

We maintain our 2023/2024 estimates but increase our PO to \$63 (from \$52), now based on a 10x 2025E EV/EBITDA (vs. previous 10x 2024E EV/EBITDA) as we roll forward our multiples to 2025. We reiterate our Underperform rating based on valuation and a still challenging repair and remodel backdrop (see: Homebuilders and Building Products: Monthly building products spending snapshot: a weak finish to a down year 11

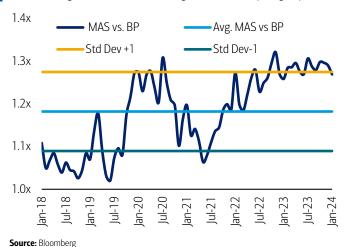


Data through January 25, 2024

January 2024). We see risk to 2024 consensus estimates and expect Masco to underperform given: 1) MAS generates 90% of sales from repair and remodel (R&R) and sell-out trends continue to decline against tough comparisons, 2) we expect depressed existing home turnover to continue to pressure R&R through 1H24, 3) Europe (15% of EBIT) recently and the macro backdrop remains challenging, and 4) MAS trades at a premium to its historical valuation vs. peers.

Exhibit 28: MAS forward EV/EBITDA relative to building products peers

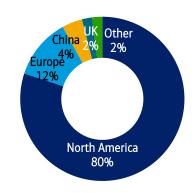
MAS is trading above its historical average relative to the peer group



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Exhibit 29: MAS 2022 revenues by geography

20% of sales come from outside North America



Source: Company reports

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Exhibit 30: Monthly BAC aggregated card data at home improvement retailers (YoY and change vs 2019)

Dec 2023 spending fell 7.5% YoY, but increased 16.7% vs. Dec 2019

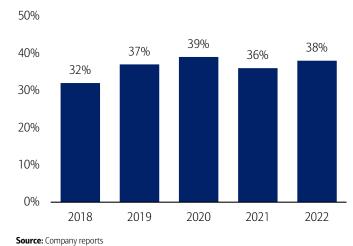


Source: BAC internal data

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Exhibit 31: MAS exposure to Home Depot

Sales to Home Depot represented 38% in total sales in 2022



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Mohawk (MHK): reiterate Underperform; Raise PO to \$95

Lower estimates to reflect weak flooring demand

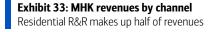
We lower our 2024 EPS estimates by 7% but raise our PO to \$95 (from \$80) now based on 5.0x EV/2025E EBITDA (vs. previous 5.2x 2024E EBITDA) as we roll forward our multiple to 2025 estimates. Our lower estimates primarily reflect an outlook for continued weak flooring demand through 1H24. We reiterate our Underperform rating given: 1) flooring demand remains weak (see charts below), and 2) we expect most of

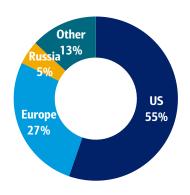


the improvement in costs will be competed away on price and promotions.

Exhibit 32: MHK 2022 revenues by geography

45% of sales come from outside the US





New construction r - resi 25%

Source: Company reports

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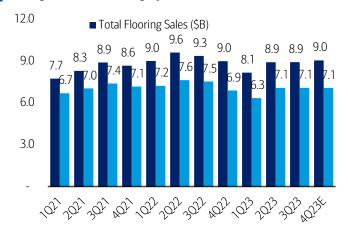
BofA GLOBAL RESEARCH

Flooring demand remained weak in 4Q23

For the month of December, spending at floor covering stores was down (10.4%) YoY and fell (20.0%) on a MoM basis (+9.7% vs. December 2019). 4Q23 spending decreased (9.0%) YoY vs. an (11.0%) YoY decrease in 3Q23. 4Q23 spending decreased (7.7%) QoQ. (see: January 2024).

Exhibit 34: Flooring industry sales

Flooring volumes increased slightly in 4Q23

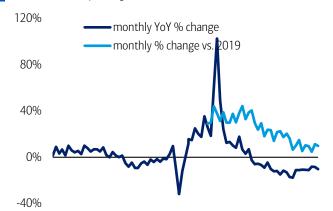


Source: Catalina Floor Covering

BofA GLOBAL RESEARCH

Exhibit 35: Monthly BAC aggregated card data at floor covering retailers (YoY and three-year change)

December 2023 spending fell 10.4% YoY, but increased 9.7% vs. Dec 2019



Dec-16 Dec-17 Dec-18 Dec-19 Dec-20 Dec-21 Dec-22 Dec-23

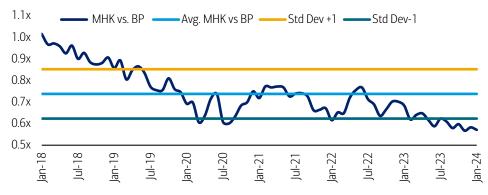
Source: BAC internal data

Source: Company reports



Exhibit 36: MHK Fwd EV/EBITDA relative to building products

MHK is trading below its avg. historical relative valuation



Source: BofA Global Research, Bloomberg

Note: Peers include MHK, AWI, FBIN, MAS, and OC; Data through January 25, 2024

BofA GLOBAL RESEARCH

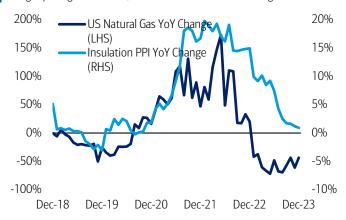
Owens Corning (OC): reiterate Buy; Raise PO to \$165

Lower estimates slightly as weaker composites outlook offsets roofing and insulation upside

We lower our 2024 EPS estimate by 2% to reflect a weaker outlook for composites, which offsets potential upside in roofing margins and insulation margins. We believe composites margin will remain under pressure until China macro outlook improves and global composite pricing stabilizes. We raise our PO to \$165 (from \$149), based on 7x 2025E EV/EBITDA as we roll forward our multiple to 2025. We reiterate our Buy rating to reflect: 1) attractive valuation (~9% free cash flow yield), 2) potential upside to roofing price and margins in 2024 on channel restocking due to favorable storm demand and lean distributor inventory levels, and 3) improving volume and pricing outlook in insulation with our stronger outlook for single-family housing starts.

Exhibit 37: Nat gas pricing vs. Insulation PPI

Nat gas pricing is down YoY, while Insulation PPI is increasing

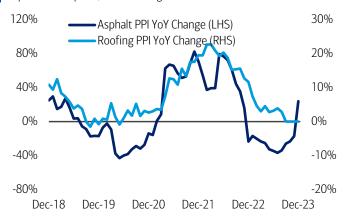


Source: Bloomberg, Bureau of Labor Statistics

BofA GLOBAL RESEARCH

Exhibit 38: Asphalt PPI vs. Roofing PPI

Asphalt PPI is up YoY, while Roofing PPI is flat

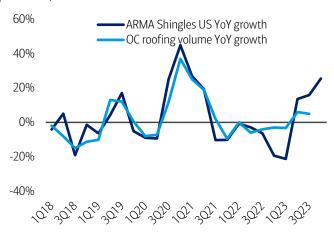


Source: Bloomberg, Bureau of Labor Statistics



Exhibit 39: ARMA shipments vs. OC roofing volume

ARMA shipments increased 26% YoY in 4Q23

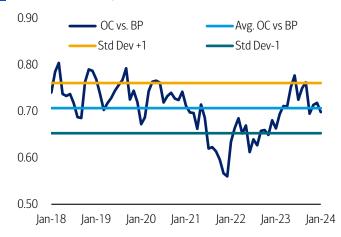


Source: BofA Global Research estimates, ARMA, company reports; ARMA data through 4Q23

BofA GLOBAL RESEARCH

Exhibit 40: OC Fwd EV/EBITDA relative to building products

OC is in line with its avg. historical relative valuation



Source: BofA Global Research, Bloomberg

Note: Peers include MHK, AWI, FBIN, MAS, and OC; Data through January 25, 2024

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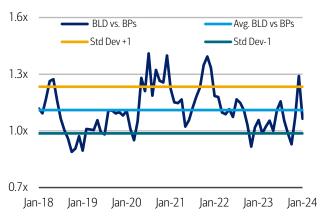
TopBuild (BLD): reiterate Buy; raise PO to \$410

Raise EPS slightly to reflect stronger starts and insulation pricing outlook

We raise our 2024E EPS estimates by 3% and increase our PO to \$410 (from \$327), now based on 11X EV/2025E EBITDA (vs. previous 10.0x 2024E EBITDA) as we roll forward our multiples to 2025 and increase the multiple to reflect higher market multiple and lower rates. We raise our EPS to reflect a stronger single-family housing starts forecast and benefit from insulation price increase realization. We reiterate our Buy rating given see upside to consensus estimates in 2024 and valuation remains compelling. We also see potential upside from the Specialty Products & Insulation (SPI) acquisition in 2024 (see: TopBuild Corp: BLD acquires SPI: great strategic fit at a good price; synergies look conservative 28 July 2023).

Exhibit 41: BLD Fwd EV/EBITDA relative to building products

BLD is trading below its avg. historical relative valuation relative to BPs



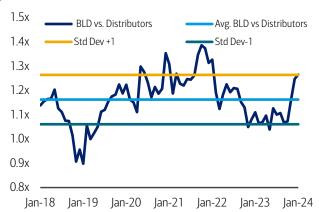
Source: BofA Global Research, Bloomberg

Note: Peers include MHK, AWI, FBIN, MAS, and OC; Data through January 25, 2023

BofA GLOBAL RESEARCH

Exhibit 42: BLD Fwd EV/EBITDA relative to distributors

BLD is trading above its avg. historical relative valuation vs. distributors



Source: BofA Global Research, Bloomberg

Note: Peers include GMS, BECN, BLDR and IBP; Data through January 25, 2023



Composite decking companies

AZEK Co. (AZEK): reiterate Buy; Raise PO to \$45

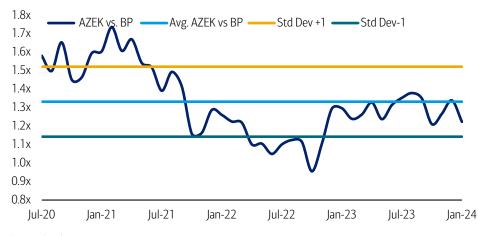
Raise estimate to reflect healthy sell-through and price-cost tailwinds

We raise our C2024E estimate by 6% and increase our PO to \$45 (from \$36), now based on a 17x C2025E EBITDA (vs. previous 16x C2024E) as we roll forward our multiples to 2025 and increase the multiple to reflect higher market multiple and lower rates. We model F2024 EBITDA 5% above the high-end of guidance to reflect significant margin tailwinds including: 1) positive incremental on residential revenue growth (estimate 30%+ incremental EBITDA margin), 2) higher production levels as production matches more closely to sell-through going forward (lapping a \$20mm headwind in F1H24), 3) additional \$15mm benefit from PVC deflation in F1H, and 4) continued recycling content increases (around 60% of PVC decking materials and still growing).

We reiterate our Buy rating given: 1) Azek's residential sell-out trends remain strong and composite decking/exteriors continues to meaningfully outperform over renovation market, and 2) we see upside to margin guidance from the flow-through of PVC deflation, higher utilization, and use of more recycled materials.

Exhibit 43: AZEK forward EV/EBITDA relative to building products peers





Source: Bloomberg Data through January 25, 2023

BofA GLOBAL RESEARCH

TREX (TREX): reiterate Buy; \$90 PO

CEO meetings highlight early stage growth opportunities

We hosted TREX CEO Bryan Fairbanks for investor meetings in Chicago on Tuesday, 12/19. We came away from the meetings incrementally bullish. Our key takeaways: 1) we think Trex's moat (its brand and manufacturing capability/use of recycled materials) is wider today than any time in its history, 2) TREX is well positioned to drive conversion to composite decking through its consistent innovation and marketing, 3) Railing is a meaningful opportunity and ripe for consolidation within Trex's existing distribution, 4) Utilization is below peak levels and and Trex already has the capacity to support growth through 2025, and 5) TREX has a clear vision for capital use: prioritize organic growth investments and stock buybacks.

Forecast 2024 EPS 7% above consensus

We recently raised our 2024E EPS estimate by 6% to \$2.33 (7% above consensus) to reflect a stronger revenue growth outlook. We anticipate YoY revenue growth above Trex's long-term 11-13% target in 2024 given: 1) continued outperformance of composite decking relative to other building product categories due to the conversion from wood, 2) \$60-80mm of revenue that will fall in 1H24 instead of 4Q23 due to an early buy timing shift, 3) distributors are entering 2024 more confident than last year



following strong sell-out performance in 2023 despite a choppy macro environment, 4) Trex has a robust product launch schedule (strongest since 2019 in our view) including color and geographic expansion for Signature, 5) adjacent categories are gaining traction (including recently launched fasteners and entry level railing), and 6) we believe Trex (and Azek) are gaining share from smaller tertiary brands.

Expect strong incremental margins in 2024 as well

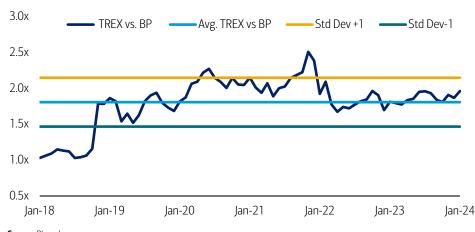
We expect incremental EBITDA margins in the high-30% range in 2024 driven by improving utilization (roughly 150bps of gross margin expansion for every \$100mm of sales). We also expect a return to modest SG&A leverage in 2024 (20-30bps) following a significant step-up in marketing expense in 2023 (which will stay elevated).

Valuation could re-rate on lower rates, higher growth

We reiterate our PO \$90 now based on a target multiple of 23X EV/2025E EBITDA (using a lower multiple on our 2025 forecast vs. 2024E 25X previously). We believe a higher target multiple is justified given the lower interest rate environment and outlook for above-trend growth in 2024.

Exhibit 44: TREX forward EV/EBITDA relative to building products peers

TREX is trading in line with its historical average relative to the peer group



Source: Bloomberg Data through January 25, 2023

BofA GLOBAL RESEARCH

Pool equipment

Hayward (HAYW): reiterate Underperform; raise PO to \$12

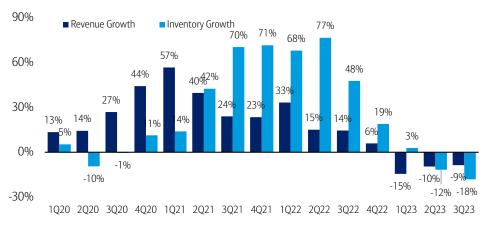
Lower 2024 estimates on tough pool macro environment; raise PO to \$12

We lower our 2024E estimates on Hayward to reflect a slightly more conservative top-line outlook given the challenging macro environment for pool equipment (weak discretionary spend and potential pull forward of demand into 2021/2022). We raise our PO to \$12 (from \$10) as we roll forward our multiples to 2025. We reiterate our Underperform rating to reflect: 1) pool industry sell-out continues to decline, 2) macro headwinds, especially in international markets (~16% of sales) and 3) potential share loss to Pentair and Fluidra as supply chains normalize.



Exhibit 45: POOL (~35% of HAYW sales) revenue vs inventory growth

POOL has been destocking inventory in 2023

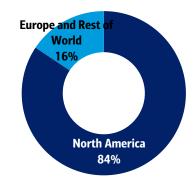


Source: Company reports

BofA GLOBAL RESEARCH

Exhibit 46: HAYW 2022 revenues by geography

16% of sales come from outside North America

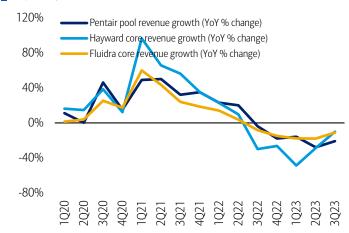


Source: Company reports

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Exhibit 47: Pool equipment manufacturer revenue growth

Hayward gained share from competitors in 2021



Source: Company reports

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Exhibit 48: Stocks mentioned

Rating and price summary

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
AWI	AWI US	Armstrong World	US\$ 98.7	B-1-7
BLDR	BLDR US	Builders FirstSource	US\$ 169.52	C-1-9
FBIN	FBIN US	Fortune Brands Inc	US\$ 79.15	B-3-7
HAYW	HAYW US	Hayward Holdings	US\$ 12.59	C-3-9
MAS	MAS US	Masco Corp	US\$ 67.25	B-3-7
MHK	MHK US	Mohawk Industries	US\$ 100.97	B-3-9
OC	OC US	Owens Corning	US\$ 150.2	B-1-7
AZEK	AZEK US	The AZEK Company	US\$ 37.74	C-1-9
BLD	BLD US	TopBuild	US\$ 366.23	B-1-9
TREX	TREX US	Trex Company, Inc.	US\$ 81.23	C-1-9

Source: BofA Global Research

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Disclaimer and Methodology regarding BAC internal data

Selected Bank of America ("BAC") transaction data are used to inform the macroeconomic views expressed in this report and should be considered in the context of other economic indicators and publicly available information. In certain instances, the data may provide directional and/or predictive value. The data used are not comprehensive; they are based on aggregated and anonymized selections of BAC data and may reflect a degree of selection bias and limitations on the data available.

Methodology explained

Readers should be aware that although the BAC datasets utilized in our analysis represent a significant number of data points, they nevertheless present a degree of selection bias, including but not limited to income levels and geographies. In addition, the data is limited to debit and credit cards and does not include other payment methods such as cash or checks.

Data regarding merchants who receive payments are identified and classified by the Merchant Categorization Code (MCC) defined by financial services companies. The data are mapped using proprietary methods from the MCCs to the North American Industry Classification System (NAICS), which is also used by the Census Bureau, in order to classify spending data by subsector. Spending data may also be classified by other proprietary methods not using MCCs.

BAC data used in this report include spending from active US households only. Spending from corporate cards are excluded.

Additional information about the methodology used to aggregate the data is available upon request.

Investment Rationale

Builders FirstSource Inc

We rate BLDR shares Buy. We see positive long-term tailwinds from share gains and mix shift to higher margin value-add services. BLDR should benefit from improving single-family housing starts.

Price objective basis & risk

Armstrong World Industries, Inc. (AWI)

Our \$110 PO for AWI shares is based on a 2025E adjusted EV/EBITDA multiple of roughly 11.0x, implying a 2025E P/E multiple of roughly 16x, roughly in-line with AWI's historical average as a favorable price-cost outlook, which offsets a challenging commercial construction outlook. We view AWI as among the best positioned, most resilient companies in our coverage through-out a cycle.

Downside risks: 1) weaker than anticipated commercial construction activity, 2) slower than forecast share repurchases, 3) weaker than expected economic growth in North America, 4) a resurgence in COVID-19 outbreaks that leads to another round of construction market closures, 5) slower than expected return to the office, 6) less municipal spending dedicated to non-residential R&R.

Upside risks: 1) stronger than anticipated recovery in commercial construction, 2) faster



than expected recovery in mineral fiber AUV, 3) stronger than expected economic growth in North America, 4) an unexpected decline in COVID-19 cases, 5) faster than expected return to the office, 6) strong municipal spending on R&R for schools and other projects.

Builders FirstSource Inc (BLDR)

Our \$200 price objective (PO) is based on a 2025E EV/EBITDA multiple of roughly 9x (around 14x P/E on 2024E EPS), above its average of roughly 6.5x from 2017-2023. We think that BLDR deserves a premium to its historical average given structurally higher margins, increased exposure to value-added products, and a higher ROIC profile.

Upside risks to our PO: 1) faster-than-expected recovery in new home starts, 2) further residential market share gains through organic growth and M&A, 3) higher commodity prices, and 4) lower interest rates.

Downside risks: 1) a downturn in the housing market leading to less starts, 2) margins normalizing lower than anticipated, 3) a decline in commodity prices, and 4) higher than expected capex related to tech investments.

Fortune Brands Innovations Inc (FBIN)

Our \$72 PO for FBIN shares is based on a 2025E adjusted EV/EBITDA multiple of roughly 10.5x. At 10.5x adjusted EV/EBITDA, FBIN would trade near the mid-point of its historical valuation range.

Downside risks to our PO are: 1) slowing in the residential R&R market, 2) failure to successfully integrate acquisitions, 3) failure to meet long term outlook, 4) pricing pressure from large customers, 5) greater than expected input cost inflation, 6) rising interest rates increasing the cost of home equity loans, 7) tariffs on imported goods, 8) slowing US economy.

Upside risks to our PO are: 1) acceleration in the residential R&R market, 2), relief on Chinese tariffs, 3) portfolio rationalization, 4) faster than expected Cabinet business restructuring, 5) greater than expected declines in raw material costs.

Hayward Holdings, Inc. (HAYW)

Our \$12 PO for HAYW shares is based on a 2025e adjusted EV/EBITDA multiple of roughly 11x. In determining the adjusted EV/EBITDA multiple underlying our PO on HAYW shares, we considered current valuation multiples for pool equipment manufacturing competitors and other pool and outdoor living related companies. We believe Hayward should trade at a slight premium to pool peers given its share gain trends in the pool segment.

Upside risks are: 1) a faster than anticipated rebound in pool demand, 2) market share gains, 3) favorable demographics, 4) a more favorable economic backdrop with lower interest rates, and 5) continued elevated price increases.

Downside risks are: 1) higher financial leverage than many building product peers, 2) real/perceived COVID-beneficiaries could lag as economy re-opens, 3) international expansion could negatively impact margins and valuation multiple, 4) effectiveness of Omni app to drive sales remains unclear, 5) rising interest rates could make financing pools more expensive.

Masco Corp (MAS)

Our \$63 PO for MAS shares is based on a 2025E adjusted EV/EBITDA multiple of roughly 10x. At 10x adjusted EV/EBITDA, MAS would trade near the mid-point of its recent valuation range.

Downside risks to our PO are: 1) slowing in the residential R&R market, 2) larger than expected declines in paint sales/margins, 3) pricing pressure from large customers, 4)



greater than expected input cost inflation, 5) rising interest rates increasing the cost of home equity loans, and 6) slowing US economy.

Upside risks to our PO are: 1) stronger spend in residential R&R market, 2) decline in input costs, 3) declining interest rates and 4) improved DIY paint trends.

Mohawk Industries (MHK)

Our \$95 PO for MHK shares is based on 5.0x 2025E EV/EBITDA. At 5.0x 2024e adjusted EV/EBITDA, MHK would trade at the low-end of its 3-year historical average, which we view as appropriate given the a slowdown in near-term revenue growth due to capacity constraints, weakening demand and a recent surge in raw material costs.

Downside risks to our PO are: 1) accelerating execution challenges, 2) greater than expected negative impact from the industry mix-down to lower-value-add products, 3) slowdown in residential new construction, 4) economic slowdown in Europe, 5) political uncertainty in Mexico, 6) slowdown in the resi R&R market, 7) slowdown in commercial construction, 8) continued structural decline in carpeting, 9) capacity additions present risk, 10) rising interest rates increasing the cost of home equity loans, 11) additional loss of patent income, 12) slowdown in acquisitions, 13) slowing global economic growth.

Upside risks to our PO are: 1) more rapid than expected improvement in execution, 2) industry mix improvement, 3) stronger than expected new construction and R&R markets in the US, 4) stronger than expected economic growth in Europe, 5) stabilization in the Mexican political environment, 6) increased carpet demand, 7) smoother execution with capacity additions, 8) lower than expected interest rates, 9) resumption of accretive acquisitions.

Owens Corning (OC)

Our PO for OC is \$165. Our PO is based on 7x 2025E EV/EBITDA, in line with Owens Corning's historical average and roughly in line with OC's historical discount to the group to the current peer group average. We believe that a multiple in the middle of OC's historical range is appropriate given positive demand and pricing trends but some input cost pressure and capacity constraints.

Downside risks: 1) further input cost pressure, 2) softer-than-expected new construction and repair and remodel trends in the US, 3) slower-than-expected GDP growth in key regions, 4) deceleration in industrial production, 5) further competitor capacity additions in the insulation industry, 6) inability to successfully integrate acquisitions, 7) slowing global growth.

Upside risks: 1) stronger than-expected new construction and repair and remodel trends in the US, 2) upside to GDP growth in key regions and global industrial production, 3) better-than-forecast capacity utilization, particularly in Insulation, 4) stronger-than-expected pricing power.

The AZEK Company Inc. (AZEK)

Our \$45 PO for AZEK shares is based on a CY2024E EV/EBITDA multiple of 17x, which implies Azek trades in line with its historical discount to key peer Trex. We believe a discount to TREX is appropriate given AZEK's lower return on invested capital, margins and brand recognition.

Upside risks to our PO are: 1) an acceleration in residential repair & remodeling and outdoor living spending, 2) a faster than expected conversion from wood decks to composite decks, 3) faster than expected share gain, 4) continued consumer preference towards enhancing the overall outdoor living space, and 5) faster than expected transition to recycled materials.



Downside risks to our PO are: 1) a slowdown in residential repair & remodeling spending, 2) a slower than expected conversion from wood decks to composite decks, 3) potential market share loss, 4) a mix shift in consumer preferences away from outdoor living and 5) a slowing US economy.

TopBuild Corp (BLD)

Our \$410 price objective (PO) is based on a 11x EV/2025E EBITDA multiple, in line with its average from 2017-2023. We think that BLD's valuation will trade more in line with its historical valuation as housing starts recover.

Upside risks to our PO: 1) faster-than-expected recovery in new home starts, 2) further residential market share gains through organic growth and M&A, 3) continued strength in the commercial/industrial market, 4) continued price increases on insulation products.

Downside risks: 1) a downturn in the housing market leading to less starts, 2) deflation in insulation products leading to weaker revenue growth and margin pressure, 3) a broad pullback in commercial/industrial activity.

Trex Company, Inc. (TREX)

Our \$90 PO is based on a 23X 2025E EV/EBITDA multiple, which is slightly above TREX's trailing 5-year average (22X), given a favorable growth outlook and a lower rate backdrop. We believe EV/EBITDA is the most appropriate metric for valuing the building product companies.

Upside risks to our PO: 1) an acceleration in residential repair & remodeling and outdoor living spending, 2) a faster than expected conversion from wood decks to composite decks, 3) faster than expected share gains, 4) stronger than anticipated pricing, and 5) continued consumer preference towards enhancing the overall outdoor living space.

Downside risks to our PO: 1) a slowdown in residential repair & remodeling spending, 2) a slower than expected conversion from wood decks to composite decks, 3) market share loss, 4) a mix shift in consumer preferences away from outdoor living, 5) a slowing US economy and 6) rising interest rates.

Analyst Certification

I, Rafe Jadrosich, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.



US - Homebuilders and Building Products Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Armstrong World Industries, Inc.	AWI	AWI US	Rafe Jadrosich
	Builders FirstSource Inc	BLDR	BLDR US	Rafe Jadrosich
	D.R. Horton, Inc.	DHI	DHI US	Rafe Jadrosich
	Latham Group, Inc.	SWIM	SWIM US	Shaun Calnan, CFA
	Leslie's	LESL	LESL US	Shaun Calnan, CFA
	NVR, Inc.	NVR	NVR US	Rafe Jadrosich
	Owens Corning	OC	OC US	Rafe Jadrosich
	PulteGroup Inc.	PHM	PHM US	Rafe Jadrosich
	The AZEK Company Inc.	AZEK	AZEK US	Rafe Jadrosich
	Toll Brothers, Inc.	TOL	TOL US	Rafe Jadrosich
	TopBuild Corp	BLD	BLD US	Rafe Jadrosich
	Trex Company, Inc.	TREX	TREX US	Rafe Jadrosich
NEUTRAL				
	Dream Finders Homes, Inc.	DFH	DFH US	Rafe Jadrosich
	KB Home	KBH	KBH US	Rafe Jadrosich
	Lennar Corporation	LEN	LEN US	Rafe Jadrosich
UNDERPERFORM				
	Fortune Brands Innovations Inc	FBIN	FBIN US	Rafe Jadrosich
	Hayward Holdings, Inc.	HAYW	HAYW US	Rafe Jadrosich
	Masco Corp	MAS	MAS US	Rafe Jadrosich
	Mohawk Industries	MHK	MHK US	Rafe Jadrosich
	Patrick Industries, Inc.	PATK	PATK US	Rafe Jadrosich
	Pool Corporation	POOL	POOL US	Shaun Calnan, CFA
	·			

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Building Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	39	44.83%	Buy	22	56.41%
Hold	18	20.69%	Hold	11	61.11%
Sell	30	34.48%	Sell	8	26.67%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

R1 Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.



FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

 Buy
 ≥ 10%
 ≤ 70%

 Neutral
 ≥ 0%
 ≤ 30%

 Underperform
 N/A
 ≥ 20%

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Armstrong World, Builders FirstSource, Fortune Brands Inc, Hayward Holdings, Masco Corp, Mohawk Industries, Owens Corning, The AZEK Company, TopBuild, Trex Company, Inc.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Fortune Brands Inc, Mohawk Industries, The AZEK Company.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Armstrong World, Builders FirstSource, Fortune Brands Inc, Hayward Holdings, Mohawk Industries, Owens Corning, The AZEK Company, TopBuild.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Armstrong World, Builders FirstSource, Fortune Brands Inc, Hayward Holdings, Masco Corp, Mohawk Industries, Owens Corning, The AZEK Company, TopBuild, Trex Company, Inc.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Armstrong World, Builders FirstSource, Fortune Brands Inc, Hayward Holdings, Masco Corp, Mohawk Industries, Owens Corning, The AZEK Company, TopBuild, Trex Company, Inc.

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