



# BORAL USA

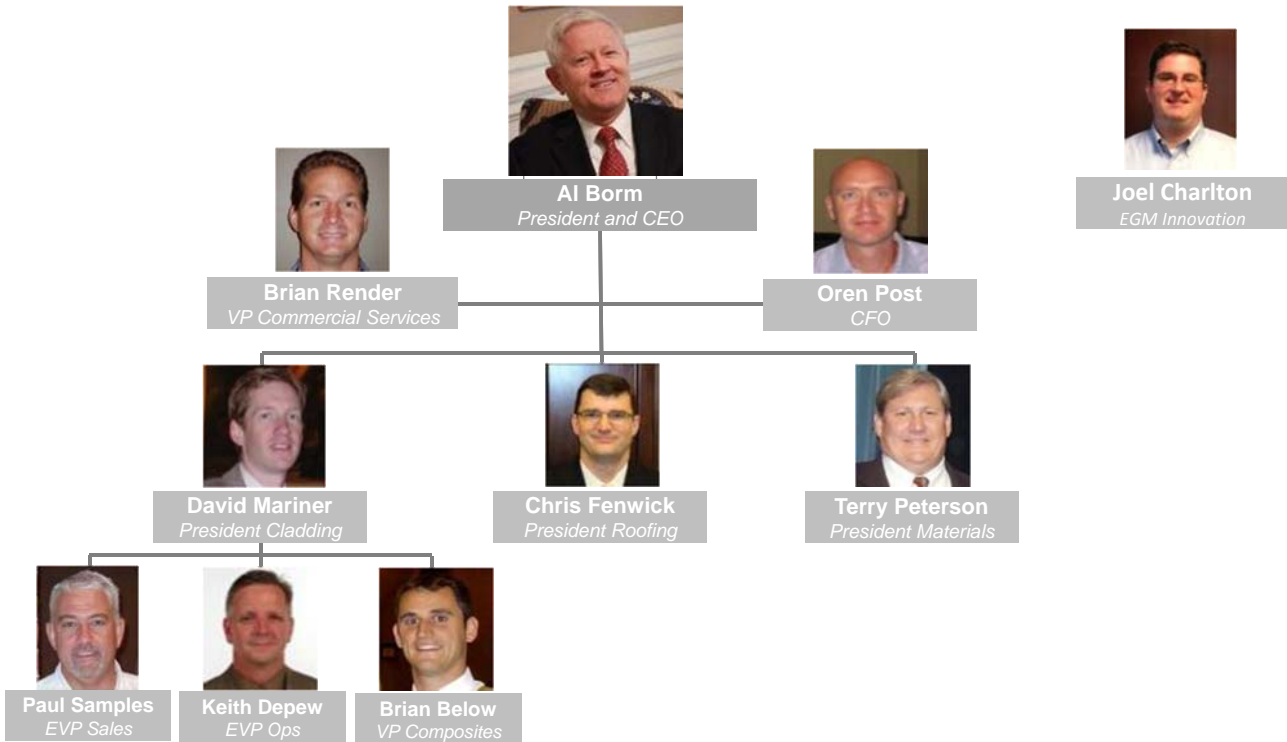
Analyst and Investor Site Tour

16 & 17 September 2013



BORAL USA ANALYST AND INVESTOR SITE TOUR 2013

## Boral USA Team





# Boral USA Presentation Agenda

Time	Presentation	Speaker
8.00 - 9:00am	Boral USA Overview Economic & Housing Update Strategic Priorities	Al Borm, President & CEO Boral Industries
9:00 - 9:30am	Commercial Services & Innovation	Brian Render, VP Commercial Services Joel Charlton, EGM Innovation
9:30 - 9:45am	<i>Morning tea break</i>	
9:45 - 10:15am	Boral Cladding <sup>1</sup>	David Mariner, President Boral Cladding
10:15 - 10:45am	Boral Roofing	Chris Fenwick, President Boral Roofing
10:45 - 11:15am	Boral Materials <sup>2</sup>	Terry Peterson, President Boral Materials
11:15 - 11:30am	Outlook	Al Borm, President & CEO Boral Industries

1. Boral Cladding group of companies consists of Boral Bricks Inc, Boral Stone Products LLC, Boral Composites Inc.  
 2. Boral Materials group of companies consists of Boral Material Technologies LLC, BCM Oklahoma LLC, Ready Mixed Concrete Company and Affiliates



# Boral Building Something Great

Creating Sustainable Solutions for the Building Industry

*One Boral ... "Our Journey"*





# Content

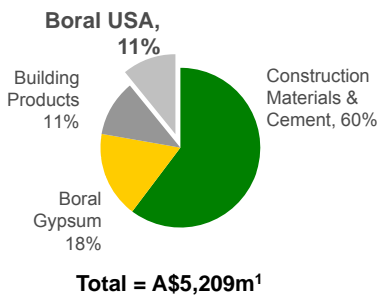
## Boral USA Overview

- Economic & Housing Update
- Strategic Priorities
- Commercial Services & Innovation
- Boral Cladding
- Boral Roofing
- Boral Materials
- Outlook

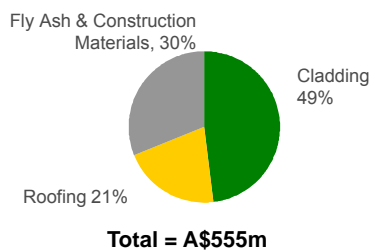


**Boral USA is currently the smallest divisions**  
in revenue but has the most significant earnings improvement potential

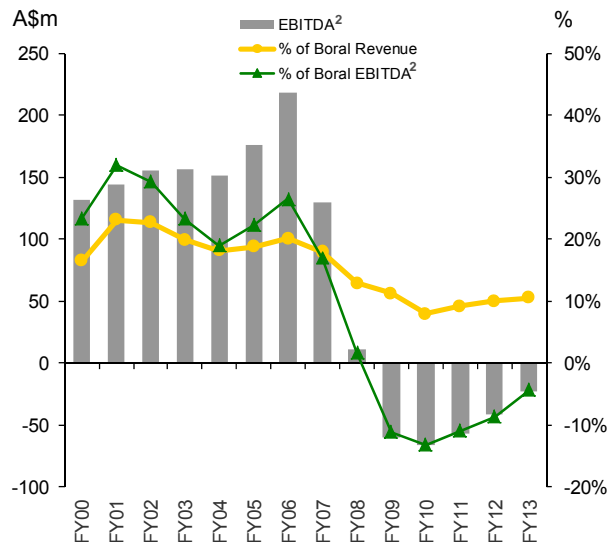
**Boral revenue by division – FY2013**



**Boral USA revenue – FY2013**



**Boral USA contribution to Boral Revenue and EBITDA<sup>2</sup>**

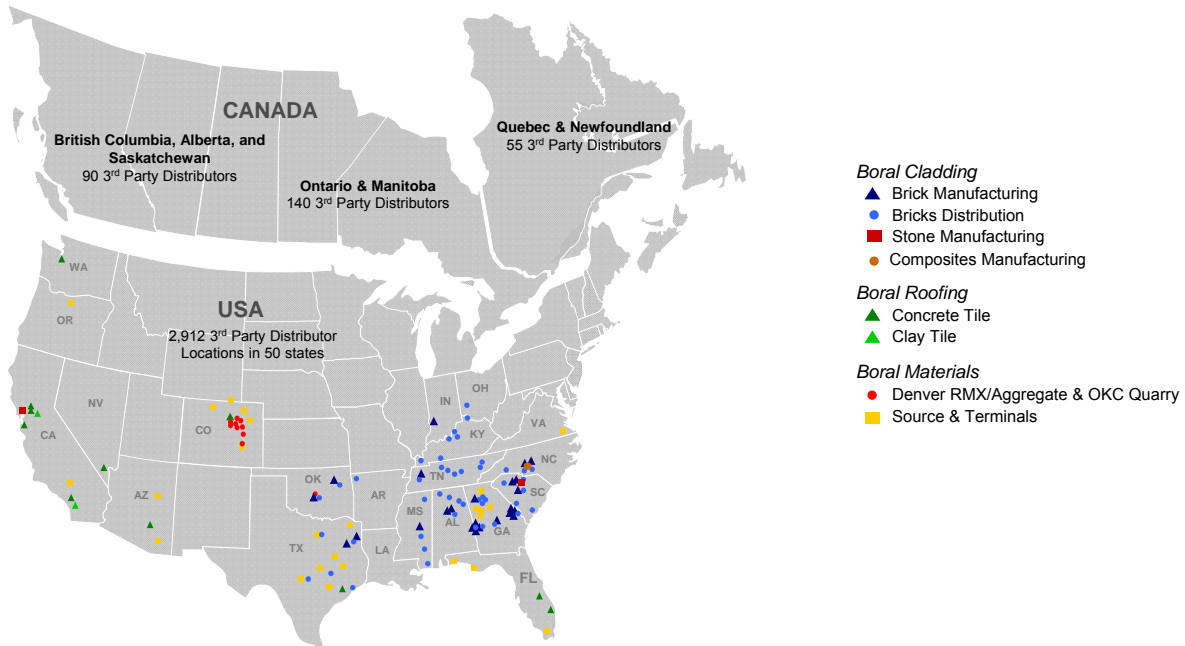


1. For Boral continuing operations only  
 2. Excluding significant items. EBITDA before significant items is a non-IFRS measure reported to provide greater understanding of the group's underlying business performance. Full details of significant items are contained in Note 4 of the Financial Statements.



# Boral USA has leading market positions & an expansive footprint

#1 in Brick, Clay Tile, Concrete Tile, and Stone Veneer, & #2 in Fly Ash in the USA  
 #3 in Construction Materials in Denver, Colorado



Our distribution business, Boral Building Products, complements our leading bricks, concrete and clay tile, and manufactured stone veneer positions with 43 sales centers in 11 states



## Boral USA: Journey Snapshot

The business has transformed through acquisitions, rationalisation and restructuring following a dramatic cyclical downturn in US residential activity

	FY2005	FY2009	FY2013
<b>US housing starts</b> ('000)	2,016	646	877
<b>Revenue</b>	US\$611m	US\$406m	US\$569m
<b>EBITDA margin<sup>1</sup></b>	22%	(11%)	(4%)
<b>Product portfolio</b>	Brick Brick Accessories Pavers Roof Tile Fly Ash	<b>Added since FY04</b> Construction Materials	<b>Added since FY09</b> 50% MonierLifetile 50% Cultured Stone Trim Roof Components Stucco
<b>Brick capacity</b>	1.7b SBE <sup>2</sup>	1.9b SBE <sup>2</sup>	1.3b SBE <sup>2,3</sup>
<b>Roofing capacity</b>	7.0m squares	7.2m squares <sup>4</sup>	7.0m squares
<b>Employees</b>	2,679	1,511	2,233
<b>Revenue by business</b>			

1. EBITDA excludes significant items  
 2. Standard brick equivalents  
 3. Includes a mothballed clay paver plant  
 4. Roofing capacity peaked in FY2007 at 7.7m squares  
 5. MonierLifetile and Trinidad JV were equity accounted – Boral's share of revenue did not appear as revenue in the consolidated accounts but is included in the chart



# Growth has been focused on Cladding & Roofing

Where Boral has leading market positions

## Jul-10: MonierLifetile – Leader in Concrete Tile

- Acquired for US\$75m in July 2010
- Merged with US Tile (clay) business
- Rebranded to Boral Roofing
- Achieved +\$5m in year 1 synergies
- Created roof component (resale) business



## Nov-11: TruExterior Trim – Leader in Trim Innovation

- Plant Commissioned in Salisbury, North Carolina
- Poly-ash trim product using ~70% recycled materials
- High level of workability with low maintenance
- Further expands Boral into the repair & remodel segment



## Dec-10: Cultured Stone® – Leader in Manufactured Stone

- Acquired 50% for US\$45m in December 2010
- Rebranded to Boral Stone
- Achieved +\$3m in year 1 synergies
- Residential, commercial, repair and remodel focus
- 5 Year Automation plan to reduce headcount



## Jun-13: Oklahoma City Ready-mix

- Divested in June 2013
- Construction Materials business identified as non-core
- Oklahoma Quarry still operational but being marketed

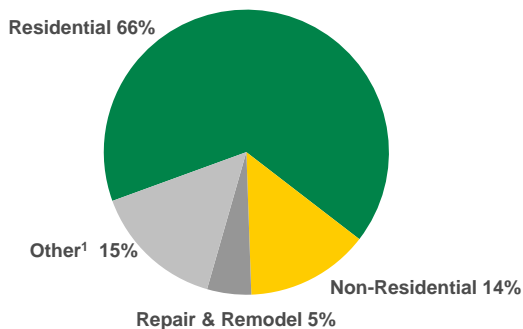


# End-market Exposure

is largely to the US residential market

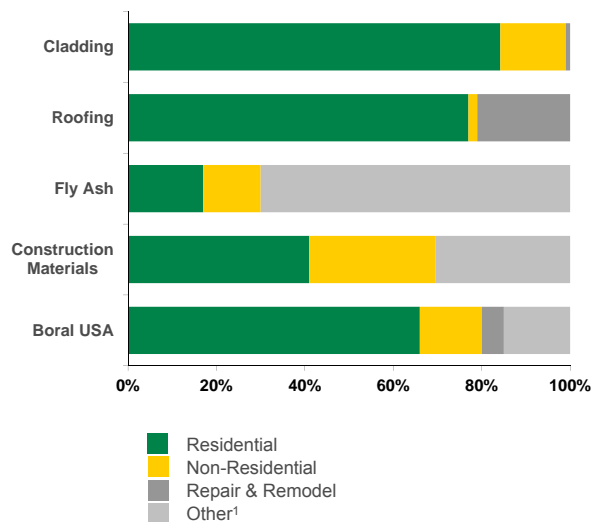
## FY2013 USA Revenue

Estimated exposure by market segment



## FY2013 Revenue

Estimated exposure by market segment



1. Other includes fly ash non construction markets and roads, bridges, and highways construction



## Content

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11



## Economic & Housing Update

- **Fundamental economic indicators stabilising and improving**
  - 2.0% average quarterly growth since 3Q 2009
  - Aug-13 unemployment rate of 7.3% vs. Oct-09 peak of 10.0%
  - Consumer confidence at six year high
- **Housing fundamentals supporting increased new construction**
  - New home stock 38% below 10 year average
  - Home prices improving
  - Foreclosure activity down 61% from peak in March 2010
- **Residential market recovery led by Big Builder construction and smaller starter homes**
- **% of single vs. multi-family starts below historic average but moving towards historic norms**
- **US non-residential segment remains sluggish but recovering over next 18 months**

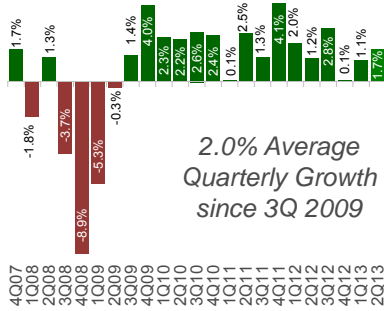
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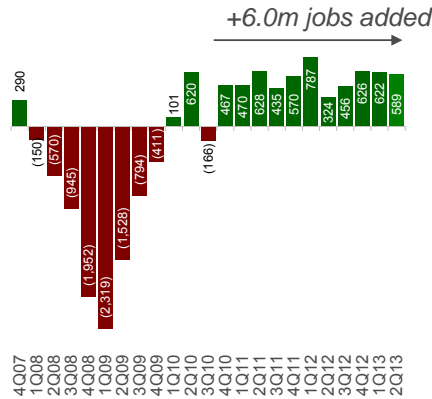
# Economic Update

Trending positively with confidence higher, job creation continuing, and unemployment lowering

**GDP % Growth<sup>1</sup>**



**Job Creation<sup>2</sup>**



**Confidence<sup>3</sup>**



August 2013 unemployment rate of **7.3%** vs. October 2009 peak of 10.0%

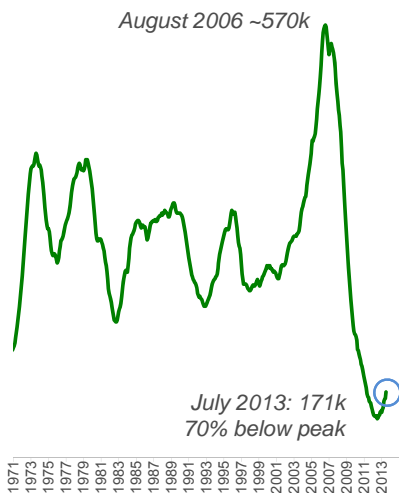
1. US Bureau of Economic Analysis: National GDP  
 2. US Bureau of Labor Statistics: Unemployment Rate  
 3. Reuters/University of Michigan Surveys of Consumers



# Housing Fundamentals

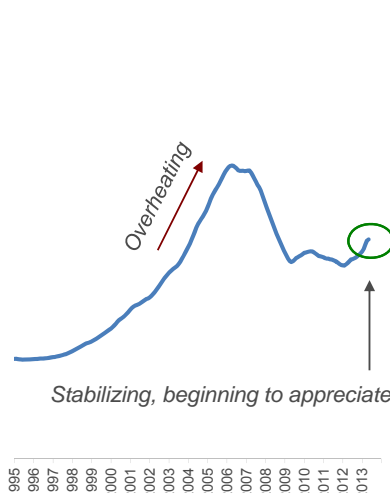
New home stock at historic lows, prices stabilizing, and foreclosures slowing

**New Home Stock<sup>1</sup> (000s)**



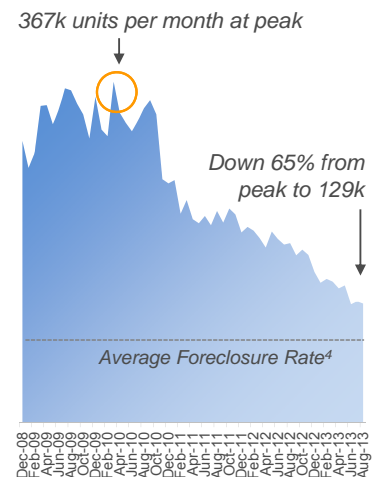
**National Home Pricing<sup>2</sup>**

Home Price Index  
Composite of Top 20 Cities



**Foreclosure Activity<sup>3</sup>**

Units Entering Foreclosure (000s)



1. US Census Bureau, National Association of Homebuilders  
 2. S&P/Case-Shiller® Home Price Index  
 3. Realtytrac  
 4. Average foreclosure rate at 98k from 1995 - 2006

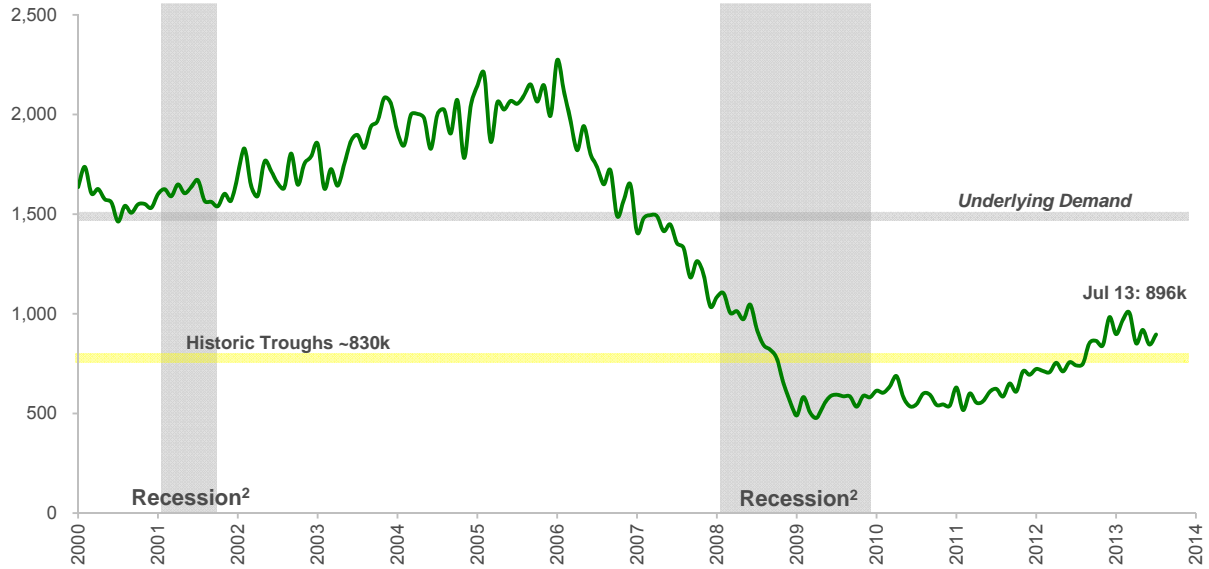


# US Housing Snapshot

US Housing starts ended FY2013 at 877k, a year on year increase of ~28%

## Total US Housing Starts

Units 000s<sup>1</sup>



1. US Census Bureau: Seasonally adjusted annualized housing starts  
 2. Grey bars indicate recession

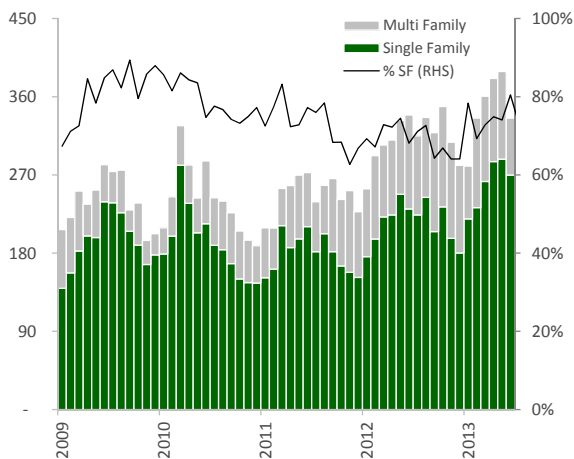


# Boral Brick and Tile State Housing Starts

Brick States housing starts improved by 20% & Roof Tile States increase 35% in FY2013

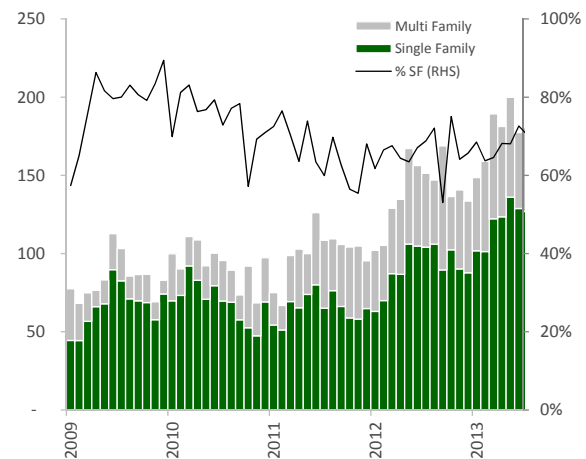
## Brick States Housing Starts<sup>1</sup>

Units 000s



## Tile States Housing Starts<sup>2</sup>

Units 000s



1. Boral Brick States (Dodge): Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas  
 2. Boral Tile States (Dodge): Arizona, California, Florida, Nevada



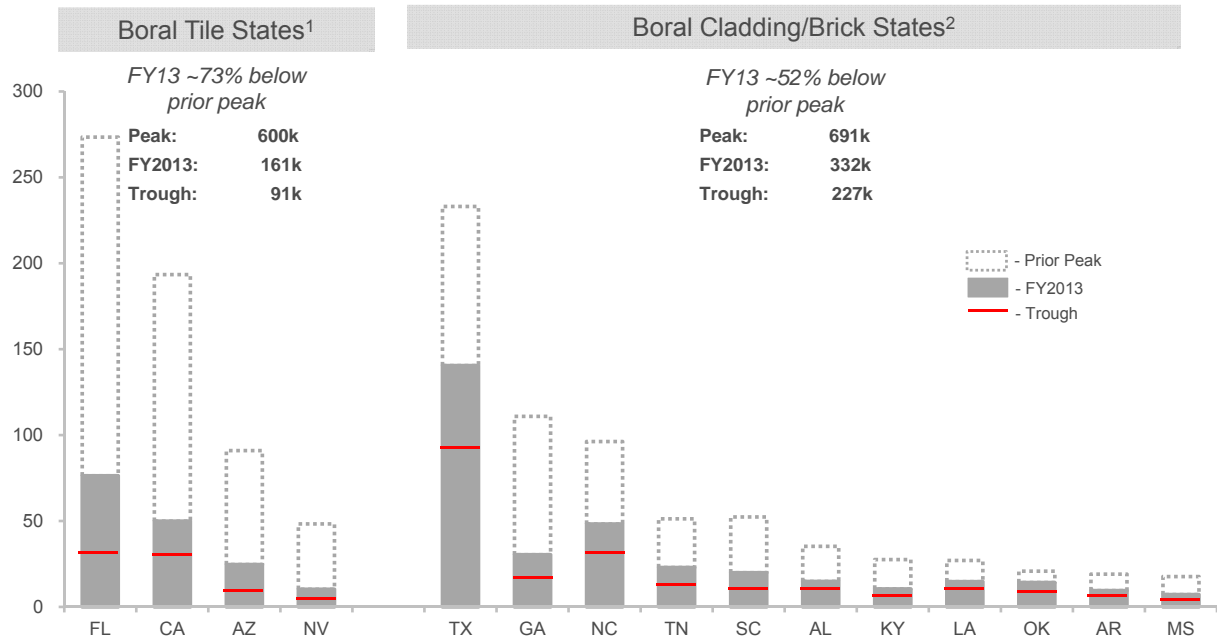


# Housing in Key Boral States

Demand remains significantly below prior peak for housing starts in Boral Brick and Tile States

## Housing Starts

(000's Units)



1. Boral Tile States (Dodge): Arizona (AZ), California (CA), Florida (FL), Nevada (NV)  
 2. Boral Brick States (Dodge): Alabama (AL), Arkansas (AR), Georgia (GA), Kentucky (KY), Louisiana (LA), Mississippi (MS), North Carolina (NC), Oklahoma (OK), South Carolina (SC), Tennessee (TN), Texas (TX)



# Cladding & Roofing Industry Intensity Drivers

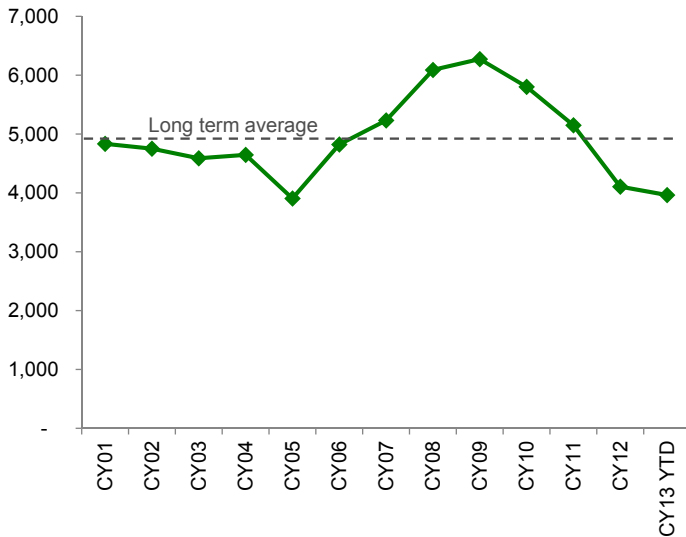
## Cladding & Roofing Intensity Drivers

1. Segment Mix → % Residential vs. Non-residential
2. Geography of Start → Starts in given Brick or Tile states as % of total starts
3. Type of Start → Single family vs. Multi-family starts
4. Builder Mix → National vs. Custom vs. Regional builders
5. Builder Practices → Value engineering, e.g. less expensive homes being built in cycle trough



# US Brick Industry intensity is near historic low

## US brick industry intensity<sup>1</sup> SBE<sup>2</sup> per residential start



- Current brick intensity at ~4,000 SBE<sup>2</sup>/ start compared to long term average of 4,900 SBE/start
- Recent decline in brick intensity reflects:
  - lower proportion of single family starts vs. multi-family starts; single family starts accounted for 71% of total starts in FY2013 vs. 10 year average of 77%
  - growth of low cost production home builders that typically use less bricks per start
  - lower non-residential demand
- Will look to 2H FY2014 to determine if shift in intensity returns; requires:
  - return to more typical mix of single- and multi-family starts
  - Strengthening in mid to premium end of new housing construction
  - Recovery in non-residential sector

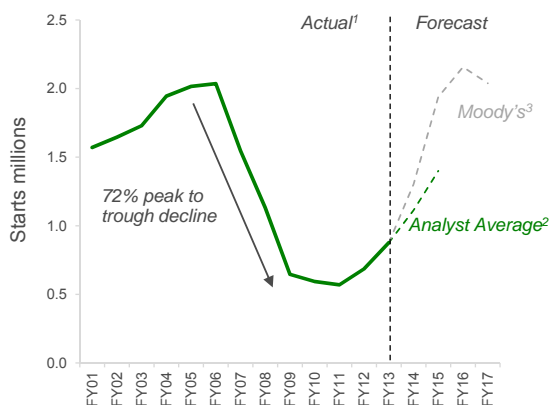
1. Total US Brick Shipments (Brick Industry Association) divided by Total US Housing Starts (Census)  
 2. Standard brick equivalent



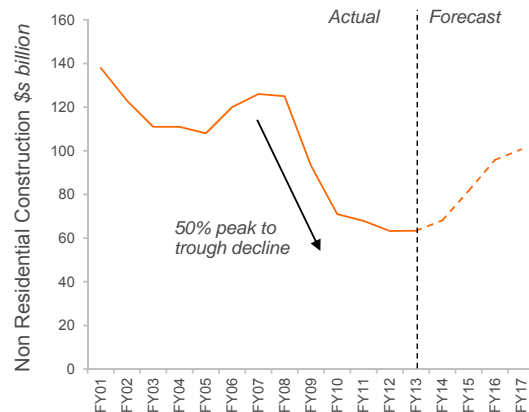
# Market Outlook

Residential segment momentum to continue and non-residential entering recovery in FY2014  
 Both markets forecasted for significant growth through next 3 to 5 years

## New Residential Starts<sup>1</sup>



## Non Residential Activity<sup>4</sup>



Analyst Average forecasting US starts at ~1.1m in FY2014, a ~27% increase from FY2013.  
 Expected growth of ~7% for the Non-Residential segment however weighted toward 2H FY2014

1. Historical Residential Starts: Census Bureau  
 2. Residential Forecast: Average of NAHB, MBA, Dodge, Wells Fargo, NAR, Fannie Mae, Freddie Mac  
 3. Moody's (Mark Zandi): Base Case Forecast  
 4. Non Residential Activity: McGraw Hill / Dodge - 1992 Value



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## Boral USA: Our Vision

To be a +US\$2.0 billion leading materials supplier for the US\$33 billion exterior envelope market including roofing, cladding, and other exterior building products and materials

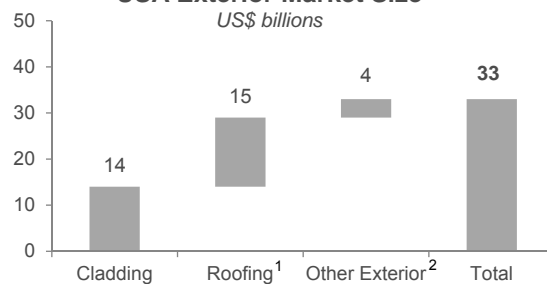
### Historic (pre 2010)

1. Brick
2. Brick Accessories
3. Pavers
4. Roof Tile
5. Fly Ash
6. Materials

### New Additions (2010/12)

1. Stone
2. Trim
3. Roof Components
4. Stucco

### USA Exterior Market Size

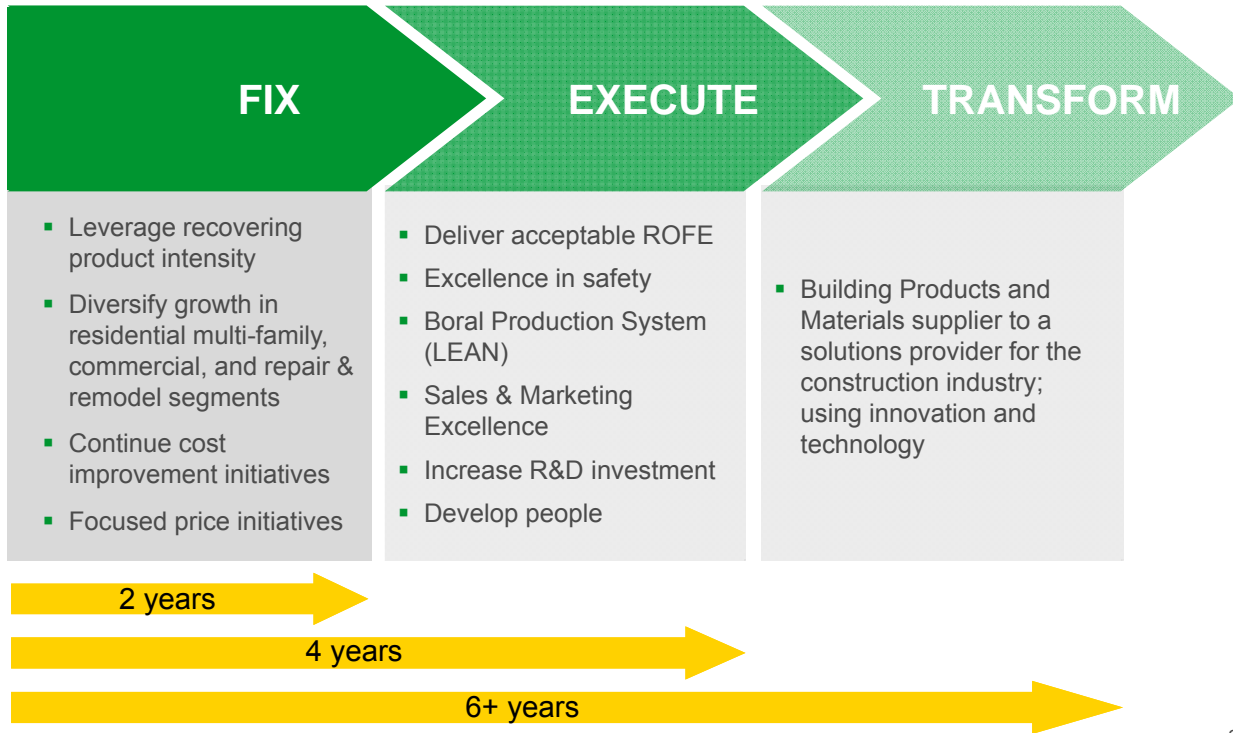


1. Roofing: US\$12b for Roofing, US\$3b for components  
 2. Other: Trim, Accessories

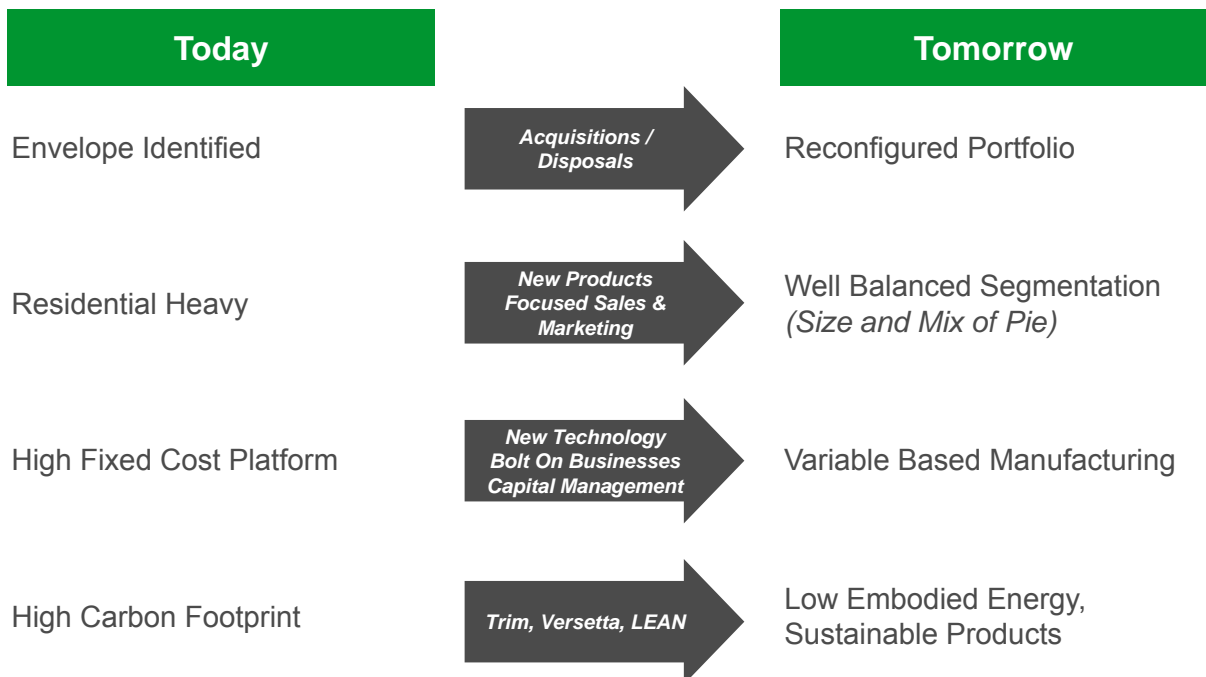


## Boral USA Strategic Focus

Our current focus is on fixing the business



## Deliver for the future





# Strategic Priorities

Position business to leverage recovery and deliver financials in the short term; transform our culture and operations to deliver returns through the cycle

1. World best practices in safety performance
2. Breakthrough to **profitability in 2H FY2014** as housing recovery continues to benefit volume
3. Prepare for and **maximize recovery** in new residential
4. Drive **diversified growth** into commercial and repair & remodel segments. Launch **new and innovative products**, processes, and services to target new markets, customers, and channels
5. Use levers of change to deliver on strategic priorities



# 1 – World Best Practice Safety Performance

Four tiered approach to eliminate at-risk behaviors. Focus on “Leading Indicators,” identifying and addressing patterns of risky behavior to achieve Zero-Harm

## Four Tiered Approach:

- Behavioral-Based Safety: BAPP, DuPont STOP™, Driver
- Boral Production Systems: Work standardization, visual management, exposure elimination
- Analytics and Tools: Cell phone app, SAP, IHS Compliance Suite, DataPro™, Cell Control
- Reporting: Forward looking, visual, communicated to all levels



PPE & Procedures

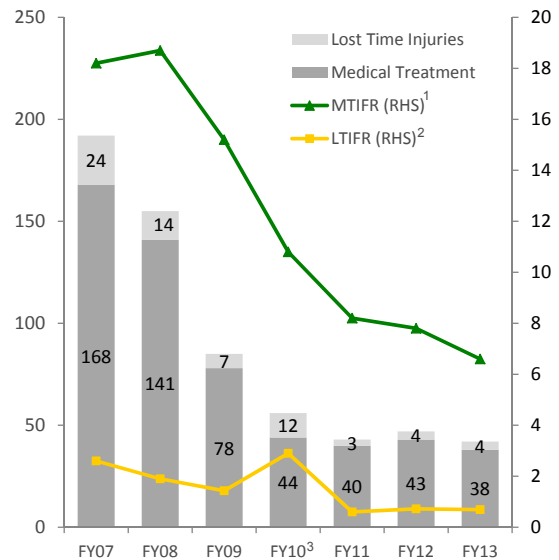


iPhone



SAP

## Safety Performance – Boral USA



1. Medical Treatment Injury Frequency Rate  
 2. Lost Time Injury Frequency Rate  
 3. Includes addition of Cultured Stone



## 2 – Breakthrough to profitability in 2H FY2014

Focus on share & price, cost and cash management, will allow us to effectively leverage the US residential recovery and return to profitability

### Price & Share Management

- Effective pricing by customer tier
- Market share management
- Manage capacity

### Cost Management

- Boral Production System (LEAN)
- Cost reductions at plants, distribution, and SG&A
- Effective procurement
- Plant rationalization / re-configuration of management

### Cash & Capital Management

- Optimise working capital
- Improve inventory management
- Effective stay in business capital investments
- Divest permanently closed facilities

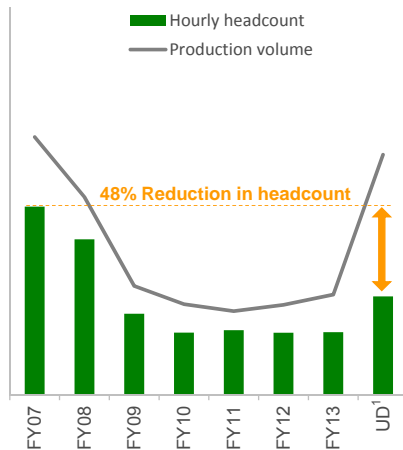
27



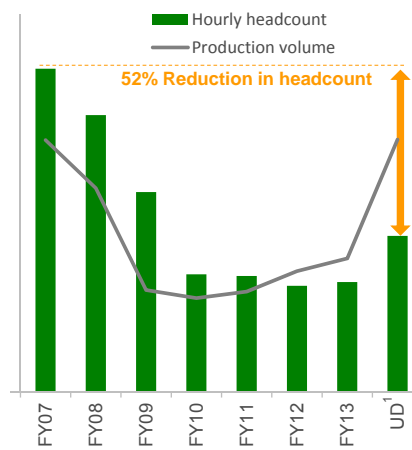
## 3 – Leverage Recovery in New Residential

Plant rationalization and cost improvement focus at our production facilities will allow for a more productive workforce and reduce the headcount required during the next cycle

**Bricks Plant Headcount vs. Production Volume**



**Stone Plant Headcount vs. Production Volume**



Total of 11 fewer plants, ~1,200 fewer employees, delivering ~85% more production per employee at underlying demand (UD) of 1.5m housing starts

1. Underlying Demand - ~1.5m Housing Starts (FY07 at ~1.5m units)

28



# 4 – Diversify Product Offerings and End Markets; Launch New & Innovative Products

### New Products

Roof underlayment    Composite Trim

Stucco Wall System    Stone Panel System    Commercial Brick

### Target Market Segments<sup>1</sup>

Residential

- Custom
- National & Regional
- Multi Family

Repair and Remodel

Commercial

Segment	Today (%)	Aspiration (%)
Residential	82%	50%
Non-Residential	11%	25%
Repair & Remodel	7%	25%

### New Channels

BORAL Building Products    WOLF Leader of the Pack    Weyerhaeuser

Lansing Building Products    U.S. LUMBER

1. Target Market Segments include Cladding and Roofing



## Summary

Use Boral Key Levers of Change to Deliver on Strategic Priorities

- Safety**
- Boral Production System**
- Sales & Marketing Excellence**
- Innovation**
- People engagement**

- Implemented 4 tier approach to eliminate at risk behaviours
- LTIFR of 0.7 in FY2013, 79% improvement over FY2010 results
- Leveraging pull system to reduce inventories
- Brick inventory lowered by ~9% and turns improved by ~25% in FY2013
- Established Commercial Services
- Consolidated Trade Show Functions and Implemented Sales Ranking System
- Successful development and launch of Class 4 Hail Tile, Boral TruExterior® Trim, and Versetta® stone
- Rollout of the Global Innovation Factory
- Targeted approach to align the objectives of every level to achieve short term and strategic goals





## Content

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31



## Opportunities for Growth

Recognizing the need to change to achieve our short and long term goals

### Our Marketplace

#### Diversity and Scope

- Market Segments
- Sales Channels
- Products

#### Margin Growth

#### Sales Skills



32

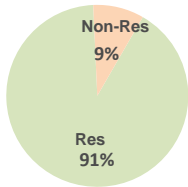




## Diversity & Scope

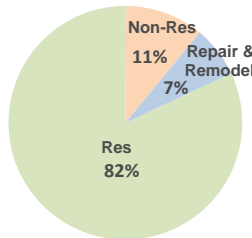
Leverage increased products to diversified segments to transform Cladding and Roofing exposure

FY2009



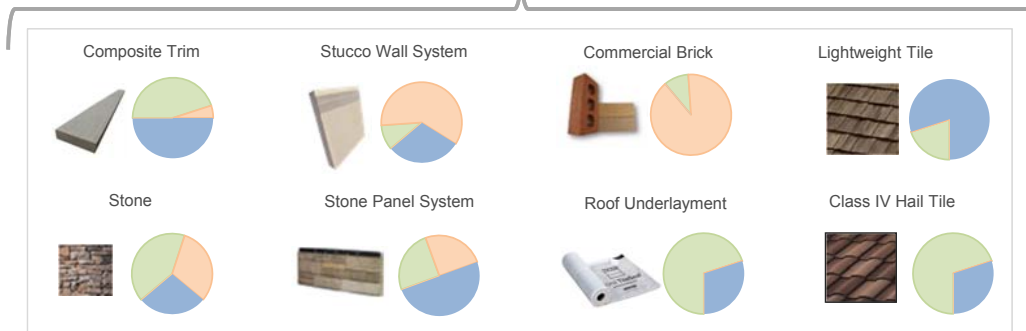
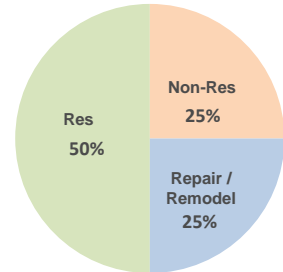
**FIX**

Current



**TRANSFORM**

Aspiration



## Margin Growth

Improving visibility to drive higher margins

### Pricing

- Price increase triggers
- By customer and products

### National Accounts

- Residential
- Commercial / Retail
- Repair & Remodel

### Monthly Reporting

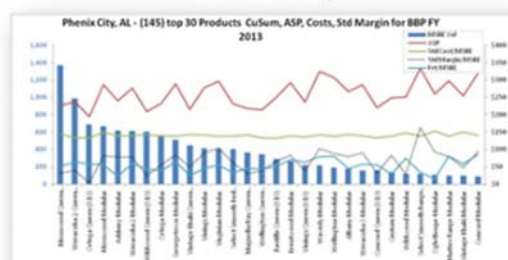
- Transparency
- Awareness

### Coordination with Manufacturing

Cross division deal analysis

Monthly Margin Reports

CuSum with Margin





## Sales Skills and Tools

Developing the tools we need for our sales force to excel

### Sales Performance Ranking

Ranking Scorecard



### Account Planning

Original Account Plan



Newsletters, ranking analytics reports



### E-Commerce



## One Boral Marketing

Establishing and promoting Boral's identity

### *Previously*



### *Now*



Roof Tile  
Pavers  
Bricks  
Stone  
Trim  
Fly Ash  
Materials

Moving all Boral brands to a common "Boral" marketing platform



# One Boral Marketing

Identifying cross divisional marketing opportunities

## Our Goals

- **Unified** approach with consistent messaging
- Combining our budgets to achieve scale
- Building widespread brand **recognition**
- Promoting our brand **nationally**
- Positioning a **premium** brand

## Literature



## Trade shows



# Customer Appeal

Using the "Voice of Customer" to transition our message from product attributes to customer concerns

## Sustainability



- Homeowners
- Architects
- Builders
- Designers
- Installers
- Distributors

## Innovation



## Durability



## Availability



## Design





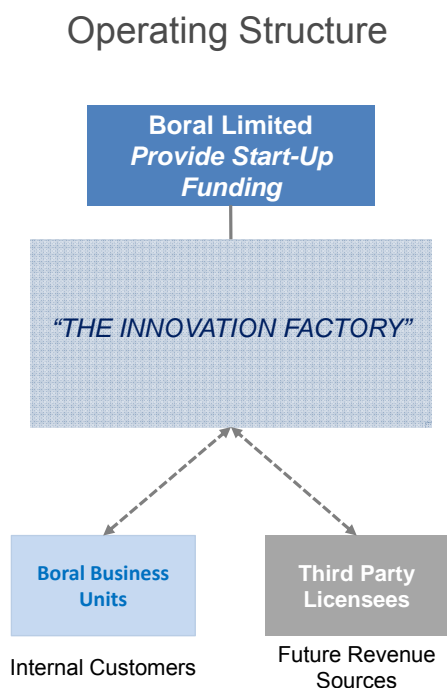
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## Introducing the Innovation Factory

Transforming our operating structure to achieve our short and long term goals



### Our Goals

- Align resources and R&D priorities globally
- Manage disruptive/ transformational innovation and open innovation
- Leverage R&D resources globally
- Balance innovation risk
- Incubator for “square peg” projects
- Intellectual property management
- Transform customer needs into products and services

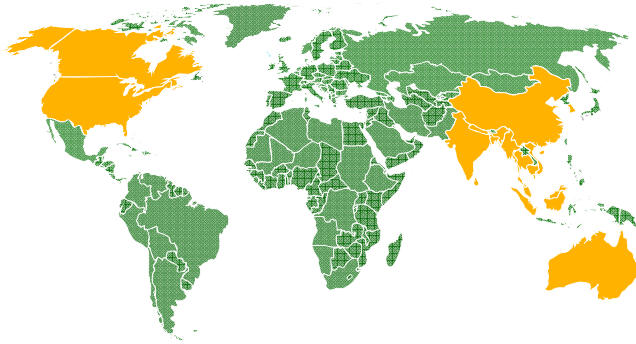


# The One Boral Approach

Incorporating current best practices under centralized management

## Centers of Excellence

*Original Concept*



Boral North America	Boral Asia	Boral Australia
<ul style="list-style-type: none"> <li>Building Products</li> <li>Composites</li> </ul>	<ul style="list-style-type: none"> <li>Gypsum</li> <li>System Design</li> <li>Ceilings</li> </ul>	<ul style="list-style-type: none"> <li>Cement</li> <li>Asphalt</li> <li>Concrete</li> </ul>

## Innovation Factory

*Original Concept with Central Oversight*

- Regional R&D centers
- Open innovation networks
  - Universities
  - Joint development partners
- Knowledge management systems
- Knowledge management processes
- Lean organization



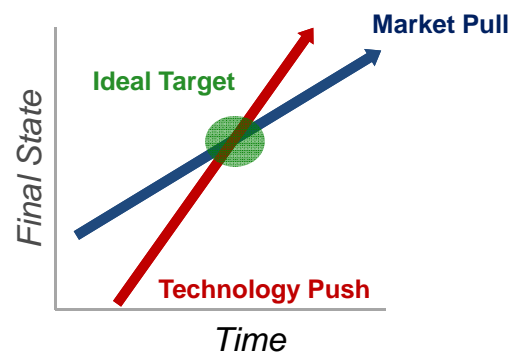
# Our Aspiration

Achieving transformational innovation to maximize the benefits of our changing industries

## Benefits of the Factory

- Defined global innovation strategy
- Clear **accountability for projects**
- Senior Management engagement and oversight
- Drive disruptive and transformational innovation**
- Leverage global expertise
- Promote knowledge transfer
- Produce **customer driven products** and solutions
- Enhance Boral's Innovation image in the market

## Future State



*Matching Technology to Future Market Demand*



## Innovation Driven Growth

Boral Composites Inc. is a new technology platform

### New Product – New Opportunities

- First of kind Trim product
- Proprietary technology
- Highly sustainable
- New class of products
- New markets
- New channels and segments
- New geographies
- Growth platform
- Outbound innovation opportunities



Repair & Remodel – Lancaster, PA



Multi Family New Construction – Gloucester, VA



Single Family New Construction – Middle River, MD

43



## Content

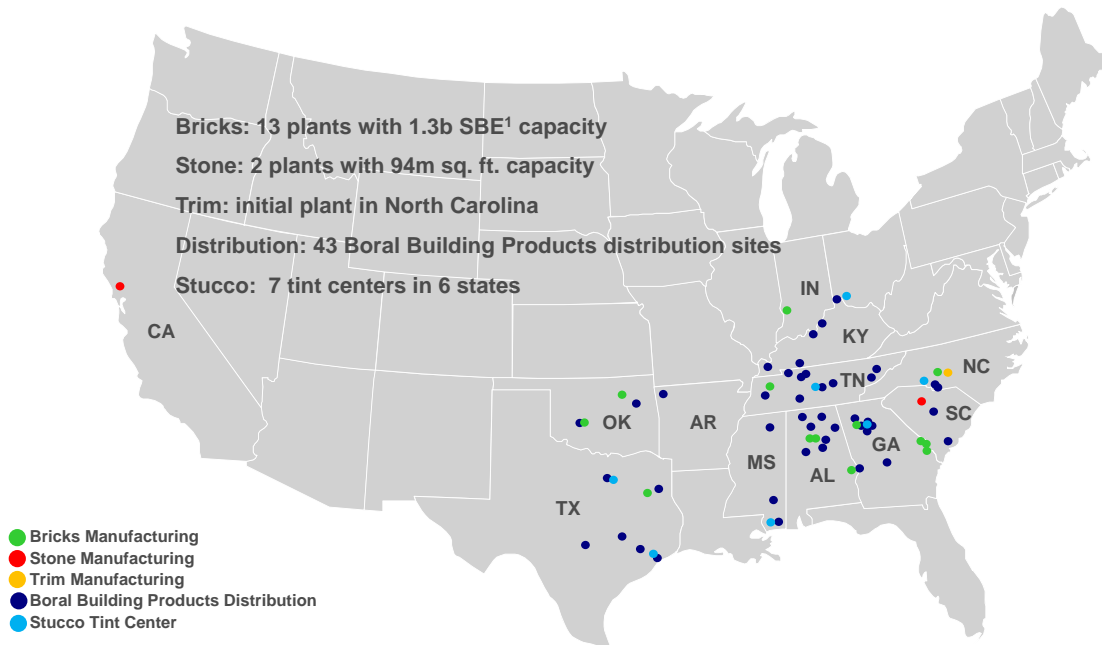
- Boral USA Overview
- Economic & Housing Update
- Strategic Priorities
- Commercial Services & Innovation
- **Boral Cladding**
- Boral Roofing
- Boral Materials
- Outlook

44



# Boral Cladding Footprint

Comprising 65 facilities, our reach is considered nationwide



1. Standard Brick Equivalent

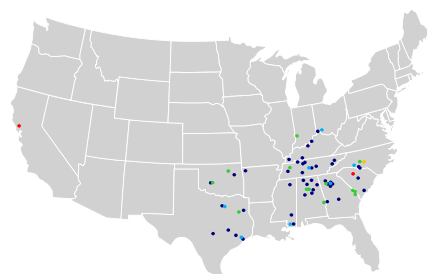


# Boral Cladding: Strategic Intent

“Provide product and service solutions to the residential, commercial and repair & remodel segments that will enable Boral to grow and diversify into new geographies and markets”

- #1 brick manufacturer in the US<sup>1</sup>
- #1 stone manufacturer in the US<sup>1</sup>
- Boral Building Products transforming to become a broader cladding products provider
- Our opportunity is in new market segments, products, and new markets
  - requires a more diverse portfolio

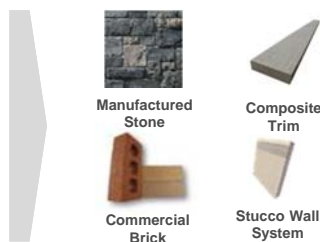
### Footprint is Growing



### Historic



### Recent



### Beyond New Residential

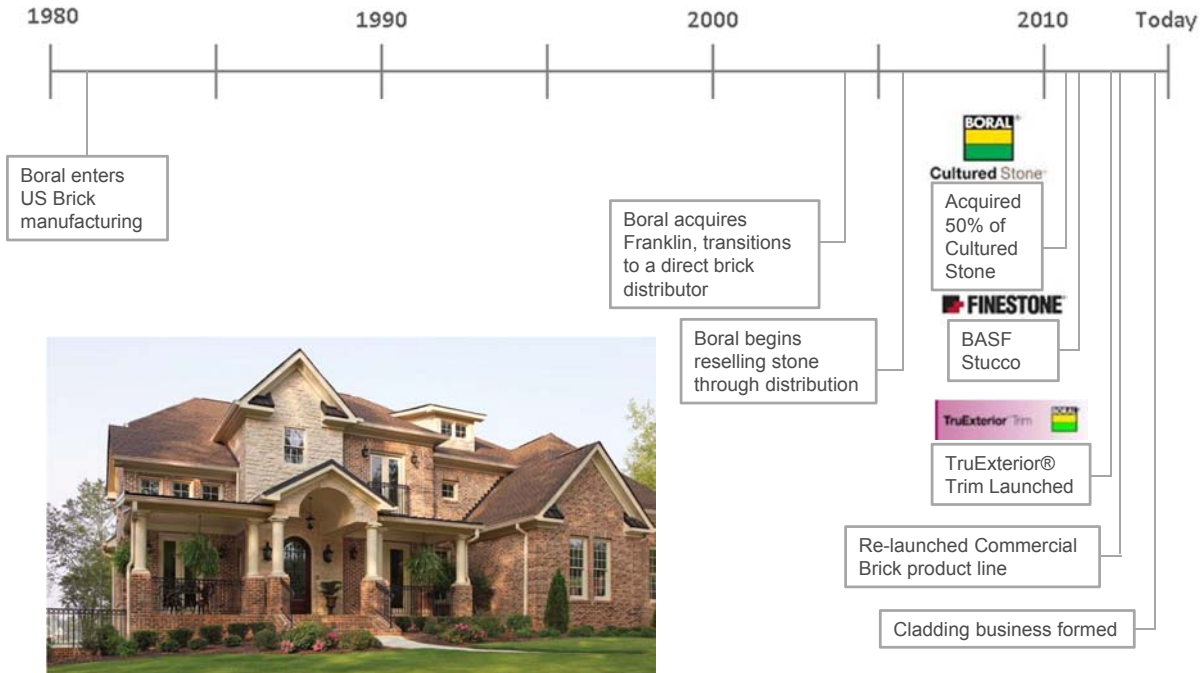


1. Based on management estimates



# Boral Cladding Evolution

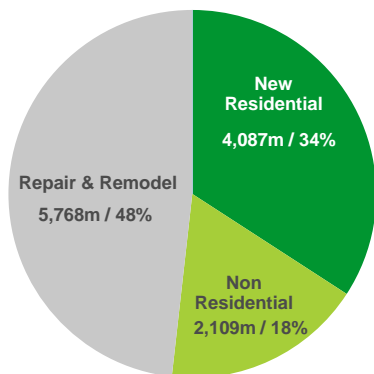
Transitioning from a brick only focus to a Cladding products provider



# Cladding & Trim Market (Size & Scope)

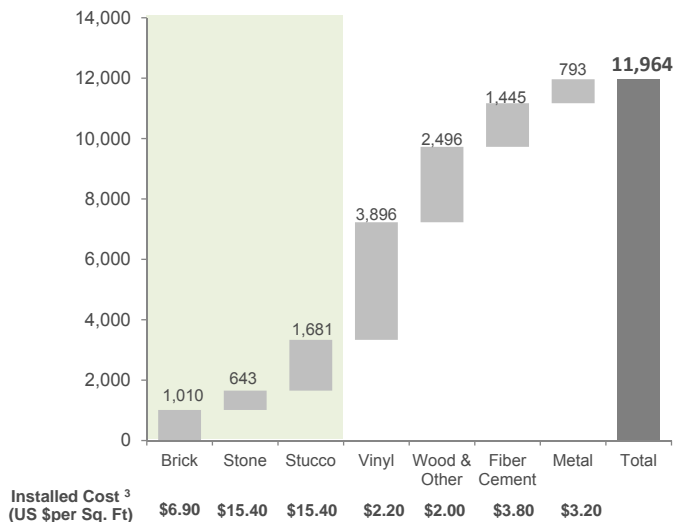
Cladding & Trim market is ~12 billion square feet predominately driven by repair & remodel segment and cheaper cladding types (e.g. vinyl & wood)

**Market Segments<sup>1</sup>**  
(millions of square feet)



During the prior cycle Boral Cladding sales were ~90% New Residential.

**Product Segments<sup>2</sup>**  
(millions of square feet)



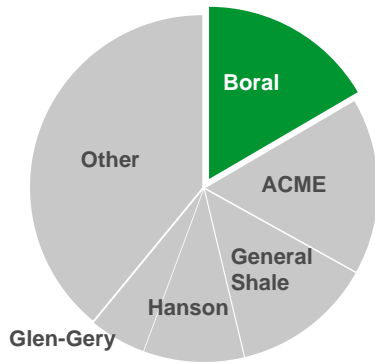
1. Source: NAHB, Freedonia, management estimates  
 2. Source: NAHB, Freedonia, Principia, management estimates  
 3. Source: Ducker (FY10 installed cost study) & management estimates





# Boral's key competitors in Bricks

## Brick Sales Volume – FY2013<sup>1</sup>



Total = ~3.4bn SBE

## Key Competitors – Brick States

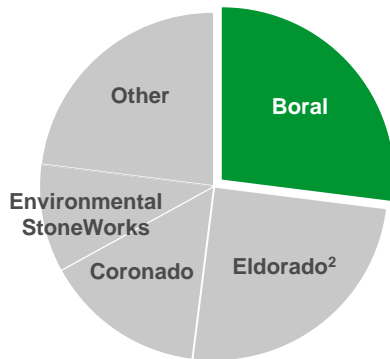


1. Brick Industry Association for total industry shipments; Boral estimates for market share



# Boral's key competitors in Stone Veneer

## Stone Veneer Sales Volume – FY2013<sup>1</sup>



Total = ~72 m Sq. Ft

## Key Competitors by Region



1. MVMA data for total industry shipments(US only); Boral estimates for market shares  
 2. Eldorado data includes all Headwaters Brands – Eldorado, Dutch Quality, and Stonecraft



# Boral Cladding: Strategic Priorities

1. **Safety** – Target Zero Harm
2. **Product & Market Diversification (Growth)** – Maximize returns, geographic and segment expansion
  - Geography
  - Products
  - Innovation
3. **Price & Share Management** – Maximize price and maintain / grow share
4. **Cost & Capital Management** – Improve cost position by leveraging Boral Production System, rationalization, and lower SG&A. Effective capital investments to support rationalised plant network



## 1 – Safety

Focused on achieving Zero Harm Workplace

### Safety & People

- 18 Medical Treatment Injuries (MTI) and 2 Lost Time Injuries (LTI) in FY2013
- Hours worked up ~9%

### Safety Programs

- On Boarding & Behavior Training
- Safety Interventions - All employees



PPE & Procedures

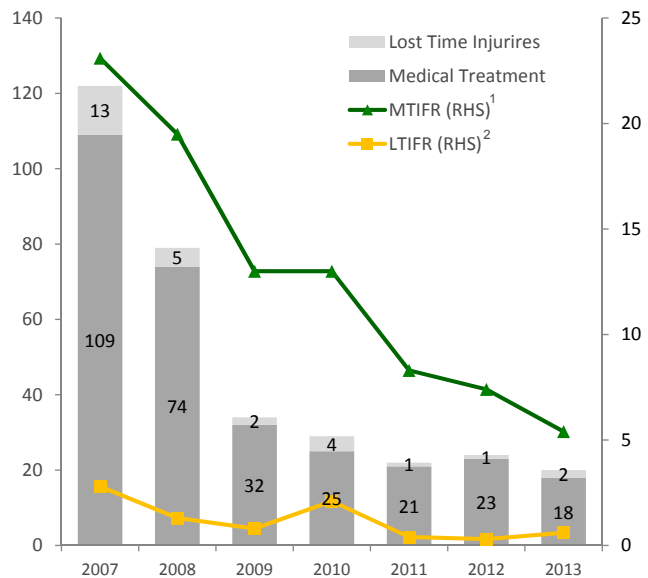


iPhone



SAP

### Boral Cladding – Safety Performance



1. Medical Treatment Injury Frequency Rate  
 2. Lost Time Injury Frequency Rate

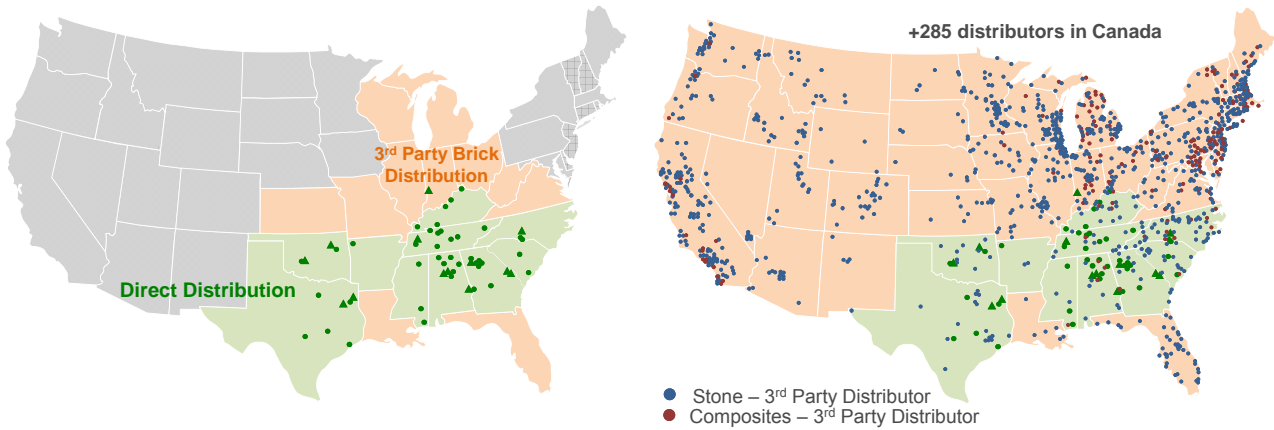


## 2 – Geographic/Channel Diversification

Acquisition of Cultured Stone and TruExterior Trim start up has opened up new channels and expanded Boral Cladding's footprint to cover 50 US States and Canada

**Historical US Channel**  
(Brick, BBP, 3<sup>rd</sup> Party Brick Distribution)

**Current US Channel**  
(3<sup>rd</sup> Party Distribution Expansion)

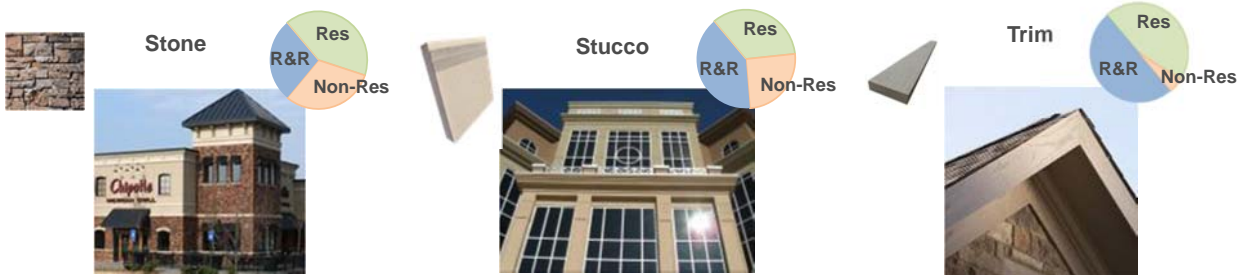


Expanded to a national Cladding presence adding ~1,700 3<sup>rd</sup> Party distributors in the US and 285 in Canada



## 2 – Product Diversification

Historical approach was focused on bricks and ancillary / tangential products. Focus now on expanding to new products that diversify market position and end-market exposure

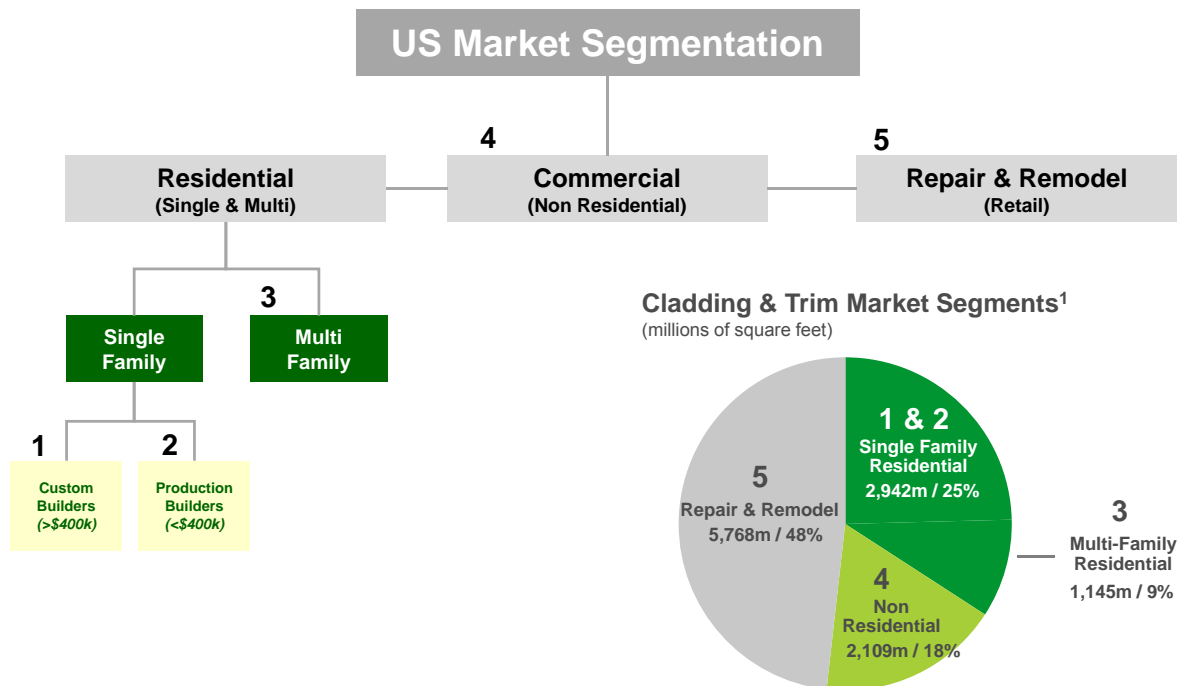


- Expanded product portfolio provides a more diversified market position
- Boral Stone, Admix Brick, and BASF Stucco have been added to the Boral Building Products portfolio
- Boral Trim and Versetta® Stone, both internal innovation products, are leveraging new two step channels



## 2 – Market Segment Diversification

As the market recovers we will leverage our key segments and broaden focus to further penetrate other segments



1. Source: NAHB, Freedonia, Principia, Management Estimates



## 2 – Organic Product Growth

A key priority is continually adding to the product portfolio for Boral Building Products as the market recovery moves forward

### Cultured Stone®

- Acquired management control in Dec-2010
- JV winds down end of CY2013
- Lowered manufacturing cost through automation and LEAN manufacturing
- Natural compliment to brick in Boral Building Products channel
- Cements us as #1 player<sup>1</sup> in Manufactured Stone category

### Commercial Brick (Admix)

- Invested capital to convert Bessemer, Alabama plant to Admix facility
- Typically brick market is ~30% Non-Residential
- Admix product will allow Boral to approach market with a full brick line
- Complements our other brick commercial capabilities in Henderson and Terre Haute

### BASF Stucco

- Agreement with BASF to maintain exclusive rights to its Finestone brand in 12 states
- Currently selling traditional 3 coat stucco, EIFS, and wall system components
- Currently 7 tint centers, additional in development
- Focused initiative to grow non-residential sales

1. Based on management estimates



## 2 – Innovation Product Growth

Boral TruExterior® Trim and Versetta® Stone products transform Boral's market position beyond our historical channel and market segments

### Versetta® Stone



- Ideal product to penetrate the Repair & Remodel market.
- Panelized Manufactured Stone
- Nailed or screwed in place
  - No mason needed
- 50% recycled content
- Fast installation
- Target market: Where speed and ease of installation is key



### TruExterior® Trim



- New category in US\$1.7b trim market
- Poly-ash trim
- 70% recycled content
- Like wood: easy to handle, easy to cut, rout, drill and fasten, installed with same tools
- Unlike wood: low maintenance, exceptional durability, resistant to rotting, cracking, free from termites.
- Unlike most other trim products has high level of dimensional stability, ground contact, easily painted



## 3 – Price & Share Management

Brick and Stone pricing continues to be soft, driven by low industry utilization but market share improving

### Brick

- Market Share
  - Focus on national builders
  - Leverage residential recovery in Texas
- Pricing
  - National builders leading growth with lower price point (improves leverage)
  - Geographic mix impacting pricing (Texas)

### Stone

- Market Share
  - Focus on national builders & multi-family
  - Synergies with BBP being realized
- Pricing
  - Competitive pressure as intensity / utilization remain low
  - National builders and multi-family traditionally have lower ASP

### Trim

- Market Share
  - Growth continues in Northeast
  - Expanding into Midwest and West Coast
- Pricing
  - Pricing levels in line with value proposition and roll out strategy

### Other

- Stucco
  - Growing share, expanding geographic footprint
- Other Resale
  - Mortar, full dimensional stone, and ancillary products continue to increase
  - Resale 40% of Boral Building Products' distribution revenue in FY2013

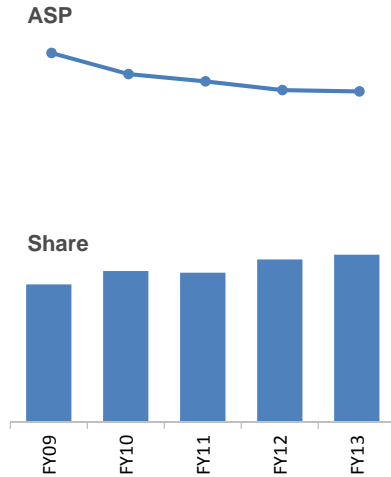


### 3 – Price & Share Management

Brick and Stone pricing continues to be soft, driven by low industry utilization but market share improving

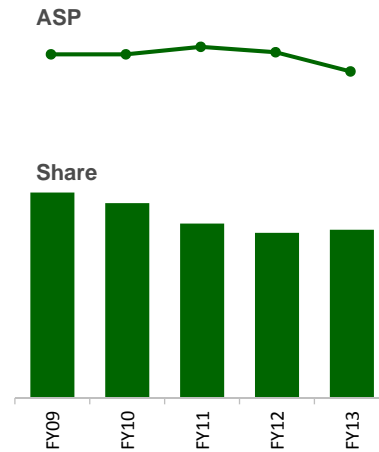
#### Bricks Market Share and Price

% Share, \$ per MSBE<sup>1</sup>



#### Stone Market Share and Price

% Share, \$ per Sq. Ft



1. Bricks ASP: Direct distribution ASP per 1,000 SBE

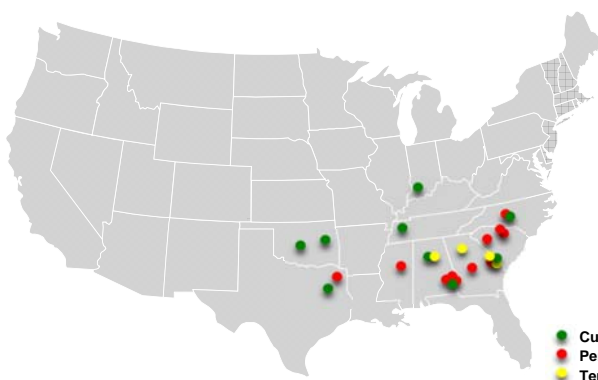


### 4 – Cost & Capital Management (Rationalized network)

Brick plant and direct center network rationalized to improve cost and capital position

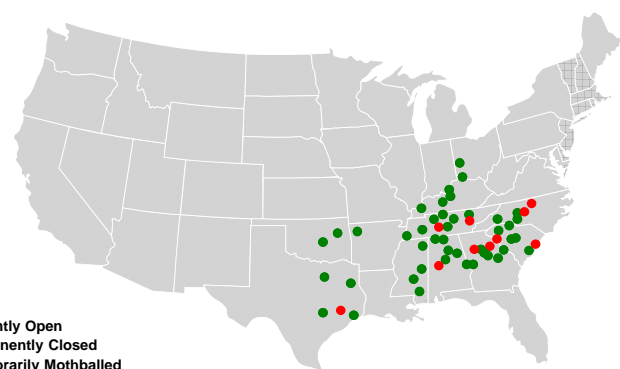
#### Boral Bricks Plant Network

Current capacity: ~1.3b MSBE



#### Boral Building Products Footprint

Currently 43 Centers



Permanently closed 11 higher cost bricks plants & 10 distribution centres since FY2010



## 4 – Cost & Capital Management

Only 13 brick plants to be operational in future freeing up capital for higher value investments

### Asset Overview

#### Brick:

- 24 plants operational during prior peak with ~1.9b SBE capacity
- Utilization at 41% in FY2013, improved from 34% in prior year
- Permanently closed ~32% of high cost capacity
- In the future plan to operate ~1.3b SBE capacity with 13 plants

#### Stone:

- 2 plants with ~94m square feet capacity
- Utilization at 27% in FY2013, improved from 24% in prior year
- Rationalized employees and installed automation post acquisition
- Both plants operational in FY2013

#### Trim:

- Commissioned in November 2011
- 1 plant, 1 line in Salisbury, North Carolina

Product	Plant	Location	Status
<b>Brick</b>			
	Terre Haute	IN	Operational
	Bessemer 1	AL	Operational
	Salisbury 1	NC	Operational
	Augusta 1	GA	Operational
	Phenix City 1	AL	Operational
	Gleason	TN	Operational
	Muskogee	OK	Operational
	Union City	OK	Operational
	Henderson	TX	Operational
	Smryna	GA	Mothballed
	Augusta 2	GA	Mothballed
	Bessemer 2	AL	Mothballed
	Augusta 3	GA	Mothballed
	Phenix City 2	AL	Closed
	Phenix City 3	AL	Closed
	Phenix City 4	AL	Closed
	Augusta 4	GA	Closed
	Lexington	SC	Closed
	Salisbury 2	NC	Closed
	Macon	MS	Closed
	Macon	GA	Closed
	Marshall	TX	Closed
	Van Wyck 1	SC	Closed
	Van Wyck 2	SC	Closed
<b>Stone</b>			
	Chester	SC	Operational
	Napa	CA	Operational
<b>Trim</b>			
	Salisbury	NC	Operational

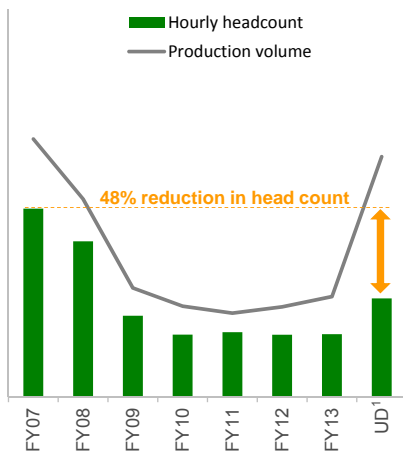
61



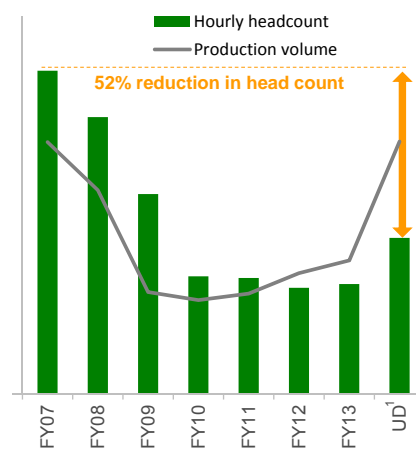
## 4 – Cost & Capital Management

Through plant rationalization and cost improvements, facilities have reduced headcount requirement during the next cycle

**Bricks Plant Headcount vs. Production Volume**



**Stone Plant Headcount vs. Production Volume**



Total of 11 fewer plants, ~1,200 fewer employees, delivering ~85% more production per employee at underlying demand (UD) of 1.5m housing starts

1. Underlying Demand - ~1.5m Housing Starts (FY07 at ~1.5m units)

62

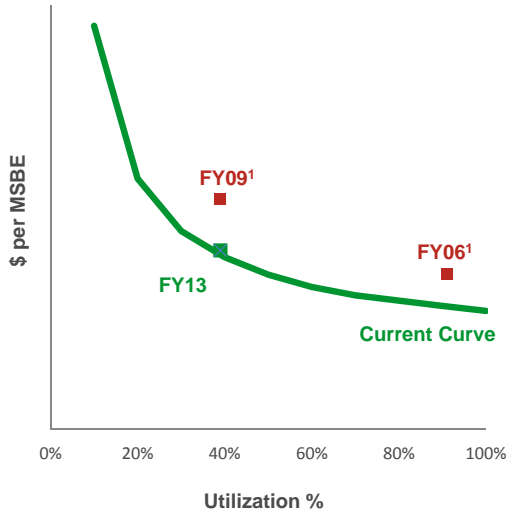


## 4 – Cost & Capital Management (LEAN & Leverage)

Through implementation of LEAN initiatives and fixed cost leverage, Boral is positioned to maximize unit cost improvements through the cycle

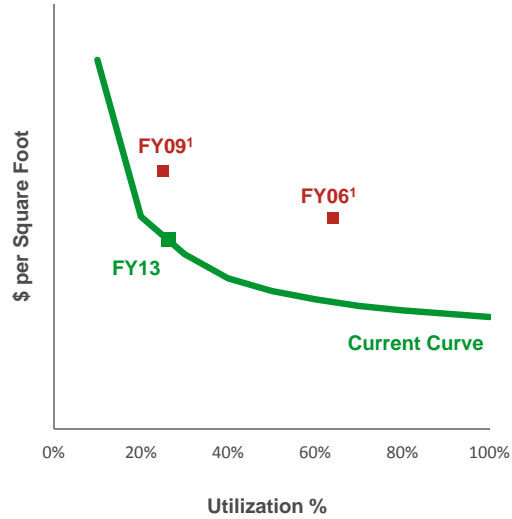
### Brick Manufacturing Cost Curve

(\$ per MSBE, Utilization %)



### Stone Manufacturing Cost Curve

(\$ per SF, Utilization %)



1. Inflation adjusted by 1.5% per annum

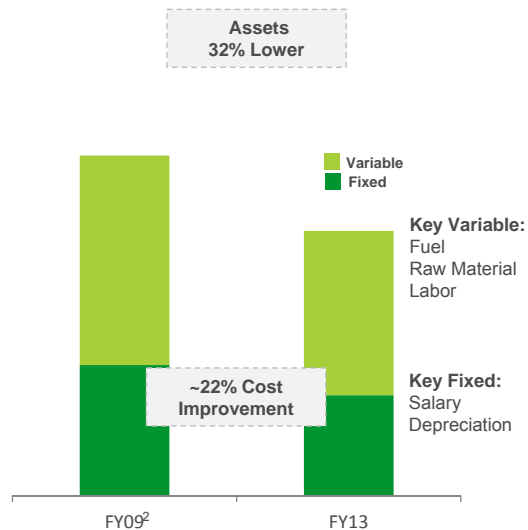


## 4 – Cost & Capital Management (Lean & Leverage)

Through implementation of LEAN initiatives and locking in savings, Boral is positioned to maximize unit cost improvements through the cycle

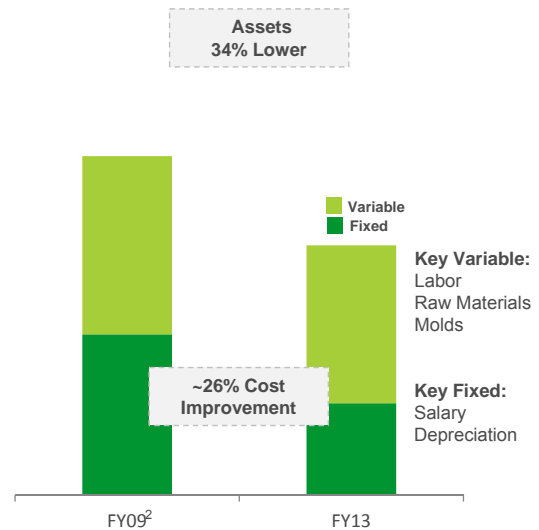
### Brick Manufacturing Costs & Assets¹

(\$ per MSBE)



### Stone Manufacturing Costs & Assets¹

(\$ per Sq. Ft)



1. FY09 & FY13 at similar utilization rates  
2. Inflation adjusted by 1.5% per annum



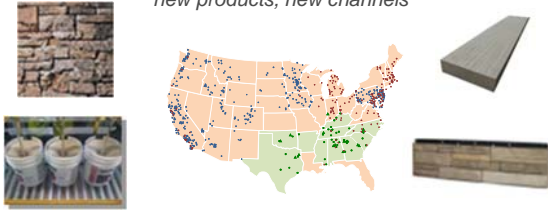


## Boral Cladding Summary

Focus on product & segment diversification and cost will improve returns and drive the business to become profitable sometime in 2H FY2014

### Product & Market Diversification

*new products, new channels*



### Segment Diversification

*Non-residential, multi-family, repair & remodel*



### Cost & Capital Management

- Rationalized Brick and Boral Building Products network
- Improvement from Boral Production System on cost
- Lower manufacturing cost position through cycle
- Lower assets through cycle



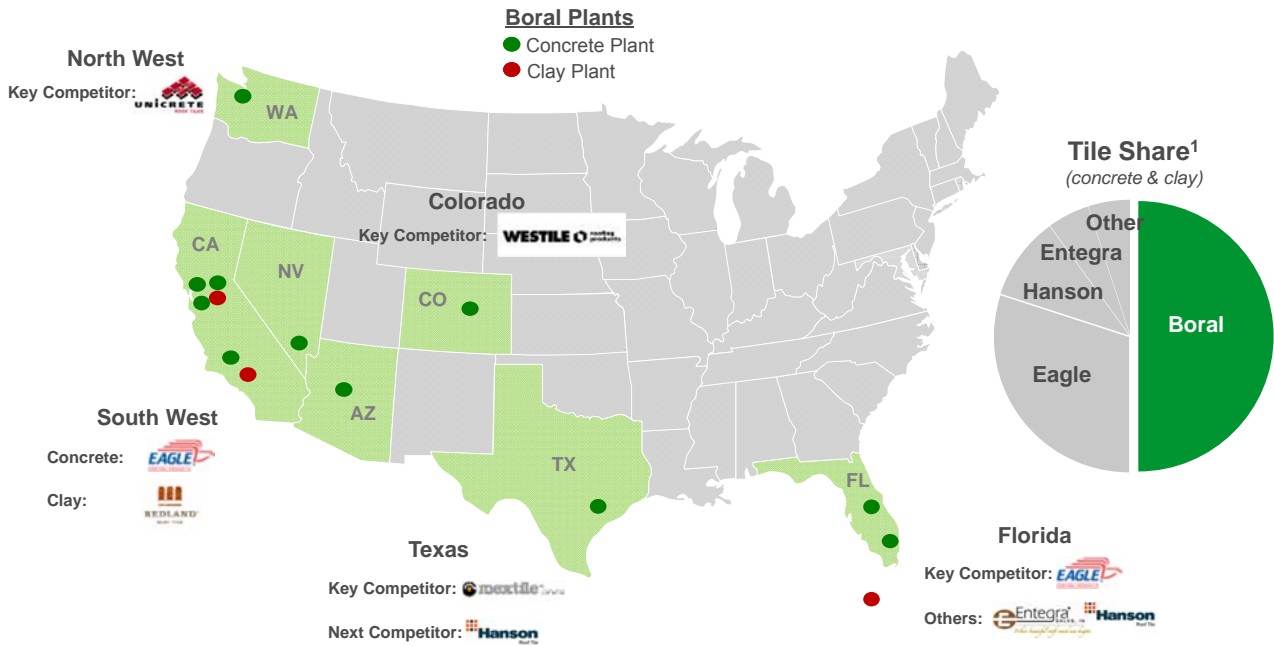
## Content

- Boral USA Overview
- Economic & Housing Update
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- Boral Cladding
- **Boral Roofing**
- Boral Materials
- Outlook



# Boral Roofing is the US market leader in Concrete & Clay Tile

11 concrete roof tile plants and 3 clay roof tile plants



1. Based on management estimates

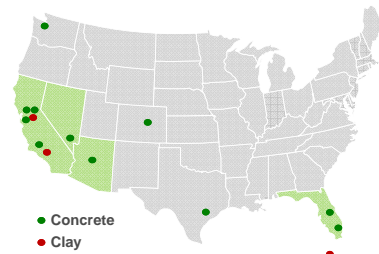


## Boral Roofing: Strategic Intent

“Provide full offering of high end pitched roof solutions that will enable Boral to grow and diversify into new geographies and market segments”

- Market leader with ~50% national share of roof tile, but only 1% to 2% of total North America roofing
- Heavily tied to four states and new construction (production builders)
- Opportunity is in new geographies, products, and market segments

80% in Four States



80% in New Construction



### Historic



### Recent



### Future





# Boral Roofing: Strategic Priorities

1. **Safety** – Target Zero Harm
2. **Product & Market Diversification (Growth)** – Grow and diversify through increased sales in new geography, products, and markets
  - Geography (central US)
  - Products (resale)
  - Markets (reroof)
3. **Price & Share Management** – Maximize price and maintain / grow share
4. **Cost & Capital Management** – Lower SG&A as a percent of sales, improve manufacturing costs, and deliver higher asset utilization at lower cost base



## 1 – Safety

Focused on achieving Zero Harm workplace

### Safety & People

- 10 Medical Treatment Injuries in FY2013
- Hours worked up 3%

### Safety Programs

- On Boarding & Behavior Training
- Safety Interventions - All Employees
- Near Misses - 4,455 in FY2013



PPE & Procedures

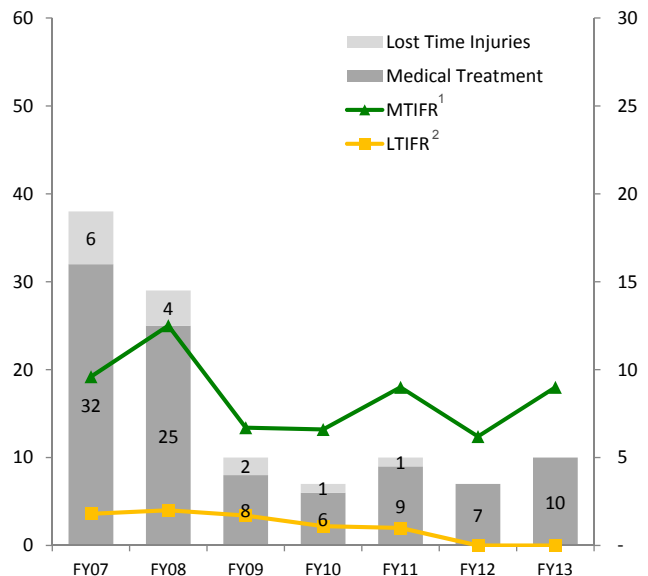


iPhone



SAP

### Boral Roofing – Safety Performance



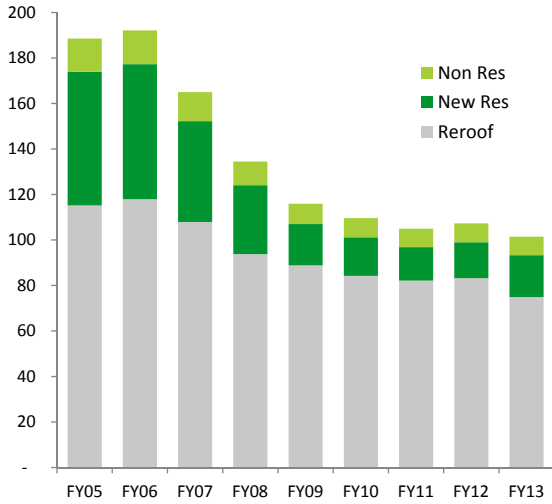
1. Medical Treatment Injury Frequency Rate  
 2. Lost Time Injury Frequency Rate



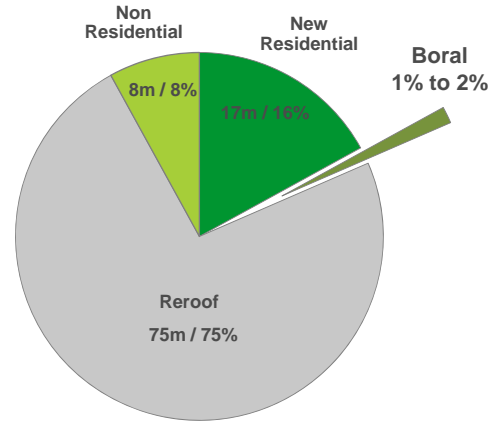
## 2 – Product & Market Diversification (Size & Segment)

The pitched roof market is currently ~100 million squares. Reroof was down over prior year; however its size, stability, and profitability is desirable

**Market Size**  
(millions of squares)



**Market Segments**  
(millions of squares)



Re-roof: homes with asphalt typically replaced every 10-20 years

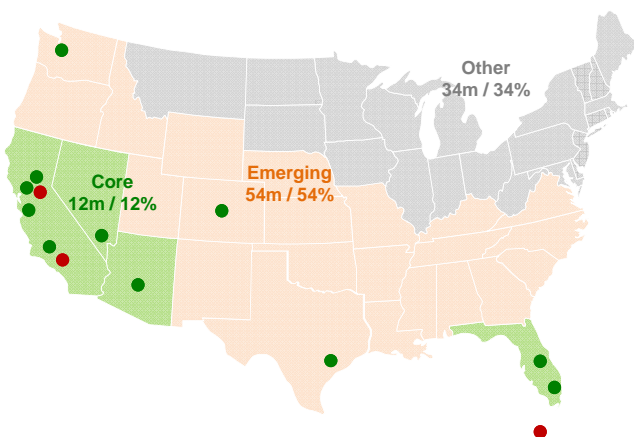
Source: ARMA, NAHB, Moody's, Dodge, Management Estimates



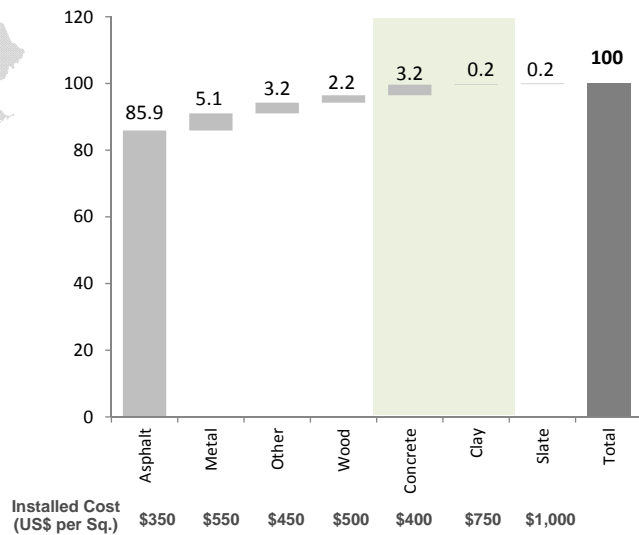
## 2 – Product & Market Diversification (Geography & Product)

Opportunity resides in diversifying beyond current geography, market, and product

**Size by Geography**  
(millions of squares)



**Product Segments**  
(millions of squares)



Source: ARMA, NAHB, Moody's, Dodge, Management Estimates



## 2 – Product & Market Diversification (Growth)

Boral has focused on regional campaigns, resource alignment, product innovation, and resale products for diversified growth

### Geography

- Texas, Colorado, Heartland
- Conversion from asphalt
- Consumer awareness
- 5 additional FTE's allocated
- 20 new builders, volume up +45%



### Resale

- Incremental to tile (systems)
- Three new products per year
- Pass through, limited assets
- Revenue +109% in 2 years
- Margin +88% in 2 years



### Reroof

- Lt weight tile offering
- Clay tile offering
- New hail tile in central US
- Sales / Marketing alignment



## 3 – Price & Share Management

Share increase primarily due to west coast competitors market exit. Recent focus on price / margin initiatives, and share gain through new geographies and roof components

### Price & Margin

- National builder volume up, price up
- Regional and local price increase
- Incentive management (internal / external)
- Product mix

### Share

- Fewer competitors
- New geographies (central US)
- New market segment (reroof)
- Share of roof, not just tile (resale)

### Concrete Tile: Share & Price

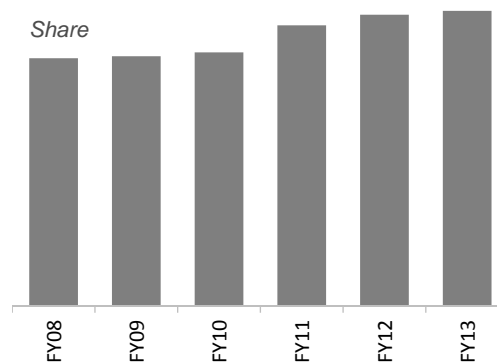
(% Share, \$ per Square)

*ASP down due to mix (volume gains from lower priced national builders)*

ASP



Share



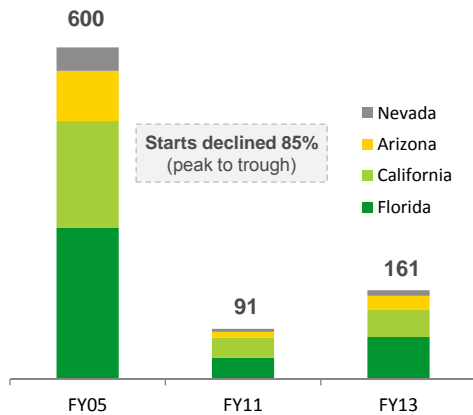


## 4 – Cost & Capital Management (Headcount & SG&A)

Headcount reduction in line with housing starts. Permanent benefits gained from operational efficiencies, consolidation, and fewer plants

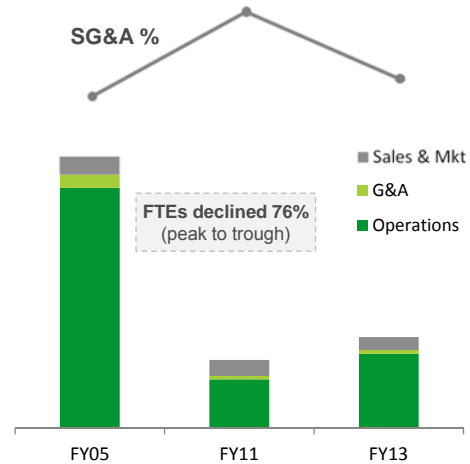
### Housing Starts in Boral Tile States

(000 units)



### Roofing FTEs<sup>1</sup> & SG&A

(Headcount, SG&A % of Sales)



1. FTE – Full time equivalent employee



## 4 – Cost & Capital Management (Manufacturing Network)

Three plants currently mothballed, three plants rationalized. Further work in progress

**Boca plant rationalized in FY2010, Mexico and Kansas City in FY2013**

### Concrete Tile

- 14 plants operational during prior peak, with ~7.7m square capacity
- Permanently closed 3 plants, ~10% of high cost capacity
- FY2013 utilization at 22%, improved from 17% in prior year

### Clay Tile

- 3 plants with ~380k square capacity
- 2 plants operational in FY2013

### Asset Overview

Product	Plant	Location	Status
<b>Concrete</b>			
	Stockton	CA	Operational
	Lathrop	CA	Operational
	Gilroy	CA	Operational
	Rialto	CA	Operational
	Phoenix	AZ	Operational
	Henderson	NV	Operational
	Katy	TX	Operational
	Denver	CO	Operational
	Lake Wales	FL	Operational
	Pompano	FL	Operational
	Tacoma	WA	Mothballed
<b>Clay</b>			
	Corona	CA	Operational
	Ione	CA	Mothballed
	Trinidad	TD	Mothballed

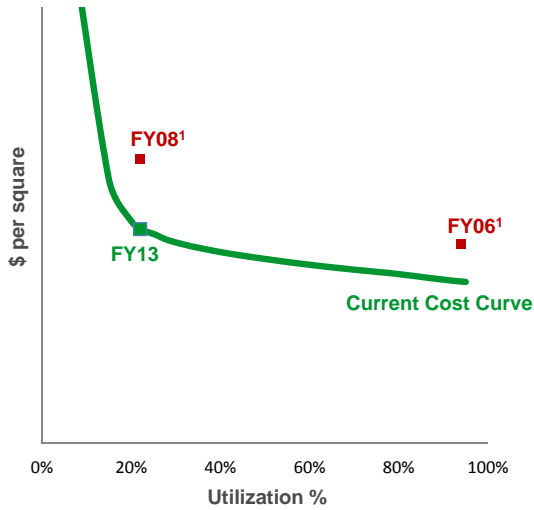


## 4 – Cost & Capital Management (Lean & Leverage)

Through implementation of LEAN initiatives and by locking in savings, Boral is positioned to maximize unit cost improvements through the cycle

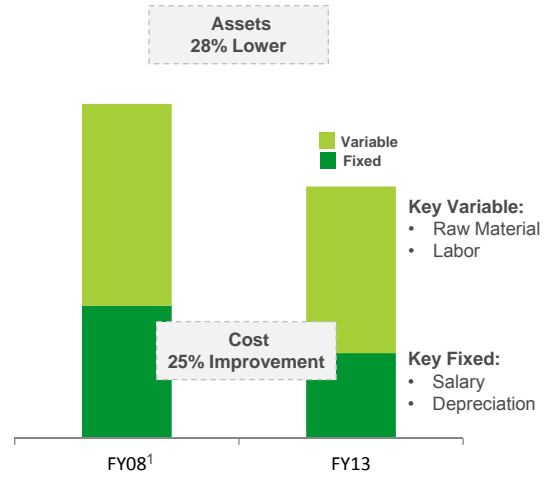
### Roofing Manufacturing Cost Curve

(\$ per square, Utilization %)



### Manufacturing Costs & Assets

(\$ per Square @ 22% utilization)



1. Inflation adjusted by 1.5% per annum



## Boral Roofing Summary

Focus on price, margin, diversification, and cost will improve returns and drive the business to become profitable in late 2H FY2014

### Product & Market Diversification

*new geographies, reroof segment, new products*



### Price & Share Management

*national builder pricing, sales resources, resale*



### Cost & Capital Management

- Lower SG&A % of sales
- Optimized manufacturing network
- Lower cost per square through cycle
- Lower assets through cycle

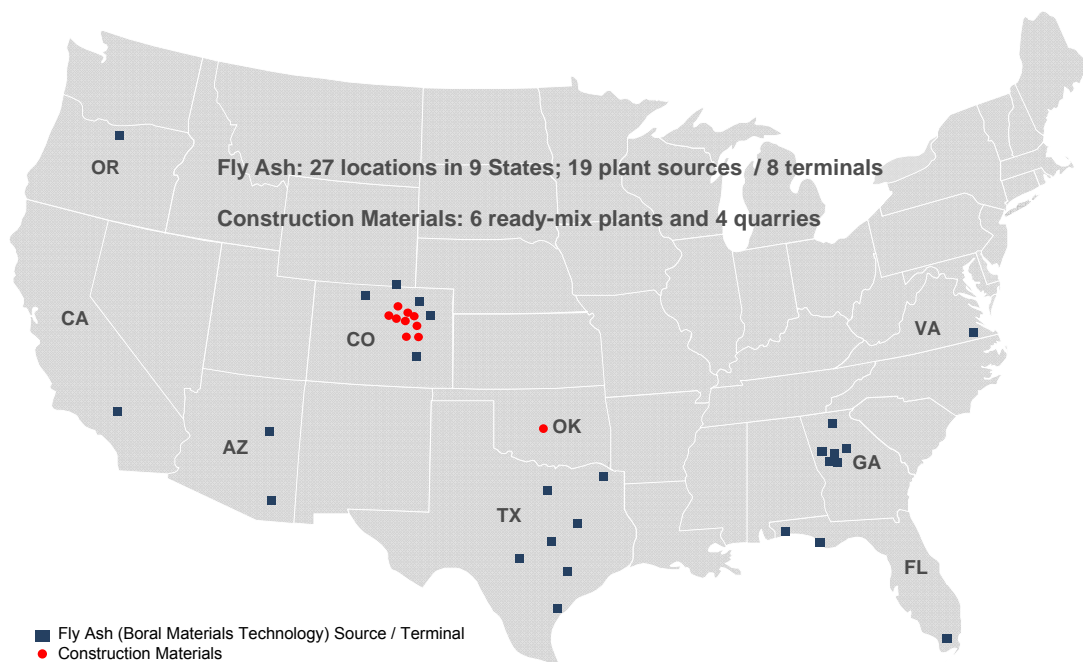


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## Boral Materials Asset Portfolio







# Boral Materials: Strategic Priorities

- Maintain safety focus on Zero Harm work environment
  
- Fly Ash (BMT)<sup>1</sup>
  - Sustainable fly ash supply
  - Improve pricing
  - Develop new product applications
  
- Construction Materials
  - Exploit strong quarry reserves position
  - Leverage strong ready mix plant network



1. Boral Materials Technology



# Safety

Focused on achieving Zero Harm workplace

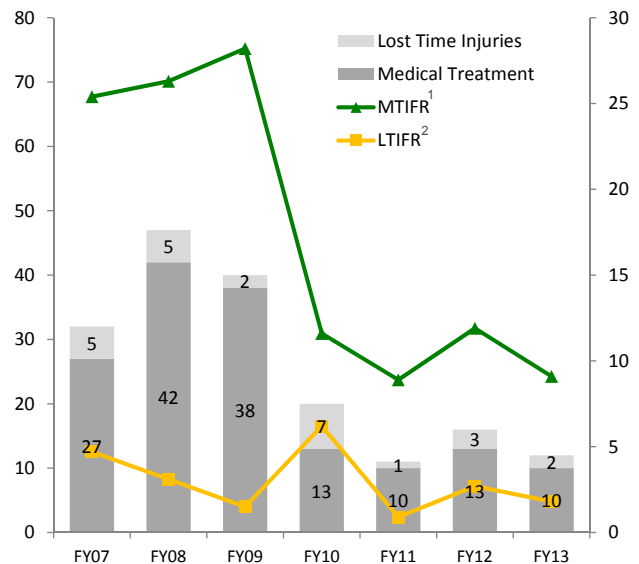
## Safety Highlights: BMT

- Improved FY2013 performance
  - Zero recordable incidents or LTIs
  - Observations and Near Miss reporting increasing
- Cultural shift in safety driven hourly employees
- Expanding safety training to sales and head office

## Safety Highlights: Construction Materials

- Improved FY2013 performance
  - Medical treatments declined
- Near Miss reporting raising awareness
- Using Near Miss reporting to identify trends

## Boral Materials – Safety Performance



1. Medical Treatment Injury Frequency Rate  
 2. Lost Time Injury Frequency Rate



## BMT: Fly Ash Supply

Secure existing ash supply and obtain additional supply

### Current Supply Footprint:

- Three key contracts extended through 2020
- Four contracts in contract extension process
- By end CY2013 all existing ash supply expected to be contracted until 2020



### Footprint Expansion:

- Added source in south Texas in FY2013
- Initiative in place to identify and add new ash sources



83



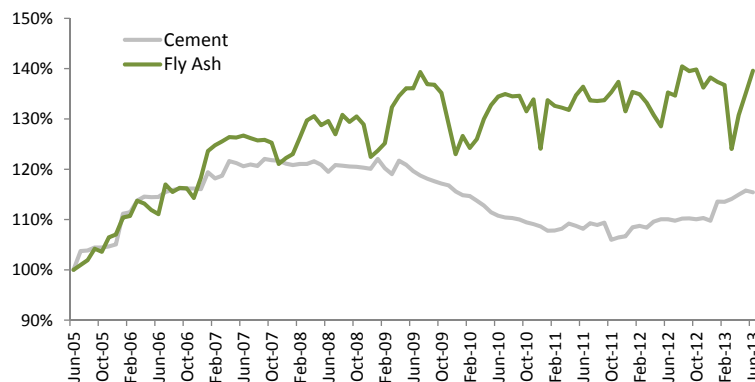
## BMT: Price Improvements

Improve pricing as the construction market recovers and cement prices increase

- BMT fly ash pricing has remained flat during downturn but cement pricing has declined
- Adjusting fly ash pricing in line with cement price increases
  - will continue this approach

### Fly Ash Price<sup>1</sup> Index vs. Cement Price<sup>2</sup> Index

(Index June 2005)



1. BMT External Fly Ash ASP

2. Source: Bureau of Labor Statistics (BLS)

84



## BMT: New product applications

Continue to identify and develop new uses for fly ash

- Aspiration to develop a diversified product portfolio resulting in ~35% of revenue generated from new product applications
- Continue to develop new niche applications for Celceram® products
- Pursue other mineral filler applications, added resources:
  - Developing asphalt roofing applications
  - Expanding oil field applications
  - Exploring the potential of plastics



## Construction Materials: Exploit Strong Quarry Positions

### Colorado Quarries

- High quality that are close to market
- Long term reserve positions exceeding 25 years at each quarry

### Oklahoma Quarry

- Lowest landed cost to market
- Long term reserve position

### Quarry End Use (Colorado)

- Sale of water storage reservoir developing incremental profit





## Construction Materials: Leverage Network Position

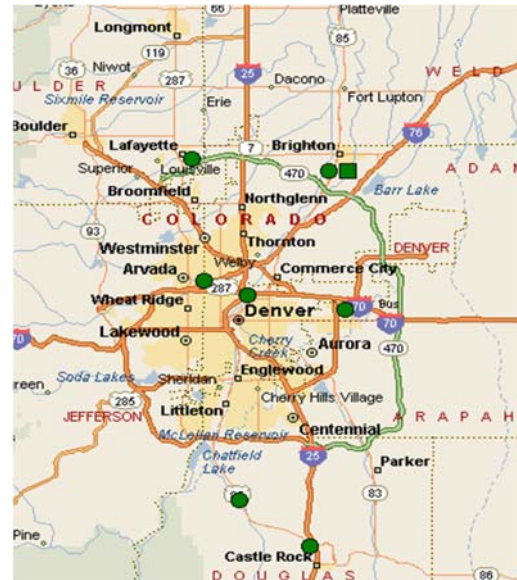
### Ready Mix Price/ Margin Improvement

- ~20% market share in Denver Metro
- Strong backlog in Denver Metro
  - Strong segment diversification, compete in Res, Non-Res, and Non-Building
  - Strong market recovery in FY2013 and expect continued growth in FY2014
  - CRM used to help management with customer relations and opportunities

### Ready Mix Delivery Service

- Route optimization
- Best in class service, product quality, and strong management team

### Ready Mix Plant Network - Denver



87



## Content

- Boral USA Overview
- Economic & Housing Update
- Strategic Priorities
- Commercial Services & Innovation
- Boral Cladding
- Boral Roofing
- Boral Materials
- **Outlook**

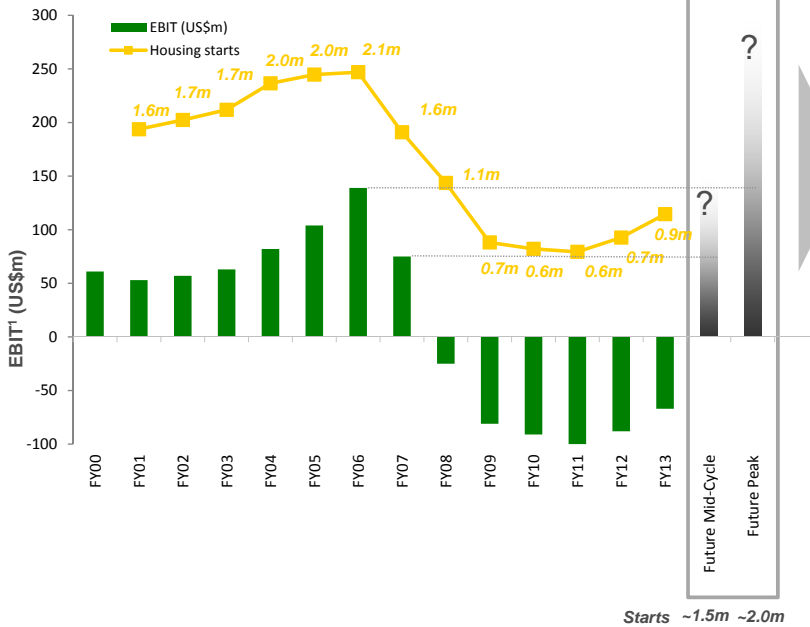
88



# Boral USA's earnings

Expected to benefit from further recovery in the housing market, restructured portfolio, lower cost structure and operational leverage

## Boral USA – US\$ EBIT<sup>1</sup>



## Potential earnings uplift from:

- **Acquisitions**
  - 50% MLT
  - 100% Cultured Stone
- **New products**
  - Trim, Versetta®, Stucco, Commercial Brick, Tile Seal, Class 4 Tile, New Resale
- **SG&A reductions**
  - Restructuring, merger synergies and improved efficiency
- **Operational improvements**
  - LEAN improvements
  - Plant rationalisation
  - Operational leverage to market recovery

1. Excluding significant items



# Boral USA Outlook FY2014

<b>Market Activity</b>	<ul style="list-style-type: none"> <li>▪ Residential segment to continue recovery with Analyst Average<sup>1</sup> forecasting 27% increase in US Starts in FY2014</li> <li>▪ Non-Residential and Repair &amp; Remodel segment to remain flat in 1H FY2014 and increase modestly in 2H FY2014</li> </ul>
<b>Boral Cladding</b>	<ul style="list-style-type: none"> <li>▪ Recent decline in brick intensity expected to improve as custom home builder activity increases</li> <li>▪ Stone, Trim and Stucco will have positive impact in diversifying growth in multi-family residential, non-residential, and repair &amp; remodel segments</li> </ul>
<b>Boral Roofing</b>	<ul style="list-style-type: none"> <li>▪ Expect production builders in Tile States to continue to increase despite residential hurdles (labour, land, rates)</li> <li>▪ Focus on price, margin, costs, and diversification will improve returns and breakeven in late FY2014</li> </ul>
<b>Boral Materials</b>	<ul style="list-style-type: none"> <li>▪ BMT: Maintain sustainable fly ash supply and develop new product applications</li> <li>▪ Construction Materials: Exploit strong quarry positions and leverage ready mix plant network as market activity continues to improve</li> </ul>
<b>Boral USA</b>	<ul style="list-style-type: none"> <li>▪ Expect to break through to profitability in 2H FY2014 as housing recovery continues to benefit volumes</li> </ul>

1. Residential Forecast: Average of NAHB, MBA, Dodge, Wells Fargo, NAR, Fannie Mae, Freddie Mac