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www.boral.com.au

9 September 2015

The Manager, Listings
Australian Securities Exchange
ASX Market Announcements
Exchange Centre
20 Bridge Street
Sydney NSW 2000

#### Dear Sir

We attach copies of slides on Boral's US operations being presented to members of the investment community in Chicago on 9 September 2015.

Yours faithfully

Dominic Millgate
Company Secretary



# **BORAL USA**

Investor Day 2015, Chicago

9 September 2015











Boral's Fix, Execute, Transform program









2 years

4 years

6 years +

Fixing things that are holding us back

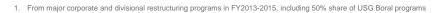
- ✓ Streamlined organisation
- ✓ Portfolio realignment
- √ \$213m cumulative cost reduction benefits<sup>1</sup> in FY2015
- √ \$251m cash from divestments & land sales in first 2 years
- ✓ Net debt of \$817m at historically lower levels
- ✓ Capital expenditure < \$300m

Improving the way we operate to be more efficient, disciplined and profitable

- ✓ People engagement and safety first
- ✓ Levers of change LEAN, Sales & Marketing, Innovation
- ✓ Responding to external challenges
- ✓ Capacity utilisation up

**Transforming Boral for** performance excellence and sustainable growth through innovation

- ✓ Product innovation
- ✓ Gypsum technology roll-out commenced
- ✓ Lowering fixed cost exposures through the cycle



## **Boral USA Schedule**

Wednesday, September 9



Time	Presentation	Speaker
10:30 a.m 11:00 a.m.	Registration	
11:00 a.m 11:15 a.m.	Welcome	Mike Kane, CEO & Managing Director, Boral Limited
11:15 a.m 12:30 p.m.	Presentation	Al Borm, President & CEO, Boral USA US Management Team
12:45 p.m 2:30 p.m.	Lunch	Small group discussions and Q&A
		<ul> <li>Cladding – Keith Depew and Paul Samples</li> <li>Light Building Products – Brian Below</li> <li>Roofing – Chris Fenwick</li> <li>Materials – Terry Peterson</li> </ul>
2:40 p.m 3:05 p.m.	Guest Speaker	Gary Katz, Master Carpenter, Editor of Fine Homebuilding Topic: Composite materials in practice
3:10 p.m 3:45 p.m.	Wrap Up, Q&A	
	10:30 a.m 11:00 a.m. 11:00 a.m 11:15 a.m. 11:15 a.m 12:30 p.m. 12:45 p.m 2:30 p.m.	10:30 a.m 11:00 a.m. Registration  11:00 a.m 11:15 a.m. Welcome  11:15 a.m 12:30 p.m. Presentation  12:45 p.m 2:30 p.m. Lunch  2:40 p.m 3:05 p.m. Guest Speaker

PORALLISA INIVESTOR DAY 2016

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## Boral USA Overview

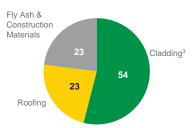
- Economic & Housing Update
- Financial Results
- Strategy
- Business Updates

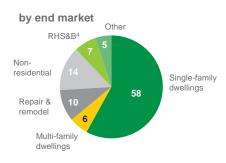
## Boral USA has leading market positions<sup>1</sup> & a national footprint

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



#### SHARE OF REVENUE<sup>2</sup>, % by business





- Based on management estimates Based on split of FY2015 revenue for Boral USA Includes Bricks, Cultured Stone and Trim revenues
- Roads, highways, subdivisions & bridges



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#### **BORAL USA INVESTOR DAY 2015**

## **Boral USA Team**



#### **Boral USA**

Distribution Centres



Al Borm President and CEO



Joel Charlton EGM Innovation

Patrick O'Boyle VP Growth & Performance





**Oren Post** CFO



**Paul Samples** President Sales & Dist, Cladding



Keith Depew President Operations, Cladding



**Chris Fenwick** President Roofing



**Terry Peterson** President Materials



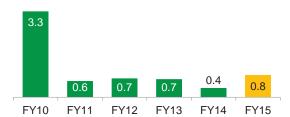
**Brian Below** President Light Building Products

## Zero Harm Safety Culture

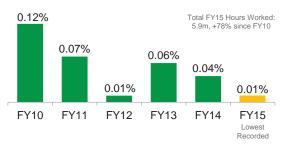
Lost hours down 84% to 372 - all-time low for Boral



## **Employee and Contractor LTIFR**<sup>1</sup>



## % of total Hours Lost to Injury



## **Employee and Contractor RIFR**<sup>2</sup>



- Risk identification and leadership engagement remain key areas of focus
- Boral Bricks Union City plant maintained OSHA VPP3 Star Plant status
- Goal is **ZERO HARM**

Lost Time Injury frequency rates (per million hours worked)

Reportable Injury Frequency Rates (per million hours worked)
Occupational Safety and Health Association Voluntary Protection Program

**BORAL USA INVESTOR DAY 2015** 

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- **Boral USA Overview**
- **Economic & Housing Update**
- **Financial Results**
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## **Economic & Housing Update**



Fundamental economic indicators improving

Q2 CY 2015 GDP Growth

6% 2.2% average quarterly growth since 3Q 20091

July 2015 Unemployment

3% vs. Oct-09 peak of 10.0%²

**Consumer Confidence** 

up from Nov-08 trough of 55.33

Positive Housing fundamentals

New Housing Stock<sup>4</sup>

40% Below long-term average inventory of ~360k homes Below long-term average

Mortgage Rates<sup>5</sup>

45% Below long-term average of 6% to 8%

Home Prices<sup>6</sup>

**5%** Higher year over y May 2015: \$179k<sup>7</sup> Higher year over year in

Construction indicators and risks

New Residential

Big builders continue to lead recovery Single family 64% of total

Non-Residential

Lagging residential by 18 to 24 months

Headwinds

Labor is still tight Credit constrained for first-time buyers

US Bureau of Economic Analysis US Bureau of Labor Statistics University of Michigan Surveys of Consumers, 80+ considered positive US Census Bureau; June 2015: 215k homes

National Association of Realtors Case Shiller Home Price Index May 2015 average home sales price

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**BORAL USA INVESTOR DAY 2015** 

## **US Housing Snapshot**

US Housing starts averaged 1,054k in FY2015, a year on year increase of ~10%



**Total US Housing Starts** Units 000s1 2,500



US Census Bureau: Monthly, seasonally adjusted annualized housing starts. Note that July is a seasonally strong month, and the monthly, seasonally adjusted figures can

## Single Family Recovery



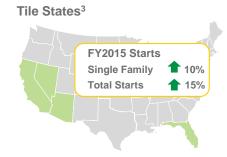


US Single Family Starts<sup>1</sup>



- 1	Brick States <sup>2</sup>
	FY2015 Starts
	Single Family 18%
4	Total Starts
<b>82k</b> 57k	

Single Family (000's units)	Prior Trough	FY14	FY15	Prior Peak	% Below Peak
Brick States <sup>2</sup>	175	255	276	565	-51%
Tile States <sup>3</sup>	63	116	127	447	-72%
US Total <sup>1</sup>	427	622	676	1,681	-60%



- US Starts: Census Seasonally Adjusted, State Level McGraw Hill Dodge, based on latest available revisions in August 2015
  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), based on latest available revisions in August 2015
  Boral Tile States (Dodge): Arizona (AZ), California (CA), Florida (FL), Nevada (NV), based on latest available revisions in August 2015

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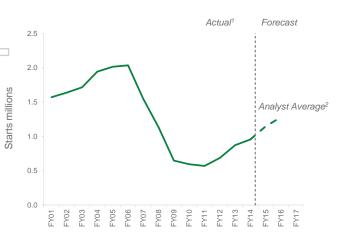
#### **BORAL USA INVESTOR DAY 2015**

## Market Outlook

Residential and non-residential momentum to continue in FY2016; strong growth forecast in both markets through next 3 to 5 years



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



#### Non Residential Activity<sup>3</sup>



Analysts' average forecast of US starts at ~1.2m in FY2016, a ~14% increase from FY2015. Expected growth of ~6% for the Non-Residential segment.

- Historical Residential Starts: Census Bureau
- Residential Forecast: Average of NAHB, MBA, Dodge, Wells Fargo, NAR, Fannie Mae, Freddie Mac Non Residential Activity: McGraw Hill / Dodge 1992 Value

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**BORAL USA INVESTOR DAY 2015** 

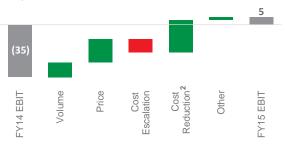
## **Operating Results**

EBIT positive, first time since 2007



US\$m	FY15	FY14	FY13	FY15 vs. FY14
Revenue	695	622	569	12%
EBITDA <sup>1</sup>	42	3	(22)	
EBIT <sup>1</sup>	5	(35)	(66)	114%
EBIT ROS, %	0.7	(5.7)	(11.6)	
Net Assets	634	625	655	
ROFE <sup>1</sup> , %	0.8	(5.7)	(10.0)	

FY15 vs. FY14 EBIT variance<sup>1</sup> US \$m



Revenue		EBIT	
\$695 <sub>m</sub>	<b>1</b> 12%	<b>\$5</b> m	↑ from (US\$35m)

- **Market Improvement** 
  - Total starts up 10%
  - Single family starts up 9%
- EBIT positive, US\$5m
  - Volume gains
  - Price improvement
  - Operating leverage
  - ~\$20m SG&A cost reductions
  - Divestment: Oklahoma limestone quarry
- **EBITDA** positive, US\$42m

Excluding significant items; ROFE in FY15 reported results for Boral USA 0.7% in AUD
 Includes production volume leverage impact

## Journey to Breakeven

Wide range of initiatives needed to return the business to profitability



#### **Top Line and Margin Growth**

#### **Cost and Capital Management**

#### SG&A1

#### **New Products:**

Non Manufactured Products

Roofing components, brick accessories, stucco, tools, liquid weather barrier

#### Manufactured Products

- Bricks: 24 new products
- Roofing: 13 new products Stone: Carolina Collection
- LBP: Siding, 2x trim

#### **New Segments:**

Repair and Remodel

Versetta, hail tile, siding

#### Non Residential

Admix brick, Stucco

#### New / Emerging Geographies:

- Roofing: Colorado, Texas, Canada
- Cladding: Exports

#### Pricing:

- Roofing: Key contracts, components
- Cladding: Regional, customer based
- 1. SG&A: "Selling, general, and administration" costs

#### Bricks:

- Bricks 1.3b capacity, 1.9b at peak
- 24 plants at peak, currently 9 operating, 3 mothballed

#### Stone:

Plant automation

#### Roofing:

- 17 plants at peak, currently 9 operating, 3 mothballed
- Standardize equipment, tooling, machinery

#### FY13 Project Get Fit:

- 115 FTEs impacted
- Outsourced brick transportation

#### FY14, FY15 Reorganization:

- 70 FTEs impacted
- Restructured regional sales and operations
- ~US\$20m cost savings in FY2015

#### Ongoing expense management

Continuous effort to protect and grow margins

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### **BORAL USA INVESTOR DAY 2015**

## **EBIT** and Housing Starts

Positive results at lower level of housing starts



#### **EBIT vs. Housing Starts**



## **FY2015 Performance Drivers**





	Total Starts	Single Family Starts	Volume	Price	Revenue	Utilization
Bricks <sup>1</sup>	Up 4%	Up 8%	<b>1</b> 8%	<b>1</b> %	<b>1</b> 3%	Up to 52%
Stone <sup>2</sup>	Up 10%	Up 9%	<b>1</b> 7%	<b>1</b> %	<b>1</b> 5%	Up to 30%
Roofing <sup>3</sup>	Up 15%	Up 10%	<b>1</b> 0%	<b>1</b> 5%	<b>1</b> 4%	Up to 28%
Composites	-	-	<b>1</b> 58%	<b>1</b> 8%	<b>1</b> 76%	-
Materials	-	-	<b>1</b> 5%	<b>1</b> 9%	<b>1</b> 7%	-
Fly Ash	-	-	<b>↓</b> (6%)	<b>1</b> 5%	<b>4</b> (3%)	-

- Brick States: (Source: Dodge) Texas, Oklahoma, Arkansas, Lousisanna, Kentucky, Tennessee, Mississippi, Alabama, Georgia, South Carolina, North Carolina Stone: Total United States starts (Source: Census)
  Tile States: (Source: Dodge) California, Nevada, Arizona, Florida
  Data as of August 2015

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#### **BORAL USA INVESTOR DAY 2015**

## **Share & Price**

FY15 share gains with price recovery ongoing



## Bricks Market Share<sup>1</sup> and Price

% Share, \$ per MSBE2

**ASP** 

Stone Market Share<sup>1</sup> and Price % Share, \$ per Sq Ft

**ASP** 

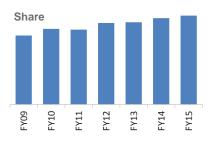


Roofing Market Share<sup>1</sup> and Price % Share, \$ per Square<sup>3</sup>

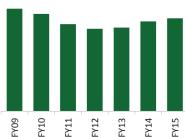
**ASP** 

Share





Share



FY13 FY14 FY11 FY12

Launch of low cost product line

Focus on price to offset cost increases

Share recapture in key markets

Market share based on management estimates Bricks average selling price: Direct distribution average selling price Standard Weight Concrete Tile ASP

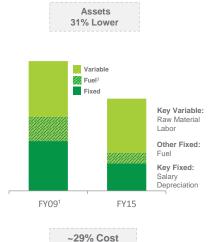
## Cost & Capital Management

Manufacturing costs have improved substantially



#### **Brick Manufacturing Costs** & Assets

(\$ per MSBE)



#### **Stone Manufacturing Costs** & Assets

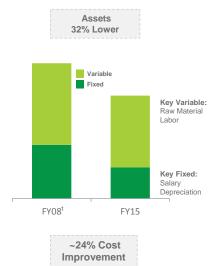
(\$ per Sq. Ft)



Improvement

#### **Roofing Manufacturing Costs** & Assets

(\$ per Square)



Inflation adjusted by 1.5% per annum

Improvement

- Asset change % based on capacity. Excludes Versetta line Fuel and energy < 5% of costs in Roofing and Stone businesses

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Outlook



## FY2016 Outlook for Boral USA:

- Housing starts to continue slow rise: ~1.2m
- EBIT will continue to improve, even without FY2015 one-time restructuring boost
- Businesses will need to increase costs to support market growth
- Impact of Light Building Products to increase

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## BORAL USA INVESTOR DAY 2015

## Strategic Roadmap



- Optimize
  Portfolio to
  Maximize
  Recovery
- Continue focus on margin enhancement, i.e. price improvement, cost down initiatives
- Divest non-core construction materials business in Colorado when appropriate
- Continue to assess options for the US bricks business
- Investment in Innovation
- Grow capabilities of Innovation Factory
- Deliver new products to market
- Develop new platforms
- Invest in prototype composite sheet line
- Acquisition Strategy
- Focus on sectors with low asset, variable cost based manufacturing
- Leverage emerging market trends, targeting products early in life cycle
- Identify companies that fit Boral's strategic objectives

## Priority 1. Optimize portfolio to maximize recovery

Growing the top line while driving efficiencies through the business













#### Non-Residential

- National restaurants
- Commercial brick
- Stucco
- Liquid barriers
- Fly Ash and Materials Growth

#### New Residential

- Brick
- Stone
- National and local customers
- Siding
- Installation accessories
- Concrete and clay roof tile

#### Repair and Remodel

- Trim, bead board
- Versetta stone panels
- Siding
- Hail Tile Reroof

control and thay room into

**BORAL USA INVESTOR DAY 2015** 

## Priority 2. Innovation

Continuous development of new products and platforms



#### **Sustainable Development**

Improving and growing current platforms



#### Support

- Marketing efforts/claims
- Technology evaluations



## SupportNew R&D centre

**Transformational** 

Creating new platforms and technologies

- Pilot plant infrastructure
- Open innovation



#### **Performance**

- Cost optimization
- Process improvements



#### **Market Diversification**

- Repair and Remodel
- Interior
- Commercial



#### **Product Extensions**

- Craftsman Collection<sup>™</sup>
- Bevel siding profile
- New trim profiles/sizes



#### **New Product Categories**

- Sheet development
- New formulations
- New processes

## Priority 3. Acquisition Strategy

Positioning businesses to transform the portfolio and achieve ROFE targets



## **Current Portfolio**

- High cost assets, high energy
- High fixed cost platform
- Residential focus
- Mature markets
- High skilled labor

## **Aspiration**

- Low asset base, low energy, sustainable
- Variable cost based manufacturing
- Balanced market segments<sup>1</sup>
- Innovative technology platform
- Low skilled labor

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#### **BORAL USA INVESTOR DAY 2015**

## Transforming the Portfolio

Changing the composition and scale of our assets



## Snapshot of business over time

	FY2005	FY2009	FY2015
Revenue	\$611mm	\$406mm	\$695mm
Product portfolio	<ul> <li>Brick</li> <li>Brick accessories</li> <li>Pavers</li> <li>Roof tile</li> <li>Fly Ash</li> </ul>	Added since FY05 ■ Construction materials	Added since FY09  50% MonierLifetile  100% cultured stone  Trim, siding  Roof components  Stucco  Divested in FY13  Oklahoma materials  Launched in FY14  Light building product
Revenues by busines  Boral Cladding  Boral Roofing  Boral Materials	20%	42% 45%	23%



<sup>1. 50%</sup> residential, 25% non-residential, 25% repair and remodel

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**BORAL USA INVESTOR DAY 2015** 

## **Boral Cladding: Strategy**

Deliver high quality masonry and construction cladding solutions with increasing emphasis on commercial market through stone, stucco, and commercial brick offerings



#### Sales and Marketing

- Maintain and grow share
- Convert direct stone sales to Boral Stone
- Compete in lower tier stone market
- Increase commercial share
- Expand brick and stone product lines
- Expand high-margin resale portfolio





## **Operations and SG&A**

- Rationalize direct network
- Optimize production network
- Restructure to lean cladding organization
- Improve Chester plant utilization
- Optimize/Outsource logistics



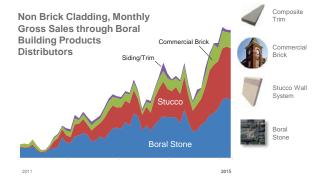
## Boral Cladding: Challenges and Actions

Delivering on priorities to protect and grow market share and maximize profitability



## Challenges

- Brick share of wall (brick intensity)
- Increased share of volume builders
- Reliance on new single-family
- Excess supply and capacity
- Return to profitability



#### **Actions**

- ✓ Expanded product offerings
- Established strategy to win volume builders
- Invested in commercial capacity
- Shed excess capacity, remastered key items
- Rationalized direct distribution
- Working to eliminate losses in FY20161





2015 Designer Cultured Stone Collection

Dependent on housing starts, intensity, and builder mix

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#### **BORAL USA INVESTOR DAY 2015**

## Boral Cladding: Strategic Product Highlights

Continued share gains, new product offerings, price increases, and commercial sales growth



#### **Product Highlights**

Prostone (lower tier)









Echo Ridge stone (Interior)

#### **New Collections**

New Historic District Brick Collection







Ancient Villa Ledgestone is one of several new

## **Boral Light Building Products: Strategy**

Market leader for high performance, innovative, "green" product solutions across the residential new construction, light commercial, and repair & remodel segments



## **Strategic Priorities**

- Low asset base, low energy
- Variable cost based manufacturing
- Balanced market segments<sup>1</sup>
- Innovative technology platform
- Platform for growth
  - Organic: Boral Innovation Factory
  - Future M&A

#### Markets and Channels









New Construction

Repair & Remode

Light Commercial

**Light Building Products Manufacturing** and Distribution Network



New residential, repair and remodel, light commercial, and retail

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#### **BORAL USA INVESTOR DAY 2015**

## Boral Light Building Products: Challenges and Actions

Executing on key initiatives to aggressively grow scale



## Challenges

- Market adoption to continue rapid growth
- Price pressures from competitive products
- Manufacturing efficiency and cost improvements
- Timing of new manufacturing capacity

## LBP Revenue Growth (\$M) ~\$1.8b market1 80° OAGR FY12 FY13 FY15 FY16 Target

## **Actions**

- Continued expansion into new geographies, channels, segments
- Multi-pronged marketing strategy to drive awareness and trial
- Expanding product portfolio to full offering
- Price discipline and margin management

Napa Versetta Line



## Boral Light Building Products: FY2016 Commercial Developments





#### **Market Awareness**

Mobile Training Units



Katz Roadshow Sponsorship



Finish Carpentry Clinics with Gary Katz

#### Content Marketing Initiative





#### **Product Development**























Graphite - 2015

Mission Point - 20

Versetta - 2010

BORAL USA INVESTOR DAY 2015

## **Boral Roofing: Strategy**

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



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#### Sales and Marketing

- Maximize price and margin
- Maintain and grow share of tile vs asphalt
- Launch new, high margin products
- Diversify business across market segments
- Optimize product offering across assets

## Operations and SG&A

- Optimize manufacturing network
- Invest in assets to improve efficiency
- Deliver higher asset utilization at lower cost
- Add talent to support growing market
- Manage SG&A as % of sales



## **Boral Roofing: Challenges and Actions**

Executing on key initiatives to increase profit margin and share of roof



## Challenges

- Heavily tied to new homes in sand states
- High installed cost
- Low utilization and price challenges
- Manufacturing optimization

#### **Actions**

- ✓ Fewer hours lost to injury
- ✓ Market expansion
- ✓ Price and margin improvements
- ✓ Increased roof component sales
- ✓ Manufacturing network consolidation
- ✓ Overhead cost improvements

Pitched Roof Solutions



Gilroy to Stockton Conversion



Hand Stacking Tile



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#### **BORAL USA INVESTOR DAY 2015**

## Boral Roofing: FY2016 Commercial Developments

Price increase, margin improvement, new product introductions, and design centers are planned to deliver profitable growth in FY2016



## **Product Launches**

Gemstone Collection



Earth Tone Collection



Villa 800



## **Customer Experience**

New Tile and Stone Design Center in Phoenix, Arizona





## **Boral Materials: Strategy**

Fly Ash: Bolster fly ash supply and uncover new applications; increase pricing with recovery Materials: Exploit quarry position and leverage ready mix plant network



## Sales and Marketing

- Maximize price and margin
- Maintain and grow share through new contracts
- Launch new, high margin fly ash fillers
- Find new applications of fly ash as filler
- Optimize product offering across assets<sup>1</sup>



Fly Ash is required in Federal Transportation Projects

1. Materials operations only

## **Operations and SG&A**

- Optimize fly ash supply network
- Upgrade equipment to improve efficiency<sup>1</sup>
- Deliver higher asset utilization at lower cost<sup>1</sup>
- Add talent to support growing market
- Maintain low SG&A as % of sales



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#### **BORAL USA INVESTOR DAY 2015**

## Boral Materials: Challenges and Actions

Executing on key initiatives to grow supply and improve margins



#### Challenges

#### Fly Ash:

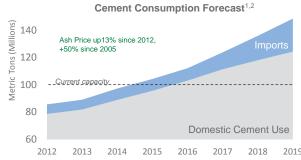
- Supply during construction upturn
- Storage capacity
- Source material price increases

#### Materials:

Driver/Delivery shortages

## Actions

- ✓ New supply contracts
- ✓ New storage facilities
- ✓ Increase sales of high margin fillers
- ✓ Increase price with demand
- ✓ New Colorado quarry and ready mix



- Portland Coment Association Market Intelligence Penart 2015
- Portland Cement Association Market Intelligence Report 2015
   Future domestic cement shortages drive fly ash and cement import demand



Bottom ash stockpile - San Antonio



Fly ash terminal - Denver

## Back-up slides



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**BORAL USA INVESTOR DAY 2015** 

Boral Cladding, market leader in clay brick and stone veneer 12 brick manufacturing plants, 2 stone manufacturing plants, and 42 distribution centers



Stone **Bricks**  Boral Brick Plant Canada Kentucky / Tennessee / Virginia Key Competitor: ELDORADO STONE Competitive Landscape Northeast Arkansas / Louisiana West Coast Key Competitor: Hanson Key Competitor: TLDOR Key Competitors: ELDORADO STONE &COLOWIDO. SC Central MS Georgia / Carolina's & COLONY TO Southeast Key Competitor: TEDOR Texas / Oklahoma Mississippi / Alabama Key Competitors: Key Competitor: ACME Boral Stone Plant Market Share1 Boral Other Boral Other Acme Environmental StoneWorks Eldorado **General Shale** Coronado Glen-Gery<sup>3</sup>

Hanson<sup>2</sup>

Total = ~3.8bn SBE

Management Estimates Purchased by Lone Star from Heidelberg in 2015 Purchased by Bain Capital from CRH in 2015

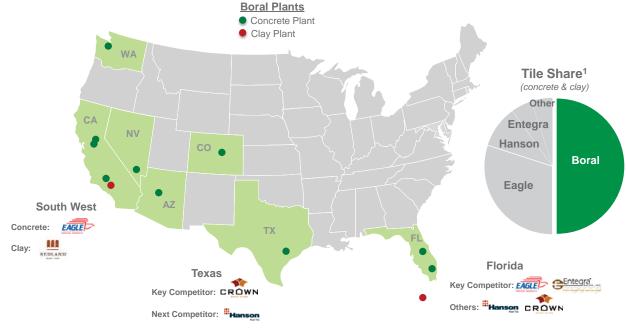
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Total =  $\sim$ 86m Sq. Ft.

# Boral Roofing is the USA market leader in Concrete & Clay Tile 10 concrete roof tile plants and 2 clay roof tile plants

BORAL

NA MA



1. Management Estimates 41