

MILESTONE FOR BORAL CULTURED STONE® IN WESTERN AUSTRALIA P2



MAJOR PHASE FOR AGGREGATES

Peppertree to ensure
Boral's position in
quarry reserves.

P3



EMERGING LEADER PROGRAM

Boral's Leadership
Pathway program.

P11

CONTENTS

A Message from Boral's CEO Mike Kane	1	Boral's Leadership Development program	11
Bricks West wins large Cultured Stone® project	2	Innovative recycled water treatment	12
Improved rail services for Boral	2	Standard batching the key at Thomastown bricks	13
Sydney aggregates project	3	JDRF Ride to Cure Diabetes 10th anniversary	13
Boral secures Queensland country resource position	4	Safety focused seminars in Indonesia	14
Quarrying awards for Boral Production System	5	Boral exhibits at Malaysian fire conference	15
Boral renews its registered training organisation status	6	WeatherBloc Gen II Board exceeding early sales targets	16
National heavy vehicle driver training program	6	Jointing competition wins over Indonesian installers	17
Boral employees blitz Corporate Challenge	7	Boral sales representative has a major win	18
Poster competition a safety first	7	US Lean journey update	19
Taking the Kokoda challenge	8	One Boral display in Queensland	20
Boral Sampler launched	9	Boral North America at International builders show	21
Biodiversity in Boral's Quarries	10	Celebrating the opening of Livvi's place - a playground for everybody	22
Another successful Emerging Leader program	11		

Front Cover: Hammond Park Catholic Primary School's hallmark entry featuring Boral's Cultured Stone®.

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A MESSAGE FROM BORAL'S CEO

MIKE KANE

FIXING BORAL.

It has been a busy start to 2013 for Boral. I know the recent activity has been tough and I appreciate the efforts of all of our employees through the difficult times we faced together in the overhead cost reduction project. Recently I have been travelling around Australia presenting Boral's half year results and discussing strategic priorities with investors, analysts, journalists and employees. During the recent meetings I stated the need to Fix, Execute and Transform Boral.

First and foremost, we must FIX Boral's safety performance. Less than one lost time injury per million hours worked is best practice and we are not there yet.

Everyone in Boral needs to behave differently. It's not enough to say that safety comes first – we need to demonstrate that safety takes priority over production at all times.

I ask every employee to adhere to safe work practices, stop work if you feel the activity is unsafe, and talk to your co-workers if you observe them acting unsafely. Together we must make sure every action is safe and we are not putting ourselves and each other at risk of injury.

At the half year, Boral announced a \$52 million profit after tax (before significant items), which was 25% below last year, on a \$2.8 billion half year revenue base. This is unacceptably low and it must improve.

The immediate business priorities are to address cost, cash and capital.

We have taken actions to deliver \$105 million of annualised cost savings through overhead reductions and restructuring; we generated \$98 million of cash in the first half of the year helping to reduce Boral's debt of \$1.46 billion; and we cut the capital expenditure budget for this year by a further \$50 million to around \$300 million.

We need to spend capital funds efficiently and restrict stay-in-business (SIB) maintenance capital expenditure. Investors judge our business by the monetary return on investor capital but our recent performance is poor. Next year we will ease the brake on SIB capital and slow down on our growth capital expenditure. We need to earn the right to start spending more capital by getting better returns from the capital we spend. FIXING the business also includes simplifying our portfolio, which will help to focus our capital investments on core business activity.



Mike Kane,
Chief Executive Officer
and Managing Director.

It may take us 12 months to FIX Boral but I am confident that we are on track to achieve this goal.

As we make further progress, I look forward to sharing more about how we will EXECUTE excellence in Safety, BPS (LEAN) and Sales & Marketing, and how we will deliver an exceptional return on funds employed for our shareholders. The full transformation of Boral will then follow. It won't happen overnight and may take several years for us to achieve a high performing company with a truly participative culture using innovation and technology to drive our success.

I am looking forward to sharing this journey with you.

Mike Kane
Chief Executive Officer
& Managing Director
Boral Limited

BRICKS WEST WINS ITS LARGEST CULTURED STONE® PROJECT TO DATE

Cultured Stone® is standing out amongst strong competition from alternative products.

By Sean Adomeit, Marketing Manager, Bricks West and Steve Sutton, Trade Sales Manager, Bricks West.

Boral's Cultured Stone product has reached a new milestone since it was launched in Australia 12 months ago.

In the largest sale of Cultured Stone to one project in Australia, 880m² of tight fit Country Ledge Stone Chardonnay Cultured Stone has been specified to feature on buildings at the Hammond Park Primary School in Western Australia.

The product was specified by EIW architects with the construction contract awarded to Absecon Pty Ltd.

Despite strong competition from alternative products, Cultured Stone stood out due to the availability of corner stones, the realistic appearance of the product, the availability of technical literature.



IMPROVED RAIL SERVICES FOR BORAL PRODUCTS IN SYDNEY

Boral has extended its partnership with Pacific National to provide rail services from Boral quarries into the Sydney area.

By Dave Bolton, Manager, Sydney Aggregates Project.

Under a new agreement, Pacific National will build three new 34 wagon trains to deliver aggregates from Dunmore Quarry and the new Peppertree Quarry into existing Boral rail terminals at St Peters and Enfield, as well as the new rail terminal under construction at Maldon.

As the current supplier of aggregate and limestone haulage for Boral's Quarries and Cement divisions in NSW, Pacific National are very familiar with our operations and customer requirements.

The wagons will be custom built and designed:

- To ensure product hang-up and contamination are minimised

- For automated discharge, to decrease discharge time and to minimise the potential for injuries from manual handling
- To accommodate a loading rate of over 4,000 tonnes per hour at Peppertree and a discharge rate of over 2,000 tonnes per hour at Maldon terminal.

The wagons will eliminate up to 100,000 truck movements from public roads each year, an obvious safety and environmental benefit to the communities in which we operate.

Construction is already underway in China with the first new wagon due to be commissioned on site in late 2013.



The first train to travel across the new section of rail.

SYDNEY AGGREGATES PROJECT ENTERS MAJOR CONSTRUCTION PHASE

The Sydney Aggregates Project will ensure Boral can maintain its competitive position in quarry reserves for years to come.

By Dave Bolton, Manager, Sydney Aggregates Project.



Boral's Construction Materials business has a project underway to ensure it can remain competitive despite the anticipated depletion of quarry reserves at the Penrith Lakes Scheme.

The Sydney Aggregates Project includes:

- Construction of the new 3.5 million tonne per annum Peppertree Quarry.
- Construction of a train loading facility at Peppertree Quarry.
- Construction of new Rail Infrastructure in and around Peppertree Quarry.
- Construction of a new manufactured sand plant at Boral Cement (South Marulan).
- Construction of a new quarry rail terminal at our existing cement facility at Maldon.
- Commissioning of new rail services from Peppertree Quarry into the Sydney market.

The new facilities have been designed to incorporate world's best standards in safety, sustainability and efficiency.

Project Update

Since site works commenced in August 2011, a significant amount of progress has been made, including:

- Over 1.65 million m³ of earth excavated to uncover the resource and to construct a number of structures, including large noise barriers, a 27m high embankment for rail infrastructure, process plant area pads, roads and water storage dams.
- Over 6,000 m³ of concrete has been poured for building and equipment foundations.
- Erection of the Peppertree Quarry Primary Screening Station and electrical installation.
- Arrival of the Metso LT 160 Mobile Jaw Crusher from Finland and on site assembly which is nearing completion.
- Commissioning of the first section of new rail line at Peppertree with the remaining rail works on track for completion in mid 2013.
- Progress on earthworks for new rail construction at Maldon.

- Foundations for the train unloading station at Maldon nearing completion.
- Construction of the major intersection and road alignment works at Maldon which are on track to start in mid 2013.
- Completion of service relocation and earthworks at the manufactured sand plant, ready for plant foundation construction to start in mid 2013.
- The establishment of an agreement for new rail services with Pacific National.

Over 250,000 employee and contractor hours have been invested to date with zero lost time injury frequency rates (LTIFR). Safety was a primary focus throughout the design phase and continues to be the priority throughout the construction phase.

Finally, it has been important to keep our neighbours informed and engaged with this major development. To ensure we are effective in doing this, a Stakeholder Engagement Plan has been developed and implemented.

The Sydney Aggregates Project will play a critical role in the future of Boral's Construction Material's business in Sydney. Regular project updates will be provided in BITN.

BORAL SECURES QUEENSLAND COUNTRY RESOURCE POSITION

By Tim Slack, Project Manager, Boral Property Group QLD/NT.



Over the last two years, the Boral Property Group in Queensland, along with the quarry business, has embarked on a process to secure Boral's resource position in country Queensland. Key markets and quarries have been identified and Development Applications (DA's) prepared and lodged where required. Securing approved access to resources, along with appropriate tenure will give Boral a key advantage over our competitors.

Boral's recent country approvals include:

- Tichum Creek Quarry, Atherton Tablelands (additional 9 million tonnes to increase life by 30 years);
- Tannum Sands Quarry, Gladstone (additional 2 million tonnes to allow uninterrupted sand supply to the LNG projects on Curtis Island);
- Cedars Quarry, Mackay (additional 14 million tonnes to increase life by 30 years); and

- Roseneath Quarry, Townsville (additional 50 million tonnes to increase life by up to 50 years).

The comprehensive approach taken in preparing the DA's and briefing the local community and elected representatives has led to these projects being approved in under 12 months. In the case of Tannum Sands, approval was received in under five months – surely a record for an extractive industry approval! Cedars Quarry in Mackay received its approval in ten months, despite the community opposition group.

Speedy approvals mean an uninterrupted supply of products to the market in these regions, keeping Boral ahead of its competitors.

The Boral Property Group in Queensland is constantly reviewing additional sites in regional Queensland that will further enhance Boral's resource position.



Top: Cedars Quarry processing plant in Mackay
Above: Tannum Sands Quarry in Gladstone.

QUARRYING AWARDS PROVE THE POWER OF THE BORAL PRODUCTION SYSTEM

Boral's NSW Dunmore Quarry - Winner of the 2012 Caterpillar Award for Continuous Improvement.

By Bev Bracken, Lean Implementation Manager, NSW Quarries.



Left to Right: Brad Subotic, Kylie Pluta, Tammy Lee Zarebski, Sue Timbs, Michael Jennings, Richard Keeling, Anthony Kokoch, Matt Banks, Mick Formosa, Trent Puckeridge, Craig Potts, John Downes, Linken Hutcheson, Scott Lean, Todd Kalajzich, Glenn Sherwin, Shane Turton, Dave Malanga, Bill McPiarland, Adam Rodda, Henry Zurek, Tom Holz, Brett Ford, Andrew Langston, Darrell Brisbane, Bob Pfeiffer, John Cook, Marty Maloney, Daniel Emerton, Jason Douglas, and up on top are Stuart Mclean and Grant Bachelor. Insert: Todd Kalajzich, Quarry Manager, Dunmore is presented with the award by Bill Robert, Asia Pacific Manager for Caterpillar.

Each year the Institute of Quarrying Australia (IQA) recognises an individual's contribution in improving and evolving their quarry business through structured and measured continuous improvements in a work related activity.

The fact that two of the three finalists were from Boral NSW Quarries this year is proof of the power of the Boral Production System (BPS) as a driver of continuous improvement.

Focusing on simple, sustained improvements has made a significant difference in NSW Quarries where the BPS has helped identify waste that can be eliminated throughout the businesses.

Brad Doyle was short-listed for his work re-designing the machinery and its application at the Grafton Quarry to make it more effective and safer to operate. However, it was the Dunmore Quarry transformation led by Quarry Manager, Todd Kalajzich which took out this year's award.

Todd was recognised for a program of work completed over the past three years. He has delivered improvements in safety standards, plant performance, cost of production and inventory management. This has all been underpinned by a culture of inclusion and the participation of key stakeholders.

A continuing series of modest but important improvement projects demonstrated Todd's and Boral's concern for safety, efficiency, cost, performance, appearance and especially people.

TPM initiatives led to dramatic reductions in conveyor belt material spillage by improving the skirting systems, adding vibrators, improving access, resolving tracking issues, the use of self-cleaning return rollers and new guarding.

The site-wide focus on housekeeping and visual management not only made the site neater, easier to maintain and safer to work in, it also boosted team morale.

- Conveyor structural supports which were buried and eroded had spillage removed, inspected, sand blasted and painted, tyre walls constructed with battered banks and the access road graded.
- The workshop yard oil storage area was cleaned and re-organised for improved access to equipment, better storage of key equipment such as rollers, improving manual handling and monitoring visual stock levels. Simple tool labelling and shadow boards were also implemented.
- Inventory management was improved with visual tools to manage key stocks and targets for critical stocks.

The site also focused on other issues such as;

- Improved dust control on site with strategically placed mist sprays in the primary and secondary crushing areas; decommissioning two dust collectors

and reinstating the final screen house dust collector; additional water mist sprays creating a mist curtain at the final product bays in the tertiary screen house.

- Eliminated the potential for flooding of the Switch Room and Lubrication Shed with new roofing, retaining walls and raised flooring.
- Improved haul road drainage and driver visibility by road widening, vegetation clearing and new bunding.

As well as improving employee engagement, other measures are also looking healthier:

- Hazard reporting has increased by 75%
- Overall equipment effectiveness (OEE) has increased from 52% in 2010 to 73.5% (YTD)
- Plant availability has increased to a stable 84%.

The changes have led to less downtime events, an increase in mean time between failures and an overall reduction in cost of production.

Todd and the team have not stopped there. They have shared their experience with other quarries and have already met and planned key projects and events over the next year to improve the site even further. Importantly the team has made sure each initiative is linked to targets to support the overall NSW Quarries business.

BORAL RENEWS ITS REGISTERED TRAINING ORGANISATION STATUS

Did you know Boral is an Enterprise Registered Training Organisation (RTO)?

By Ceridwen Jones, RTO Manager, Boral Construction Materials.



The 14 NSW Quarry employees who recently received their qualifications (Certificate IV and Diploma) at the Institute of Quarrying Australia (IQA) Graduation dinner in Sydney.

Did you know Boral has an Enterprise Registered Training Organisation (RTO)?

Our Enterprise RTO was established in 1999 and as an RTO we hold the equivalent status to that of TAFE and can offer a cost effective solution to deliver nationally recognised competency based and technical training internally to our employees.

Our RTO can assist Boral businesses to plan, co-ordinate and assist in delivering technical training, including accessing government funding, developing and maintaining training and assessment intellectual property, management of all participant records and complying with legislative requirements.

Last July, Boral's RTO was granted re-registration from the Federal Government until 29 September 2017. Boral sought re-registration to ensure the continual delivery of technical training to our workforce and ensure the ongoing management of Plasterboard's apprenticeship program.

This successful re-registration enables Boral to assess future skills training opportunities that best leverage being an enterprise RTO. Through consultation with our businesses, product councils and the industry we have added new qualifications to our scope. In addition, new learning and assessment materials have been developed.

Our RTO is able to offer participants the choice of completing a full qualification or unit/s of competency towards a qualification. Qualifications our RTO is approved to deliver are listed on our scope of registration which is maintained on the www.training.gov.au site and include qualifications ranging from Certificate II to Diploma.

The success of our RTO's involvement with the Quarry business was demonstrated last year when Boral received the SkillsDMC Chairman's Award in recognition of our commitment to workforce planning and development and leadership in skilling new entrants and existing workers in the Extractive Quarrying Sector.

When deciding whether to use the Boral RTO or an external RTO, you should contact the RTO Manager to discuss your technical training requirements. The Boral RTO can assist you in negotiating with prospective RTOs to ensure that consistency and standards are met, or will investigate the opportunity to apply for the qualification to be added to the Boral RTO scope of registration.

The question of which RTO to use should be based on an analysis of what training needs are required and whether internal trainers are qualified to provide the training.

NATIONAL HEAVY VEHICLE DRIVER TRAINING PROGRAM

The Boral RTO is also involved in management of the National Heavy Vehicle Driver Training Program.

By Ceridwen Jones, RTO Manager, Boral Construction Materials.

In November 2011 the Boral Board, Logistics Council and the OHS Committee endorsed a compulsory National Driver Training Program for all Boral drivers of heavy vehicles across Australia. INTO Training Australia (ITA) were identified as the preferred training organisation to partner with Boral for this training program.

All Boral heavy vehicle drivers are required to undertake the Certificate III qualification in Driving Operations by November 2013. Heavy vehicles include Agitators, Tippers,

Tankers, Pressure Vessels, Truck and Dogs, Prime Movers and Flat Top Trailers. We are now over 12 months into this program and of the 1,182 identified drivers, 30% now hold the Certificate III qualification.

A skill set (abbreviated) training program has been developed for employees who only drive a heavy vehicle to move equipment to or from site (their primary role is not as a driver). This is applicable to a number of Asphalt employees.

For further information regarding the Boral RTO, visit the Boral RTO Onsite, or contact Ceridwen Jones at rto@boral.com.au or on 02 9033 5020.

For further information regarding the Heavy Vehicle Driver Program, please speak to your logistics supervisor/manager or contact:

Ceridwen Jones – Boral RTO Manager
rto@boral.com.au or 02 9033 5020

Tom March – ITA Program Co-ordinator
tom@intotraining.com.au or 1300 739 881

BORAL EMPLOYEES BLITZ JP MORGAN CORPORATE CHALLENGE RACE

Over 30 NSW based Boral employees took part in the JP Morgan Corporate Challenge in Sydney recently.

By Jonathan Fenton, Internal Audit Manager, Boral Ltd.

Over 30 Boral employees from NSW participated in the JP Morgan Corporate Challenge event in Sydney in November. The event, which is open to all corporate employees, is a 5.6 kilometre race through Sydney's Centennial Park and is an international event in its 36th year.

It's now held in 13 cities from seven countries around the world. Over 8,000 runners, joggers and walkers from 356 companies across Australia participate in one of Sydney's biggest corporate fitness events of the year.

This year the event had two Olympians leading the field, Martin Dent, who represented Australia in the marathon at the London Olympics and Kurt Fearnley, the three-time Paralympic gold medalist.

Boral's team doubled its size from 2011 and included a wide mix of people from corporate and business roles across the company. Boral was successful at the event with a number of individuals running new personal bests and placing high in the field. In the male team division, Boral had an outstanding result by placing a team into the Top 10 companies overall. This team consisted of Damien Sullivan, Jonathan Fenton, Gary Nisbet and Rob Lutz. Boral's Chief Financial Officer,

Andrew Poulter showed off his running talent by finishing in a fantastic time of 22:17, one of the fastest times for a company executive in the whole field.

We're looking forward to even greater successes in next year's event. If you are an avid runner at Boral and would be interested in participating, please contact jonathan.fenton@boral.com.au

POSTER COMPETITION A SAFETY FIRST

An employee competition to design a safety poster has had a great response at Boral's Greystanes House offices in NSW.

By Giovanna Romeo, Human Resources Manager, Boral Shared Business Services.

An important part of promoting a safety culture in Boral is to ensure the subject is top of mind and to keep people talking about safety issues.

When a "3 points of contact" poster was needed at Greystanes House the OH&S team decided to hold an employee competition. There was a very pleasing response from employees both in the number of entries received and the participation in voting for their favourite poster.

Having the posters on display in the offices created a lot of interest in the subject and a lot of creative thought and energy went into the final entries.

The lucky winner was Priscila Manio from Boral Building Products who is now the proud owner of a 16GB Apple iPod Touch. Priscila's entry was chosen overwhelmingly by employee votes and the OH&S judging committee.



The winning poster design.

TAKING THE KOKODA CHALLENGE

A casual midday conversation about a new book on Kokoda soon turned into a commitment to walk the Papua New Guinea Kokoda Trail.

By Brian Jefferys and Matthias Fuchs, Boral Procurement.



Matthias Fuchs and Brian Jefferys in full flight on the Kokoda Trail" and the children from Menari school were fascinated to see photos of Matthias' family.

There's something about choosing your lunchtime topics carefully; a casual midday conversation on Peter Fitzsimon's latest book: 'Kokoda', turned into a commitment to walk Papua New Guinea's Kokoda Trail. It started sounding like a bad idea when Matthias was told by a slightly crazy extreme runner that his Kokoda experience was worse than doing seven marathons in a week through Chile's Atacama desert!

Training for our November 2012, 100 kilometre walk in Papua New Guinea's tropical heat took serious commitment from July onwards. Matthias spent his weekends climbing the mountain tracks of the Great North Walk and the Blue Mountains while Brian suffered a lot of soft sand running with a 20kg pack. Our final hit-out was a 30 kilometre steep track over Mt Solitary in the Blue Mountains in just over 8 hours. However as we both discovered, there's nothing in Sydney to compare with the stifling heat, torrential rain and humidity of the PNG jungle. The first day of trekking was very tough; Brian explains:

"On November 3rd our group of over 30 trekkers commemorated the moment exactly 70 years before the Australian forces returned to Kokoda to raise the Australian flag. It was a moving ceremony to start the day's 25 kilometre walk, climbing almost a vertical kilometre in 35 degree heat and 100% humidity. I was sweating at a rate I'd never experienced before with dehydration a serious threat, but amazingly only one person collapsed that day"

The Kokoda Trail is a narrow, single-file, muddy path, which still follows almost exactly the same route as the 1942 wartime

defence that prevented the unexpected Japanese overland advance on Port Moresby. The most significant battle at Isurava saw the first Victoria Cross posthumously awarded on (then) Australian soil, when Private Bruce Kingsbury's machine gun attack forced the enemy's withdrawal from the Australian's defensive position. The Australian government has erected a commemorative plaque at the exact position of Kingsbury's heroic action. Sadly, he was killed instantly by a sniper only moments afterward. Brian recalled the dawn service their group held at the Isurava battleground memorial;

"It was a very special sunrise with clouds covering Kokoda over 1,000 metres below, with our PNG guides singing their traditional songs. What an unforgettable moment listening to their extraordinary voices float across the enormous jungle valley as we stood on the very soil where so many brave soldiers had tragically died."

Over the next seven days we experienced just a little of the months of mud and rain the young Australian infantry volunteers fought through in 1942. Their enduring memory of the Kokoda Trail was staying wet from sweat and rain with nothing ever drying out. The local porters in bare feet walking down treacherously steep mountain sides in the pouring rain with 20kg packs gave the Australian trekkers a new respect for the heroic wartime efforts of the 'Fuzzy Wuzzy Angels', the PNG stretcher-bearers who rescued the severely wounded Australian diggers.

The group was led by Charlie Lynn, a veteran of 65 trips over Kokoda and an

advocate for the Kokoda experience to take its rightful place in the Australian psyche. It's often said by war historians; 'Gallipoli made Australia, but Kokoda saved Australia'.

All 35 trekkers completed the 96 kilometre trail south from Kokoda (including 5.5 vertical kilometres) after seven days with quite a few suffering severe blisters and sprains. For Matthias it was a great relief to get to the end of the trail at Owens Corner, particularly since almost no-one had any dry clothes left.

"Getting back to Port Moresby for my first sit down meal, shower without leaches and cold beer in almost 10 days was fabulous. It really makes you appreciate the everyday comforts we take for granted and no one was shooting at us, so it is hard to imagine what the soldiers went through."

A moving experience for every trekker is a visit to the Bomana War Cemetery in Port Moresby, a solemn reminder of the 3,123 Allied soldiers who died in the campaign. Brian visited the gravesite of Private Roy Jones, 3rd Battalion 2nd AIF, at the request of Roy's family and was able to give them photos of the headstone marking his grave that they had never seen. Roy was just 22 years old in 1942 and was killed in action only months after enlisting. His only surviving sister told Brian her last memory of Roy when she was only nine years old, was of him handing her a lolly bag of her favourite sweets moments before he caught the train to depart for Papua New Guinea. It was a story that makes "lest we forget" a very real experience on the Kokoda Trail, certainly a challenge Matthias and Brian will always remember.



BORAL SAMPLER LAUNCHED

In November last year, Boral Sampler was launched to the business internally - capitalising on the power of social networking and 'tell your friends' promotion.

By Anastasia Narkiewicz, Communications Manager, Boral Communications Centre.



Tony Coffey BCC, launching the Boral Sampler.

Almost 100 employees at Boral's Port Melbourne office were treated to morning tea, an information session on the app supported with Boral Sampler business cards and a 'sampler' of iPad cake. Proceeds from gold coin donations went to Boral's charity partner, Juvenile Diabetes Research Foundation (JDRF).

Boral timed Sampler's launch to capitalise on summer housing renovations and building activity and the increase in online search for building products and related websites.

Promoting Sampler within Boral was a great opportunity to introduce employees, their family and friends to the free, easy to use app. Sampler enables users to see, compare and choose from over 600 Boral building products on their smart phone, tablet or PC.

In the three months since the mid-September launch, Boral Sampler has recorded over 9,100 active sessions in which users have created a Sampler scheme. This is an average of 105 users per day and an estimated 12,500 users Australia wide.

The Sampler app displays brick colours, roof tiles, gutters, windows, concrete and decking and will soon include interior products such as plasterboard, timber, cornice and more. Users can scroll through dozens of product colours and styles, follow Boral suggestions or create their



TRY IT NOW



Boral Sampler Kiosk in action, Subiaco, Western Australia.

own, save, print and share their favourite combinations with family and friends, architect and builder.

A kiosk version of Sampler is currently being trialled in the Boral Subiaco display centre in Western Australia. The app is displayed on a large 42" TV touch screen for use by visitors in store. They can view and compare products using Boral Sampler without the assistance of sales staff.

Boral Sampler is the company's first e-sales tool in the emerging online building products market and has so far proven to be a runaway success.

www.boralsampler.com.au

BIODIVERSITY IN BORAL'S QUARRIES

WHERE THE EAGLES SOAR

A family of Wedge Tail Eagles is creating interest at Boral's Mugga Quarry.

By Nigel Simms, Quarry Manager, Boral Quarries, ACT.



Felicity Hatton, an honours student at the University of Canberra's Institute for Applied Ecology has been studying a family of Wedge Tail Eagles that live in Boral's Mugga Quarry.

She recently sent us a photograph of one of the young eagles she has been tracking within the quarry boundaries. She is the most golden of the three eagles whose colour darkens with age.

She has been banded and is wearing a GPS aerial under her wing which shows she has already made several visits to the NW edge of the quarry. The GPS is not usually visible as it sits under the bird's feathers.

One of the family of Wedge Tail Eagles living at Boral's Mugga Quarry in Canberra.

BORAL'S QUARRIES ARE INCREASING KOALA HABITAT WITH INTEGRATED LAND MANAGEMENT

Boral Construction Materials in Queensland has been recognised for its work on increasing fauna habitat in South East Queensland.

By Jessica van Soest, Environmental Officer, Boral Construction Materials, QLD/NT.



A couple of the many Koalas benefiting from Boral's integrated land management.

Boral's Petrie and Narangba Quarries are located within a koala corridor in South East Queensland. Both sites are currently implementing extensive rehabilitation plans which aim to increase koala density in the quarry buffer areas and should improve vegetation connectivity within the corridor. Each site has set aside approximately 80 to 100 hectares of land for initial rehabilitation and within the last two years extensive weeding has occurred and over 16,000 seedlings have been planted with more to come.

To improve the effectiveness of the rehabilitation, a holistic land management approach has been taken at both sites with the following work occurring in the last two years:

- 2,500 seedlings have been planted at Petrie as part of a new koala fodder plantation which was developed in consultation with Australia Zoo and local koala carer groups through a co-use agreement with Powerlink (in an easement)

- Three hazard reduction burns have occurred at Petrie Quarry in the rehabilitation areas to help with weed reduction
- A fauna monitoring program (for koalas, black glossy cockatoos and tusk frog) has commenced at Narangba
- Livestock management and pest management (deer and pigs) has occurred at Narangba, and
- Community liaison group meetings are used as forums to discuss the progress of the land management, particularly the rehabilitation, at each site.

The holistic land management approach at Petrie and Narangba is leading the way for other quarry sites with rehabilitation requirements. In Queensland, land management and rehabilitation work will occur at several other sites during the year.

ANOTHER SUCCESSFUL EMERGING LEADER PROGRAM

The Boral Emerging Leader Program has been a feature of Boral's Leadership Pathway programs since 2004.

By Kathy Mackay, Learning Services Manager, Boral Limited.

Designed to identify and develop Boral's future leaders, the Emerging Leader Program aims to grow and retain high potential middle managers.

Those targeted for this development are generally recent university graduates, Boral Frontline Leadership Program graduates, or managers who have been identified as high performers. Participants are sponsored and actively developed by their manager throughout the three year program.

The 2012 program was held in November, and 18 Emerging Leaders from Australia and Asia heard senior business leaders speak about Boral's key initiatives, Safety, Sales & Marketing Excellence and BPS (LEAN).

Wade Clarke from Boral Construction Materials in Toowoomba had this to say about the program.

"Having been part of the Wagners acquisition in December 2011, this was

the perfect opportunity to meet senior executives and understand what is happening across the business and why decisions are being made".

It also provided the opportunity to work alongside other leaders, across the entire business and create relationships that will help to achieve the best outcomes for Boral" he said.



Wade Clarke

BORAL'S LEADERSHIP DEVELOPMENT PROGRAM IS PREPARING OUR PEOPLE FOR TOUGH CHALLENGES

By Wayne Reade, Group Organisational Development Manager.



The 2012 Leadership Development program took 28 senior leaders from the USA, Asia and Australia through a six month development program focused around Adaptive Leadership and the key elements of enabling the Boral Strategy. The senior leaders were challenged with leadership concepts and reflected on their own leadership styles and how they are enabling the Boral strategy within their operation.

The Action Learning Project sought to identify the key enablers that would assist Boral to achieve 'Sector Best Performance' in Safety, Lean, Sales & Marketing Excellence and Innovation.

Information from across the Boral Group was consolidated and shared then presented formally to the CEO and Boral's Executive team. It then formed part of the Boral Strategy that was presented at the AGM.

Diane Niu, Sales and Marketing Development Manager, Boral Cement, had the following comments.

"I found the program particularly effective in leadership skills as it combined face to face learning modules with a focus on behaviour based skills and experiential learning." We were privileged to be joined on several evenings by Boral's CEO Mike Kane, Chairman Bob Every and Director Eileen Doyle".

INNOVATIVE RECYCLED WATER TREATMENT DEVELOPED FOR BORAL CONCRETE PLANTS

A safe and efficient process to neutralise recycled water has been developed and implemented at Boral's Eagle Farm concrete plant in Brisbane.

By Omar El Komy, Production Manager, Boral Concrete, Brisbane.



Raoul Morris, Team Leader, Omar El Komy, Production Assistant Manager and Barry Mumford, Production Manager.

Water is a key input in concrete manufacturing and is also used for essential tasks such as washing out concrete mixers and on site cleaning which can generate considerable waste water.

This water is collected in large settlement ponds for recycling. The recycled water can be used in batching normal strength concrete which keeps the water levels in the ponds manageable and reduces the quantity of fresh water purchased. However, because recycled water cannot be discharged into stormwater drains due to its high alkalinity (pH 11 – 12) and high levels of dissolved and suspended solids and it can't be used in the manufacture of high strength concrete, over time a concrete plant may generate excess recycled water. In the case of extreme rain this can be a major environmental concern as there is the risk of flooding and uncontrolled discharge of recycled water in the stormwater system.

Armed with structured problem solving skills learnt through the LEAN program, the production team at Eagle Farm with advice from Adrian Rex, BCM's Capital Manager, devised a solution. The team built a carbon dioxide injection system to treat recycled water by injecting CO₂ gas into the water stream. While this might sound complex, after building the system and setting the right parameters, the team found it to be a straightforward solution.

Mixing the CO₂ with water creates carbonic acid which, in effect, reduces the pH of the highly alkaline water, reduces the dissolved solids content and drops some of the suspended solids.

The benefits of this project are exceptional and the system is cheap to build. CO₂ is a low-cost option compared to traditional water treatment methods, such as sulphuric acid, and unlike other treatment options the risk of overdosing is absolutely minimal.

From an environmental perspective, the risk of accidentally discharging recycled water in the storm water system is eliminated. The highly alkaline recycled water is neutralised



Top: First flush pond before treatment.
Above Left: CO₂ injection set up
Above Right: First flush pond after treatment.

from pH 12 to pH 7. Needless to say, at Eagle Farm, the need to use mineral acids, which carries handling issues and safety concerns has been eliminated.

The cost benefit of this project makes it certainly worthwhile to invest in other concrete plants. Treating an average of 700L of pH 12 water costs \$1. In comparison, it would cost \$1 to send 60L of water offsite using a water tanker. Excess water captured and neutralised during rain events can then be used for batching, slumping or yard cleaning decreasing the requirement for town water.

In addition to the water project, the team at Eagle Farm is working on a carbon storage initiative. Through this they will explore different ways of reducing the total carbon dioxide gas content in the atmosphere. This gas is not collected or captured but, through a chemical reaction when mixed with recycled water, the gas no longer exists. The by-product of this process is currently disposed of as regular inert waste but there is the potential to find a market for it in the future.

STANDARD BATCHING THE KEY AT THOMASTOWN BRICKS

In Victoria, Project CST standard batching is complementing PULL implementation.

By Andy Rylance, Group Lean Manager.



Wayne Whitelegs, Plant Manager, Thomastown conducts his daily Gemba sign off at one of the Project CST Checkpoints.

In manufacturing, it's said "variation is the enemy". This is certainly the case in brick manufacturing. Variation in quarry material, crushing, kiln technology and how the equipment is run have all resulted in colour, size and texture variation on the same product. This impacts our customers, our brand and is a major impediment to successfully introducing PULL systems.

THE JDRF RIDE TO CURE DIABETES 10TH ANNIVERSARY

Team Boral was one of the highest fundraising teams again at this popular cycling event.

By Elke Stapf, Stakeholder Manager, Boral Property Group QLD/NT.

Over 320 riders participated in the 10th JDRF Ride to Cure Diabetes held in the Barossa Valley, South Australia in January.

The weather was perfect for the riders to cycle their choice of a 35km, 80km or 160km route. At the end they were exhausted but extremely proud.

The event raised over \$1 million for vital medical research to cure, treat and prevent type 1 diabetes. The highest fundraising

In Victoria the Clay & Concrete Products manufacturing team has been pioneering process control methods to rectify these industry issues. The project leader Alek Nikolovski explains:-

"The objective of the Project CST Standard Batching process is to ensure that products are manufactured to specification. The key point is that products are fully replicable from one production run to the next."

This is achieved by the following:

- Solid process controls to ensure products are replicable in the characteristics of colour, size and texture between production runs
- Ensuring intervention of defects or deviations from the set standard are detected early in the production process at the source
- Visualising product specifications and process controls for all to ensure compliance

- Error proofing adjustment points (settings) to eliminate variation (ie. use six sigma tools)
- Training operators and back ups in the criticality of the process controls and adherence to specifications
- Putting in place a robust finished product grading system that is aligned to customer expectations
- Ensuring the quality process control procedures are updated and being adhered to.

After 40+ years brickmaking experience Wayne comments "This process is making me a better brick maker" with the increased focus to understand and control the variables.

Employees on the shop floor are more vigilant on quality, yard forklift driver's job is simplified and the relationship between sales and operations employees has significantly improved.



The Boral Qld Cycle Team made up of Boral employees and customers raised \$31,000. Pictured are Jo Tizzone of J.T. Concreting, Brett Whitbread, Contracting Manager, Boral Asphalt Townsville, John Banfield, Banfield Builders, Elke Stapf, Stakeholder Manager Qld & NT, John Zwoerner, Account Manager Concrete, Brisbane East. Carl Buckland, Operations Improvement Manager, Boral Quarries and his wife Fiona (not photographed) were also in the team.

teams included Team ANZ who raised over \$140,000, Team Boral who raised over \$105,000, Team Macquarie who raised over \$80,000, Team Shadforth who raised over \$65,000 and The Western Flyers who raised over \$60,000.

Team Boral would like to thank all their colleagues who participated in raffles, sausage sizzles, bake-offs and other fundraising activities. Your help is greatly appreciated.

"I think I speak for everyone when I say we have had a fantastic time in Adelaide during the JDRF Ride. It was my best 80km ever. The weather was fantastic with 27 degrees, cool fresh air, a little windy, and of course there are plenty of lovely hills in the Barossa Valley. And yes, to all the cyclists in this world, yes I did use the small cog at times. I am only human!"

Total riding time 3 hours, 23 minutes. My best so far.

SAFETY FOCUSED SEMINARS PROVING POPULAR WITH INDONESIAN ARCHITECTS AND DESIGNERS

Boral Plasterboard is working with its customers to highlight safety and sustainability in building.

By Rilwan Hamzah, HRD Manager, PT. Petrojaya Boral Plasterboard.

Only around 15 years ago, drywall partition and ceiling systems were considered an expensive application used only in the high end market in Indonesia. Popularity has now grown to the point where architects and designers are using plasterboard in the most basic applications right through to the highest specification standard, throughout Indonesia. This is a great indicator of the market growth in the product.

As the original plasterboard manufacturer in Indonesia, Boral has its finger on the pulse of the industry. As well as ensuring demand for the product is met, we are also ensuring our customers have the product and systems knowledge necessary to optimise their use of the product.

Seminars for architects and designers form part of this communication. Alongside the discussion of the aesthetics of designing buildings, the topic of safety is foremost.



Safety considerations apply not only to the end users of the buildings but the builders and all parties involved in the construction process. Boral assures its customers that we will always work with them to achieve the highest safety standards possible.

In October 2012 seminars on Fire Safety in Drywall Construction Systems were held in Jakarta and Surabaya with over 400 local professionals attending.

Guest speakers included a representative of the city government in charge of Issuing Building Permits, who was able to explain Building Safety regulations including selecting fire resistant building materials and systems.

Representatives from one of the largest architectural companies in Jakarta, PT.DCM gave a testimonial on their recent projects using drywall systems. As well as the

aesthetics of the design, the lightweight plasterboard partition and ceiling systems also provided the advantage of construction speed and cost savings.

Drywall systems significantly reduce the size of the columns, beams and foundations while still meeting safety requirements by using a non combustible material which provides a passive fire protection in their buildings. Boral's Product and Systems Development Manager, Christophe Blanc, also explained the fire resistance advantage of the Plasterboard Systems.

Participants viewed mock up systems and displays and had an opportunity to meet the Jayaboard® sales and marketing team.

Jayaboard® is a member of the Green Building Council of Indonesia and is committed to an environmentally friendly building material production process internationally.



Left: Seminars for architects and designers were held in Jakarta and Surabaya last October.

Above: Mock-up displays gave the participants an opportunity to have interactive discussions on the systems with the Jayaboard® team.



BORAL EXHIBITS AT INTERNATIONAL FIRE CONFERENCE IN MALAYSIA

Duro Curlija, Director of Sales and Marketing, Malaysia, Haliza Yusof, Architectural Service Manager, Malaysia, a BOMBA officer and Boral's Christophe Blanc.

In an effort to keep professionals in the fire safety industry informed and up to date, the institution of Fire Engineers Malaysia, the Malaysian Fire Protection Association and the Malaysian Fire and Rescue Department recently organised an International Fire Conference and Exhibition in Malaysia.

By Christophe Blanc, Product and Systems Development Manager, Boral Gypsum Division.

The Conference was an opportunity to establish networks among the key players in the fire industry and to highlight the latest fire safety products and technology.

Fire safety design, either for a residential dwelling or a major commercial project, is a challenging task. Designers and installers of active and passive fire safety systems need knowledge and experience. The key challenges are:

- Achieving the most appropriate fire safety systems design through either a prescriptive or performance based approach,
- Constructing the building and installing the systems as per the assumptions and the requirements of the design,
- Testing and commissioning the fire safety systems,
- Managing and maintaining the building and the fire safety systems to ensure the assumptions of the systems designed are achieved and preserved.
- The challenges are not limited to large and complex buildings. The challenge is much more wide spread and includes fundamental questions such as how to help the more vulnerable sections of society, i.e. domestic dwelling residents where most fire related fatalities occur.

There has been significant development in building design and construction in recent years with high rise buildings taller than ever and retail buildings increasing in size.

The developments are not limited to the architectural design but also the construction materials used and more importantly the fire safety systems adopted.

Boral's display highlighted the passive fire safety performances of our systems. It provided a great opportunity for the Boral team to meet senior management from the Fire and Rescue Department Malaysia (BOMBA).

Current regulations in Malaysia around plasterboard-based systems are highly restrictive due to construction habits and lack of knowledge. But BOMBA have agreed to discuss how the rules may be evolved in the future.

In addition to the networking opportunities, Boral was able to showcase its fire resistant systems to conference delegates. A highlight was the chance to show a video of a real scale test of a warehouse in fire, exhibiting a 10m high 2H fire rated partition, performing as well as a 15cm thick aerated concrete wall.



Top: Henry Ho, Northern Regional Manager Malaysia (far left) and Christophe Blanc (far right) with two BOMBA Officers at the Boral display.

Above: Christophe Blanc, Boral's Product and Systems Development Manager with members of the Fire and Rescue Department, Malaysia (BOMBA) at the Boral display.

WEATHERBLOC GEN-II BOARD EXCEEDING EARLY SALES TARGETS

A specially formulated water resistant plasterboard has been launched for eaves applications.

By Nuttaphon Thongkukiatkun and Phichit Charutasn, Boral Gypsum, Thailand.



WeatherBloc is a high water resistant 9mm board. This improved version of a previous moisture resistant plasterboard has been initially launched for eaves application designed for semi-external ceiling applications.

The product development focused on enhancing plasterboard properties in soft applications by improving performance characteristics. The new product features higher water resistance than standard moisture resistant board, ventilation holes to promote air circulation and much better aesthetics.

We received very positive customer feedback during the product road shows. These involved presentations with mock up kits using extreme damp conditions. We were able to effectively communicate the water resistant performance and very low water absorption of the plasterboard core.

WeatherBloc Gen-II starts with a specially formulated high performance plasterboard, with low core moisture absorption (<3%) and a fungus prohibitive chemical. These boards are then transferred to the metal and ceiling tile plant for the secondary processing step. A new German designed coating and curing machine is used to apply non-solvent based polyurethane on the back of the plasterboard.

The polyurethane is then cured by running the plasterboard through an ultraviolet light radiation station. Depending on the end use, the plasterboard can then be perforated (slotted) to enable air circulation to the above eaves cavity.

According to ASTM C1396 for surface absorption with water for 2hrs, we can achieve levels less than 10 g/m2. This compares with standard boards (130 – 150g/m2), making this new innovative product an excellent addition to our family of water resistant products.

At this early stage, sales are exceeding target levels. Boral is now developing extended applications for plasterboard coated with polyurethane.

Rank	Requirements	How to deal with those requirements?
1	Aesthetics	Smoothness, graphics pattern and design flexibility
2	System Cost	Overall system is 5-10% higher than cement flat sheet for conceal and smoothness and 30-40% less than high end material.
3	Ventilation	Graphics hole for ventilation (and optional fiber mesh backing)
4	Durability	Less than 4% water absorption (7% for current MR) Water repellent by backside surface and Mold resistance according to TIS 285 Part 21 and ASTM D3273
5	Installation	Maintain installation ease of plasterboard system

Top Left: Installed product using the perforated eaves application.
 Above Top: Polyurethane coating & curing machine : First stage – coating application and second stage – UV curing.
 Above: Plasterboard coated with polyurethane.
 Left: Product features ranked according to customer needs.

JOINTING COMPETITION WINS OVER INDONESIAN INSTALLERS

Recognising that plasterboard installers and applicators are key decision makers for jointing compounds, Boral ran a series of events in Indonesia to improve local skills and showcase its product range.

By Muhamad Ferdi Syafriandy, Product Manager, Boral Plasterboard Indonesia.



Product and System Presentation in Pekanbaru, Central Sumatera.



The winners in Pekanbaru, Central Sumatera.



Enthusiastic applicators in Semarang, Central Java.

The Boral Jointing Competition run in Indonesia in late 2012 was aimed at installers and applicators who influence which jointing compound products are purchased.

It provided an opportunity for Boral to introduce the product range and demonstrate the quality and benefits, specifically the compound products and the newly launched Partition Frame Ecostud and track. The applicators enjoyed the opportunity to vie for the title of the best applicators in their regions.

Events were held in seven cities across Indonesia: Pekanbaru in Central Sumatera, Bandung in West Java, Solo and Semarang in Central Java, Surabaya in East Java and Bali. Over 100 applicators, from beginners to professionals, were invited to compete for the honour of being the best in drywall partition installation and jointing applications in the region.

Certified training was also conducted by Boral's technical team prior to the competitions to refresh awareness of the product range. This included instruction on drywall partition installation using the new Ecostud & track as well as Jointing Level 5 Finishing using UB COTE.

Participants were very interested and enthusiastic, not only about the prize they were chasing, but also about the knowledge they'd gained during the training sessions and competitions.

"...I have been waiting for this event since I was curious on my Jointing skill which I developed over the past years, and now is time to prove that..." said one of the prize winners.

Each event concluded with a customer function showcasing product and innovation updates and of course the Awards presentation to the winners.

Participant feedback has been very positive with many keen to compete again in the future.

In our competitive market situation, events like this enable Boral Plasterboard Indonesia to reinforce its market leader status and have direct interaction with the end-users of our products. A better understanding of market dynamics, expectations and knowledge sharing will help us to Build Something Great.



Doing their best to win - participants in Solo, Central Java.



The judges in action

BORAL SALES REPRESENTATIVE WINS OVER LOCAL HOME BUILDER ASSOCIATION



Boral's Myra Kissire (pictured on the far right) with builder Dave Moore of The Dave Moore Company and his family.

A Memphis sales rep's can-do attitude and rapport with customers exemplifies the Boral ideal of customer service.

By Audrey Lee, Manager Employee Relations and Communications, Boral USA.

At the Memphis Area Home Builders Association's (MAHBA) 2012 Fall VESTA Home Show, Myra Kissire, a sales rep for Boral Building Products in Memphis had a big win. Myra successfully got all five of the participating builders to specify their homes with Boral Bricks, in addition to Cultured Stone on one of the homes. Boral has supported the annual show for several years, but this is the first time Boral products have been showcased on every one of the VESTA homes.

"Myra's outstanding reputation with her customers and peers, knowledge of the construction and building industry and previously established relationships with the participating builders helped her land this large achievement," said Robin Terry, Membership Services Coordinator of MAHBA.

"Because the builders already knew Myra, they were confident in her ability to be responsive and get things done. They understood upfront the kind of customer service and quality product they'd be getting" he said.

The VESTA Home Show was attended by nearly 20,000 people. The five MAHBA Certified Green Professional Registered Builders who participated in the Show were: Phil Bryce, Bryce Homes; Jon Ruch, Ruch Builders; Dave Moore, The Dave Moore Companies; Darin Halford, Darin K. Halford; and Dave Tucker, D & D Custom Homes.

"Having been involved with MAHBA for the past 10 years has given me a great opportunity to serve the building community and meet and connect a large network of people," said Myra.

"It's been a privilege being involved with VESTA this year and getting to work with each of the builders again to supply their homes with brick and Cultured Stone," she added.

Over the past decade Myra has served on and led committees and councils such as Professional Women in Building, Fayette County Chapter of Memphis Area Home Builders/MAHBA, Remodelers Council, NAHB Spike Club, and Membership Chair. She was awarded Associate of the Month twice in 2012.

"You can always count on Myra, she's a friend as well as a peer" said Robin Terry.

"Myra has one of those 'all-in' attitudes and runs her territory better than anyone I've ever seen," said Mitch Platz, Boral Building Products' Center Manager.

"She finds deals that others probably couldn't and her involvement with MAHBA and its members certainly contributes to that. Her work with MAHBA and the VESTA Home Show not only benefits Boral and our relationships with our customers, but is a great way to support and showcase the building trade and industry."

Congratulations to Myra for her commitment to MAHBA and hard work in making the VESTA Home Show such a success.

US LEAN JOURNEY UPDATE

Boral is using Quality Function Deployment (QFD) to collaborate on product and process development across all levels and functions.

By Mike Dugger, Director of LEAN Process and Product Development, Boral USA.



Fundamental LEAN best practices emphasise collaboration and cross-functional problem solving using a methodical, team-based approach. Boral Composites Sales & Marketing, Operations and Research & Development joined together in San Antonio to pilot a LEAN-based innovation tool known as Quality Function Deployment (QFD). QFD integrates LEAN best practices into the development process by facilitating strategic product and/or process planning, while engaging stakeholders from all levels and functions of the business.

QFD brings the development team together from design concept to full product and process start-up. This ensures alignment and buy-in across the entire team as well as effective, cross-functional collaboration and knowledge transfer between the key stakeholders.

“If we have this information we could work on what is most important to the customer. In the future, it could save us process time and possibly money on new products to satisfy the customer’s need,” says Christina Clark, Production Supervisor at the Boral Composites Incorporated (BCI) Salisbury plant.

Quality Function Deployment is:

- a LEAN tool developed and introduced by Toyota in the late 80’s to dramatically improve innovation efficiency and effectiveness.

- a development planning process starting with the Voice Of the Customer (VOC), and continually focused on creating customer value by designing quality into the product and manufacturing process.
- a collaborative planning process with an emphasis on cross-functional engagement and knowledge transfer (facilitates learning within team from concept to sustainable business model).
- a process that utilises logical matrices to
 - 1) direct development action items based on VOC, strategy and benchmarking and
 - 2) identify links between customer requirements, functional/technical requirements, design/quality targets and process/production parameters.
- a LEAN tool to facilitate key stage gate milestones, and integrate with the core Boral Innovation Process.

For the December event, the BCI team chose to focus first on the TruExterior Trim value stream as a pilot. Working in teams, a six step process was used to build the first Boral House of Quality, a product planning matrix used to guide development parameters and action items.

The Six-Step Process to Build a Product Planning Matrix “House of Quality”

1. Define/enter customer requirements .
2. Rank competition through VOC and benchmarking.
3. Define functional requirements.
4. Analyse and rate the relationships.
5. Map the “how’s” to identify correlation.
6. Use matrix data to set development targets.

“QFD provides a format to incorporate knowledge from Boral’s business units into process designs earlier in the design timeline,” comments Russ Majors, Director of Technology Development.

Once the ratings were agreed upon, and development priorities set by the team as a unit, the House of Quality matrix was complete. The team noted that it is important

to provide measurable and detailed VOC analysis to include qualitative and quantitative cross-linked surveys, forced ranking attributes and analysis.

Based on customer feedback, testing of competitive products to the identified attributes is crucial to define the product design metrics. This will translate into manufacturing quality requirements and multidisciplinary team contribution to the QFD process which is key to the development process.

From the QFD kaizen results, an A3 action plan has also been developed to capture the relevant next steps. The team has identified significant opportunities to improve processes related to collecting VOC and benchmarking competitive products/processes.

“Using the QFD model for future projects challenges us to obtain robust VOC feedback throughout the process, beginning in the earliest stages of product development. Having this detailed information provides us a clear understanding of what our customers value in a certain product category and help ensure we are bringing a product to market that will have the correct balance of attributes and cost”, says Ashley Joyce, Key Accounts Manager. The BCI team will continue planning improvements and executing the follow-up action plan from the event.

The House of Quality matrix is the first of four additional QFD matrices used for LEAN development planning by QFD. In addition to the product planning matrix, QFD also includes a tiered assembly/part matrix, a process planning matrix, and a quality control plan matrix. Russell Hill, Chief Technology Officer, explains, “QFD extends to product development, process development and quality with a focus on translating the VOC throughout the process.”

If you are interested in learning more about QFD or related tools contact Mike Dugger, Director LEAN Process & Product Development
Mike.dugger@boral.com

ONE BORAL DISPLAY REPRESENTS STRONG COLLABORATION IN QUEENSLAND

The Home Ideas Centre has been revitalised to target building design professionals and become a central hub for design ideas in South East Queensland.

By Jay Killeen, Sales Coordinator, Boral Plasterboard, Queensland.



Above: from Left: Peter O'Day, Dowell Windows, Colin Ehrke, Timber, Nick Youngman, Timber, Lisa Wilson, Concrete, Terry Smith, SME, Wayne Kennedy, Plasterboard, Lance Tobin, Plasterboard and Stephen Camilleri, Bricks.
Left: The Boral One display.



“It has been a truly remarkable achievement to bring all the Boral businesses in Queensland on board and have the display built in just over a month.” Jay Killeen

In November Boral launched a One Boral display centre in Queensland, replacing the previous three individual displays at the Home Ideas Centre. Lisa Wilson, Product Manager for Decorative Concrete in Queensland teamed up with Terry Smith, Regional Market Development Manager, who represented all Boral divisions and along with representatives from each business were able to make the One Boral display centre initiative a reality.

The display houses products such as decorative concrete, timber floorboards,

Cultured Stone®, bricks, windows and plasterboard systems. The Home Ideas Centre has been a perfect representation of Boral's key values of excellence and collaboration as well as promoting One Boral as a key value proposition to the marketplace.

The new owner of the Home Ideas Centre, Charl Liebenberg has revitalised the Centre. A key shift in the marketing strategy has been to target not only end consumers but also building design professionals such as architects as well as product installers

and home builders. The centre also has a close relationship with the Australian Institute of Architects located next door.

Over 200 building design professionals including architects, commercial contractors and builders attended the launch and were rewarded with a revitalised centre. The HIA was also represented and gave their view on the market outlook.

BORAL NORTH AMERICA INTRODUCES NEW PRODUCTS AT THE INTERNATIONAL BUILDERS SHOW

Boral Roofing, Stone, Bricks and Composites once again exhibited as One Boral at the National Association of Home Builders' international show in Las Vegas, Nevada in January.



Boral's impressive stand at the show was built from a composition of repurposed structural materials and displays from last year's show as well as some new fixtures and graphics introducing seven new products:

Cultured Stone introduced Wolf Creek Southern Ledge Stone, Echo Ridge Southern Ledge Stone, Winterhaven Alpine ProFit Ledge Stone, Moroccan Sand Handmade Cultured Brick and Rustic Manor Handmade Cultured Brick. TruExterior introduced composite beadboard, and Roofing introduced Monterey Shake 600, a lightweight clay roof tile, and a Class 4 Hail Resistant roof tile.

The booth was well-attended, Boral's display and the show overall was more active and upbeat than it has been in years. More than 48,000 attendees packed the show hall, sales leads were up 39% year over year and media outreach was up 33% since 2012. Total potential impressions from the subsequent publicity could go as high as 89 million.

Key drawcards for Boral were the trim products and beadboard, and the Versetta

Stone exhibit featuring ongoing live installation throughout the show. Bob Vila, host of the popular television show "This Old House," expressed an interest in working with this innovative stone product, and Consumer Reports featured Versetta Stone in its blog, video and print versions.

Boral is the key sponsor for the NAHB Custom Homebuilder Committee in 2013 and had access to those builders at the Custom Homebuilder Central.

Boral also presented the Custom Homebuilder of the year award for 2013. Boral will sit on this NAHB committee throughout the year.

Boral is also a member of the Leading Suppliers Council which provides proprietary rankings for many activities at the Builders Show, as well as a non-voting seat throughout the year at the NAHB Board meetings. Two other committee seats have been attained for 2013 through this sponsorship, the Small Volume Builders Committee and the Design Committee.



Above top: A Sample of Alpine Ledge Winter.
Above: Southern Ledge Echo Ridge.

In a sponsor arrangement with GreenBuilder media, Boral invited over 300 customers to a high-energy reception at TAO in the Venetian Hotel. This proved to be a valuable evening of networking and relationship building.

Throughout the three-day show, Boral executives and sales personnel were busy meeting with key customers. A total of 24 customer meetings occurred during the show, including meetings with volume builders and meetings involving national accounts that could purchase multiple Boral products.

In the post-show review, executives and the sales and marketing group agreed that 2013 was a much-improved show with upbeat and active projects. The Boral exhibit was well-attended. Coupled with much-improved lead generation, NAHB committee outreach, highly successful editorial recruitment, and an exciting customer event, the USA team has confidence in the market recovery and Boral's increasing brand engagement in the building community.

Boral, the Boral Logos Cultured Stone® Wolf Creek® Echo Ridge™ ProFit® TruExterior® Monterey™ Versetta Stone® are trade marks of Boral Limited or its affiliates and may be registered in many jurisdictions worldwide.

CELEBRATING THE OPENING OF LIVVI'S PLACE - A PLAYGROUND FOR EVERYBODY

By Anna Farr, Corporate Affairs Manager, Boral Limited.



Left: The Yamble Reserve Playground is where it all happens.
Above: Some of the very proud sponsors.



Thousands came out to the Sydney suburb of Ryde in early February as the Touched by Olivia Foundation officially launched their fifth inclusive playground. The Foundation aims to improve the health and happiness of children by raising funds for the Sydney Children's Hospital and building playgrounds for children of all abilities to play side by side.

Boral has sponsored the Foundation for the past year and was delighted to be able to donate concrete for the construction of Livvi's Place at Yamble Reserve. This is the latest in a growing national network of playgrounds, awarded for their ground breaking designs which are setting the standard for true all abilities play.

"Touched by Olivia's goal is to have inclusive playgrounds all over Australia. Livvi's Place Ryde is our fifth to open, with another five scheduled across Australia in 2013, and more than twenty in various

stages of development," commented Executive Officer, Bec Ho.

"This project has been a real group effort; we've had all levels of government partnering with community groups, corporations and local residents to raise over \$1.5million to make Livvi's Place a reality. I've been blown away by the support from our team of project managers and designers at council, corporate partners AECOM, Boral, and special organisations Forming Circles, Communities for Communities and The Primary Club.

It's absolutely proved beyond a doubt how much the northern districts needed a place like this and how willing all these groups were willing to pitch in to make it happen."

Ecstatic mother of three, Emily Walton was delighted with the playground. "Play has always been such an important part of our family's life. It brings joy and happiness,

problem solving and friendships, and tires children so they'll sleep well for the night! However, having a daughter like Maia, my seven year old, who has a Moderate Intellectual Disability and ASD, brought about so many different issues and obstacles that we'd never previously given a second thought. Livvi's Place makes such a huge difference for us. We're able to share special moments together, with all our needs catered for."

Livvi's Place Ryde spans over an acre of prime beautiful bushland and has combined art with play to create a very special space where all of the community will feel included.

The Grand Opening party was a fun event, with State MP's Andrew Constance and Victor Dominello, celebrating with ambassador Jay Laga'aia and thousands of local residents and representatives from the many corporations and community groups who made Livvi's Place happen.