

Expertise is helping tsunami relief effort



BlueScope Water employees with rainwater tanks ready for shipment to Banda Aceh.

BlueScope Steel has mounted a company-wide effort to provide expertise and assistance in the aftermath of the Asian tsunami disaster.

The practical aid is on top of nearly A\$1.2 million in direct cash assistance raised by employees and the company.

Managing Director & CEO, Kirby Adams, recently visited BlueScope Steel's customers and operations in Indonesia, Thailand and Vietnam. He outlined the company's local tsunami disaster response during a visit to one of the Company's major Indonesian customers, PT Tatalogam.

"BlueScope Steel specialises in supplying lightweight metal buildings and materials and Tatalogam specialises in supplying steel roofing tiles. The two companies are co-operating to make available steel buildings and building products for relief and reconstruction," he said.

BlueScope Steel businesses throughout the region are involved in the disaster response effort.

BlueScope Water has already manufactured and supplied steel rainwater tanks for victims,

with a first batch of tanks shipped to Banda Aceh, Indonesia.

The tanks will be used with small steel roofs, sourced in-country, which will act as rainwater catchments and provide shelter.

Activity is underway across the region to supply steel buildings and building materials to affected areas.

While the immediate attention of aid agencies is still on providing food, medicine and medical care to those affected by the disaster, plans have advanced to provide steel products for shelter and to assist with rebuilding.

Already, the 500 houses supplied to the Red Cross after previous floods in Thailand have been relocated to southern Thailand to provide temporary shelter.

And the Company is now working with architects, designers and aid agencies to prepare designs for emergency aid buildings.

BlueScope Steel businesses across the region are assisting each other to overcome bottlenecks and take advantage of spare

capacity. Steel houses donated by the Indian business unit will be manufactured in Vietnam.

The Sri Lanka business is co-ordinating effort in the Maldives and the BlueScope Steel business in Malaysia is preparing to provide assistance, including moving rollforming machines to other locations if required.

In Australia, the Company has been liaising with government officials, aid agencies and the Australian Defence Force. These organisations are developing plans for constructing hospitals, schools and government buildings, managing contractors, and local sourcing of building materials.

Donations by BlueScope Steel and its employees will also make an impact to the relief effort for victims of the Asian tsunamis.

"Employees across the company, at all levels and in all locations, have been extraordinarily generous in their giving to help the victims of this disaster," Kirby Adams said.

Money raised is being donated to the Red Cross Asia Quake & Tsunamis Appeal, and to local Red Cross and Red Crescent societies working in countries affected by the disaster.

New paintline to meet demand for COLORBOND® steel

Construction work has begun on BlueScope Steel's latest COLORBOND® steel paintline at Erskine Park in Western Sydney.

The \$120 million paintline will cater for steadily increasing local demand for COLORBOND® steel.

The state-of-the-art facility is expected to be commissioned by March 2007 and is designed to produce 120,000 tonnes per year – enough COLORBOND® steel to supply roof cladding for 80,000 homes.

The plant, located on a "green field" site, has been designed to incorporate world's best practice environmental protection measures.

It will incorporate regenerative thermal oxidiser technology, a first for any BlueScope Steel production line, to ensure optimal air quality.

"The growth of steel as a building material and the growth in consumer demand for COLORBOND® steel has driven the decision to develop this facility," says Peter Nash, Vice President Sales, BlueScope Steel.

"The Erskine Park facility will deliver capacity in line with forecast domestic demand, to meet the needs of BlueScope Steel's domestic customers.

"It provides BlueScope Steel with an in-market coil painting presence in Western Sydney, Australia's largest metropolitan market.

"The site is situated close to AusB&MM's



BlueScope Steel Business Project Manager Ross Sharrock at the Erskine Park site. Below: an artist's impression of the new development.

major customers, which will facilitate a high level of service to our customers."

BlueScope Steel Business Project Manager Ross Sharrock said the new development will showcase environmentally sound rainwater recycling systems.

"The site is designed to capture a high proportion of the rainwater which falls on the roof areas and to recycle most of the water for site irrigation, toilet flushing and process use," he said.

"It will also be the first development of such a large scale to use the innovative HYDRORIB®

stormwater drainage pipe product developed by BlueScope Water.

"The paintline building will also be an architectural showcase for industrial development," Ross Sharrock continued.

"It will be a benchmark for future similar developments in the Western Sydney area and will demonstrate that industrial buildings made from COLORBOND® steel can satisfy increasing demand for higher levels of architectural merit in industrial buildings."





Driving the recyclable steel message

Trucks carrying BlueScope Steel products to customers can cover up to 300,000 kilometres per year. Now two of them are also carrying an important message.

The trucks' high visibility and frequent

presence on the roads of major cities make them ideal mobile billboards, spreading a vital environmental message.

"Using trucks carrying BlueScope Steel products is a great way to remind people that steel is 100 per cent recyclable and to

keep it out of landfill," commented Tom Varga of BlueScope Steel Packaging.

Tom hopes that other stakeholders in the steel packaging area will also take up the idea to further enhance steel's ranking as the world's most highly recycled metal.

GreenSmart first in NSW

The Stockland property group's new Bridgewater SmartLiving Display Village at South Camden on Sydney's outskirts is using designs from six of Sydney's prominent builders to highlight practical environmental principles.

COLORBOND® steel is a major partner with Stockland in the 11-home Bridgewater display village, which is the first entirely GreenSmart display village to be opened in New South Wales.

GreenSmart Villages demonstrate environmentally sensitive building and provide a learning site for all aspects of leading edge practices in residential building and land development.

"Smart Living" principles at the Bridgewater SmartLiving Display Village include roofing made from COLORBOND® steel, evaporative cooling systems,

solar hot water, recycling systems and rainwater harvesting.

Both Stockland and BlueScope Steel share the vision for environmentally sustainable design.

BlueScope steel is a GreenSmart National Industry Leader and continues its long standing support of the HIA GreenSmart initiative by participating in this new housing estate.

Research by the CSIRO has revealed that a light-coloured roof made from a material with low thermal mass such as COLORBOND® steel can assist in reflecting the sun's rays, keeping homes cooler and assisting in the reduction of air-conditioning costs.



Ken Clark NSW Business Development Manager for BlueScope Steel and Jan New, Sales Consultant, at the new GreenSmart Display Village.

Houses equipped with COLORBOND® steel roofs require less energy for heating and cooling, thereby saving on running costs and improving environmental efficiency.

The Bridgewater SmartLiving Display Village adds to the growing list of GreenSmart Villages emerging across Australia. Others are situated in Victoria, Queensland and Western Australia.

The SmartLiving Display Village is open 10am – 5pm daily. Bridgewater Boulevard (off Remembrance Driveway) Camden South, Ph 02 4655 6818.



The new Withers Homes display home at Safety Beach features roofing made from COLORBOND® steel. Below: BlueScope Steel NSW Business Development Manager Sarah Najdek with Tony Withers.

Leading the way in roof design

Housing Industry of Australia (HIA) award winner Withers Homes is using a new display home to showcase the contemporary roof design possibilities of COLORBOND® steel.

The new home at Safety Beach in the Coffs Harbour area on the NSW Mid North Coast combines curves and angles in its design.

Withers Homes' Managing Director Tony Withers said there was an increasing desire for steel roofing on the mid-north coast of New South Wales.

"Twelve months ago around 30 per cent of the homes we built had steel roofs," he said.

"Now that figure is up to around 70 per cent."

Tony Withers said customer demand was the

driving force behind the increased use of COLORBOND® steel for roof cladding.

"Customers are choosing steel roofing because they like the look of it," he said.

"But they are also discovering that it is more flexible than other roofing materials – there is a greater variety of design outcomes that can be achieved with steel roofing.

"As a designer as well as a builder, I have found that I am specifying COLORBOND® steel more and more."

Withers Homes designs and builds quality homes primarily in the Coffs Harbour region.

This is the first Withers Homes display featuring a curved roof made from COLORBOND® steel.



Improved ZINCALUME® steel maintains the look

The maximum available warranty on roof cladding made from ZINCALUME® steel is now 30 years as a result of significantly improved weathering performance.*

"Improved ZINCALUME® steel was developed as part of BlueScope Steel's commitment to ongoing product enhancement," says Building Market Operations Manager, Simon Croft.

"There is a market expectation of BlueScope Steel to provide the best, and the improved ZINCALUME® steel is evidence that we deliver leading edge technology."

BlueScope Steel spent more than three years developing the new product and has carried out extensive testing to confirm

its higher performance levels.

The company says that the improved surface treatments inherent in ZINCALUME® steel have enhanced the product's aesthetic performance.

"ZINCALUME® steel is now more resistant to the harsh and unpredictable conditions of the Australian climate," Simon says.

"This means that roofing made from ZINCALUME® steel will maintain its distinctive metallic look finish for longer.

"Consequently, BlueScope Steel has increased the maximum warranty for ZINCALUME® steel roofing to 30 years to match its improved performance."



Roofing made from ZINCALUME® steel will maintain its appearance for longer.

ZINCALUME® steel not only features superior aesthetic performance, it is also completely recyclable.

ZINCALUME® steel is primarily used for roofing in the commercial and industrial sector, where its resilience against the toughest of weather conditions is highly valued.

* warranty subject to terms and conditions.



Bondor general manager Rob Zahara pictured with a sample of the PIR panels his company will begin to manufacture in Australia this year.

Bondor invests in next generation panels

Specialist manufacturer Bondor has invested \$12 million in new local facilities to produce high-tech fire-resistant insulated building panels laminated with COLORBOND® steel.

Bondor® structural insulated panels are used to build walls, doors, ceilings and roofs of cold rooms, freezers, food and beverage processing areas, clean rooms and various architectural applications.

The company has manufactured Bondor Panels with a traditional expanded polystyrene core since the 1950s, and in 2003 began production of Flameguard Panels, with an incombustible mineral fibre core.

Strong local response to the latest PIR sandwich panels imported by Bondor in limited quantities from the USA has prompted the Australian investment decision.

The fire-resistant PIR sandwich panels, to be known as MetecnoPanel, will be mass-produced in Brisbane from mid-2005 on a 190 metre long continuous foam inline panel machine.

The machine is capable of making Metecno wall, ceiling and roofing products. It will use a chemical system developed jointly by Metecno and Huntsman Chemical Company to ensure optimum fire resistance in consistently stable panel products.

In the manufacturing process, the PIR core of each panel is permanently bonded between two sheets of BlueScope Steel COLORBOND® steel.

PIR (Polyisocyanurate) panels are estimated to have only a one per cent share of the Australian market at present, but Bondor sees a big future for them.

"The key properties of panels with a PIR core bonded to a COLORBOND® steel outer layer are

high strength and rigidity with the highest insulating values of any foam insulation available today," said Bondor general manager Robert Zahara.

"They are rapidly establishing themselves as a preferred product, especially with specifiers and insurance companies.

"One major advantage of PIR as a core in insulated sandwich panels is its fire-resistant properties. Whereas expanded polystyrene melts in a fire, PIR only chars, and has significantly better reaction to fire properties.

"PIR is widely accepted in the USA and Europe as the ideal combination of safety, lightness and economy in insulated building panels," Mr Zahara said.

Bondor plans to obtain 'Class 1 Approval' from Factory Mutual Insurance Company for all Metecno panel products manufactured locally with a PIR core bonded to a COLORBOND® steel outer layer. Factory Mutual Insurance Company is a world leader in commercial property insurance and risk management.

Bondor is a member of the worldwide Metecno Group and is Australia's largest manufacturer of insulated building panels, with facilities in every state.

"The new machine is designed and manufactured by our sister company, Metecno SpA of Italy," said Mr Zahara.

"Metecno is the world's largest manufacturer of insulated panels, now with 30 similar machines throughout Europe, North and South America and China.

"The ready supply of PIR panels from a local source will improve construction efficiency and economy, while ensuring excellent fire safety."

New facilities in China

BlueScope Steel has announced investments in two new manufacturing facilities in China, both expected to be operational by mid calendar 2006.

The company will construct a A\$45 million facility in Guangzhou to manufacture a range of BUTLER™ and LYSAGHT® quality branded products for customers in the growing building and construction markets in China's south.

The new plant will incorporate a BUTLER™ manufacturing facility for PEBs (pre-Engineered Buildings) and will complement an existing LYSAGHT® rollforming plant in Guangzhou.

In addition, the existing BlueScope Lysaght plant at Langfang, near Beijing, will be expanded at a total cost of A\$16 million to produce architectural and sandwich panels for the China market.

Architectural and sandwich panels are widely used in premium architectural building facade systems, and are expected to feature prominently in signature buildings to be constructed ahead of the Beijing Olympics.

BlueScope Steel CEO and Managing Director Kirby Adams said, "The further expansion of BlueScope Steel's manufacturing capability in China reflects strong demand in that country for our high quality branded building products, and our enthusiasm for China as a destination for manufacturing capital investment.

The Guangzhou investment again demonstrates BlueScope Steel's strategy in action, and our commitment to expanding our network of operations supplying high quality BUTLER™ pre-Engineered Buildings and LYSAGHT® building solutions."

Each of the new operations will consume the ZINCALUME® and Clean COLORBOND® product to be manufactured at the new A\$280 million metallic coating and paint line facility BlueScope Steel has under construction at Suzhou, west of Shanghai.

A billion tonnes of steel

Figures released today by the International Iron and Steel Institute (IISI) show that world crude steel production stood at 1.05 billion metric tonnes in 2004. This represents a worldwide increase in production of 8.8 per cent compared to 2003.

Excluding China, world production rose by 4.5 per cent in 2004.

China is again the largest producer of crude steel. According to the most recent figures available to IISI, China produced 272.5 mmt of crude steel in 2004, an increase of 23.2 per cent compared to 2003.

China accounted for 25.8 per cent of all crude steel produced in the world in 2004.

Crude steel production in the Asian region stood at 499.3 mmt in 2004, an increase of 13.2 per cent in 2004. Excluding China, production in the region grew by 3.0 per cent.

Gliderol builds on strength

Privately owned Australian manufacturing company Gliderol International Pty Ltd has managed to achieve international success without losing focus on its local customers.

Gliderol's core business activity revolves around its continuous steel curtain roller door and unique orbital drive automatic operator, but the company has diversified from basic roller door manufacture and now exports its products and technology around the globe.

Gliderol has branches in South Australia, Victoria, Queensland, Western Australia and New South Wales, as well as international plants in The United Kingdom and The Peoples Republic of China.

A network of licensees operate in Saudi Arabia, South Africa, Dohar, Qatar, Abu Dhabi, Bahrain, Spain, New Zealand, Singapore, Taiwan, USA, India, Thailand, Sri Lanka and many other countries.

"Despite our overseas success and growth we have never taken our eye off the Australian market," said Gliderol National Sales & Marketing Manager, Nick Storen.

"One of the things you look at when sourcing



Gliderol National Sales & Marketing Manager, Nick Storen (left) and BlueScope Steel account manager Graham Brierley, amid stocks of garage doors at Gliderol's Adelaide factory.

raw materials is what they can add to your brand's standing in the market place.

"The BlueScope Steel name is regarded positively by consumers and its association with Gliderol has a positive impact on their purchase decisions."

The Gliderol range covers residential and commercial applications and includes residential garage doors and automatic openers, fire rated security shutters, airport hanger doors and equipment for self-storage facilities.

Raising the roof... Perth's latest landmark

BlueScope Lysaght's research and development team provided a unique roofing solution for the new \$220 million Perth Convention and Exhibition Centre.

The huge venue (pictured), which can cater for up to 5000 delegates, is a bold addition to Perth's skyline.

It was vital that the roof remained clean and void of all mechanical and building services plant and equipment.

"To achieve this architecturally, we needed to select a concealed fix roof sheeting system that visually provided a wide pan profile suitable for the scale of building, while resolving the technical issues of stormwater collection and discharge," said Simon Bodycoat, Project Architect, Cox Group.

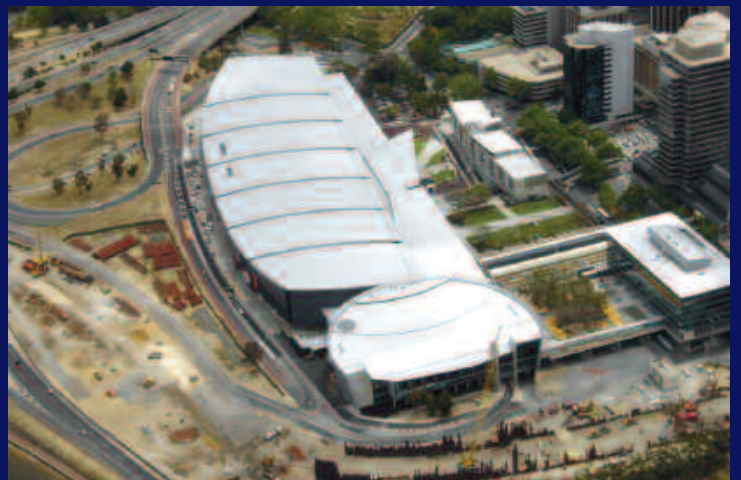
That's where BlueScope Lysaght came in. "In order to eliminate the need for traditional stepped roof expansion joints, the BlueScope Lysaght research and development team provided a guaranteed non-stepped lapped joint solution," says Simon.

LYSAGHT KLIP-LOK 406® proved to be the ideal profile for the centre's massive 40,000 sqm curved

roof. "The finish and colour of the roofing sheeting was essential architecturally, to provide the desired metallic appearance to the roof skin, whilst addressing concerns of glare and reflection," says Simon. "After an exhaustive review, we determined that ZINCALUME® steel provided the preferred architectural finish, whilst providing a roof that would weather well over time."

The roof's striking design incorporates sweeping curves with a 250 metre radius in the north south direction with each pavilion roof tilted in an east west orientation to achieve the undulating roof form, in addition to a section of roof with a much smaller radius of 37.5 metres.

"One of the key requirements for the roofing material was the ability to be endlapped for long roof runs of up to 66 metres," says



Vince Carnevale of BlueScope Lysaght. "Additionally, KLIP-LOK 406's wide tray deck profile, concealed clip fixing and durability made it the logical choice for the PCEC."

Dave Edmunds, of MRC Roofing agrees. "Only BlueScope Lysaght was able to offer a solution that incorporated three endlapped sheets to give an overall sheet length of 66 metres – and warrant it," he says.

MRC Roofing, one of Perth's largest commercial roofing companies, was contracted to provide all roofing, cladding and rainwater systems on the project.

Innovating with style

Architects, builders and roofing contractors continue to highlight the versatility of cladding made from COLORBOND® steel and ZINCALUME® steel by using it in innovative ways that have “wow factor” stamped all over them.

Steel Edge aims to salute innovation with steel wherever we find it.

The example at right is a Victorian family's forest retreat, at Kyneton, 100 kilometres from Melbourne.

Architect Jesse Judd, builder Wayne Campbell of Camson Homes, structural engineer Perret Simpson, roofing contractor Cressy Plumbing and steel fabricator Shelford Engineering combined to create a stylish dwelling with walls and roof clad in COLORBOND® steel rollformed in Lysaght Custom Orb® and Lysaght Longline 305® profiles in the colour Night Sky®.

If you know of examples that highlight the almost limitless possibilities of adding style with COLORBOND® steel and ZINCALUME® steel email the details to adrian.begg@bluescopesteel.com



Steel's versatile cladding solution

An architect designed farmhouse (pictured) in a bushland setting on Victoria's Mornington Peninsula demonstrates a seldom used combination of steel cladding.

New Sydney architectural firm Noxon Giffen suggested steel cladding as part response to the clients' wish for a low maintenance home – a big issue for a busy farming family.

A steel cladding solution also suited the home's location in a bushfire prone area.

The house features a roof clad in Slate Grey COLORBOND® steel rollformed in LYSAGHT CUSTOM ORB® profile, but architect Justin Noxon specified LYSAGHT MINI ORB® profile in Slate Grey COLORBOND® steel for the external walls.

“We selected LYSAGHT MINI ORB® for the external wall cladding because we like the elegance and delicacy of the smaller profile,” says Justin. “It's a durable and affordable material that is evocative of a rural building, and it's a product with appropriate technical backup.



“The house had to be rural in essence – evocative of a mountain hut, whilst being functional for a young farming family.

“It needed to be practical, durable and responsive to the environment.”

Local Mornington Peninsula building firm, Everclear Constructions, was contracted to

build the Main Ridge farm house.

Everclear Constructions director Bernie Everett says that the LYSAGHT® roofing and walling products worked well for the project. “LYSAGHT MINI ORB® is a slightly more unusual profile and it's virtually maintenance free,” he says.

“We generally prefer to use LYSAGHT® products, due to their superior quality,” he adds. “Installation was fantastic – it goes on very easily. We've done quite a bit of work using CUSTOM ORB® wall cladding, and the MINI ORB® performed just as well. The end result looks great.”

Justin Noxon agrees. “We are very happy with the result,” he says. “The project was built on time and under budget.

The builders were great – construction was quick and efficient. A key factor was the simple design approach and the selection of the right materials for the project – in this case, it was simple, long-lasting materials that were easy to use and which gave the client the desired result.”



Members of the Solid Block Painting Team at Chullora Service Centre and (below right) one of the doors produced from COLORGRAIN® Designer steel in the Dominican Republic.

Doors opening in the Caribbean

A collaborative effort involving BlueScope Steel staff in Miami and Sydney could soon lead to a customer in the Caribbean making a breakthrough entry into the American market.

"This is already a success story for the customer, Everlast-Doors S.A of the Dominican Republic," said BlueScope Steel (Acting Manager Caribbean & Latin America) Dorgival Alencar from Miami.

"We began supplying COLORBOND® steel to Everlast in the colour Off White in 1999 for

their local steel door manufacturing market.

"In 2001 we introduced our COLORGRAIN® Designer steel colours to Everlast-Doors and they initially showed interest in trying the colour Sarawak Red.

"Daniel Wyatt, the BlueScope Steel Caribbean & Latin America Manager at the time discovered that the customer was actually looking for a colour to reproduce or imitate mahogany colour.

"In the Dominican Republic the native word for Mahogany is CAOBA and this colour is very popular." BlueScope Steel's Miami office passed on the client's challenge to the Solid Block Painting Team at the Chullora Service Centre in Sydney and a serious development program got under way.

The development and acceptance program was completed in 2004 and a trial shipment of COLORGRAIN® Designer steel in the colour Caoba Dawn™ has already met with the approval of Everlast-Doors and its customers.

A second, larger order is under production for February 2005 shipment to the Dominican Republic, with future consumption estimated at 600-1000 mt per month once the new factory is fully operational.

The Dominican Republic has been one of the Caribbean's economic success stories in recent years.

Currently Everlast-Doors is servicing only its domestic market, but also has a new production facility under construction in a tax and duty free zone in Montecristi, Dominican Republic.

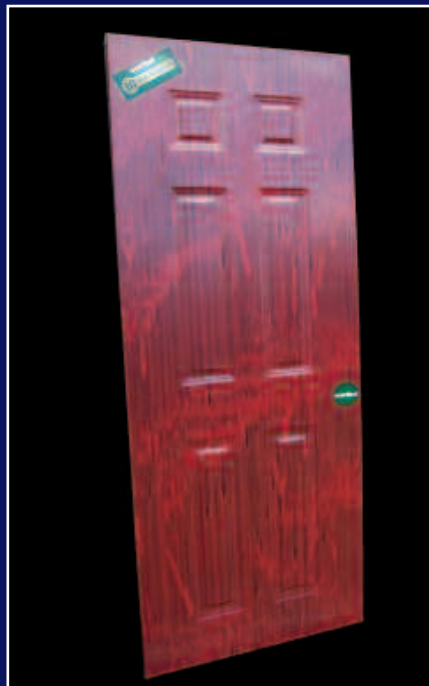
The new plant will increase production from 4,000 to approximately 20,000 to 25,000 doors per month.

Along with the new factory Everlast is building a new retail and distribution centre in Santiago, Dominican Republic to cater for domestic sales.

The initial focus will be on fully servicing the domestic market, but the company aims to target the U.S market once operational capacity and product quality is proven.

COLORGRAIN® Designer steel is an exciting new prepainted steel development that reinforces BlueScope Steel's leadership in steel coating technology.

A ZINCALUME® steel substrate is coated with a solid paint process that combines up to four colours, to produce a unique patterned and textured finish.



**BLUESCOPE
STEEL**

1800 800 789

This number is for callers within Australia only. Callers in other countries should refer to our web site for the contact number of their nearest BlueScope Steel Limited office.
www.bluescopesteel.com

Steel Edge #17 FEBRUARY 2005



9 320075 042066

Published by BlueScope Steel Limited

BlueScope is a trademark of BlueScope Steel Limited.