

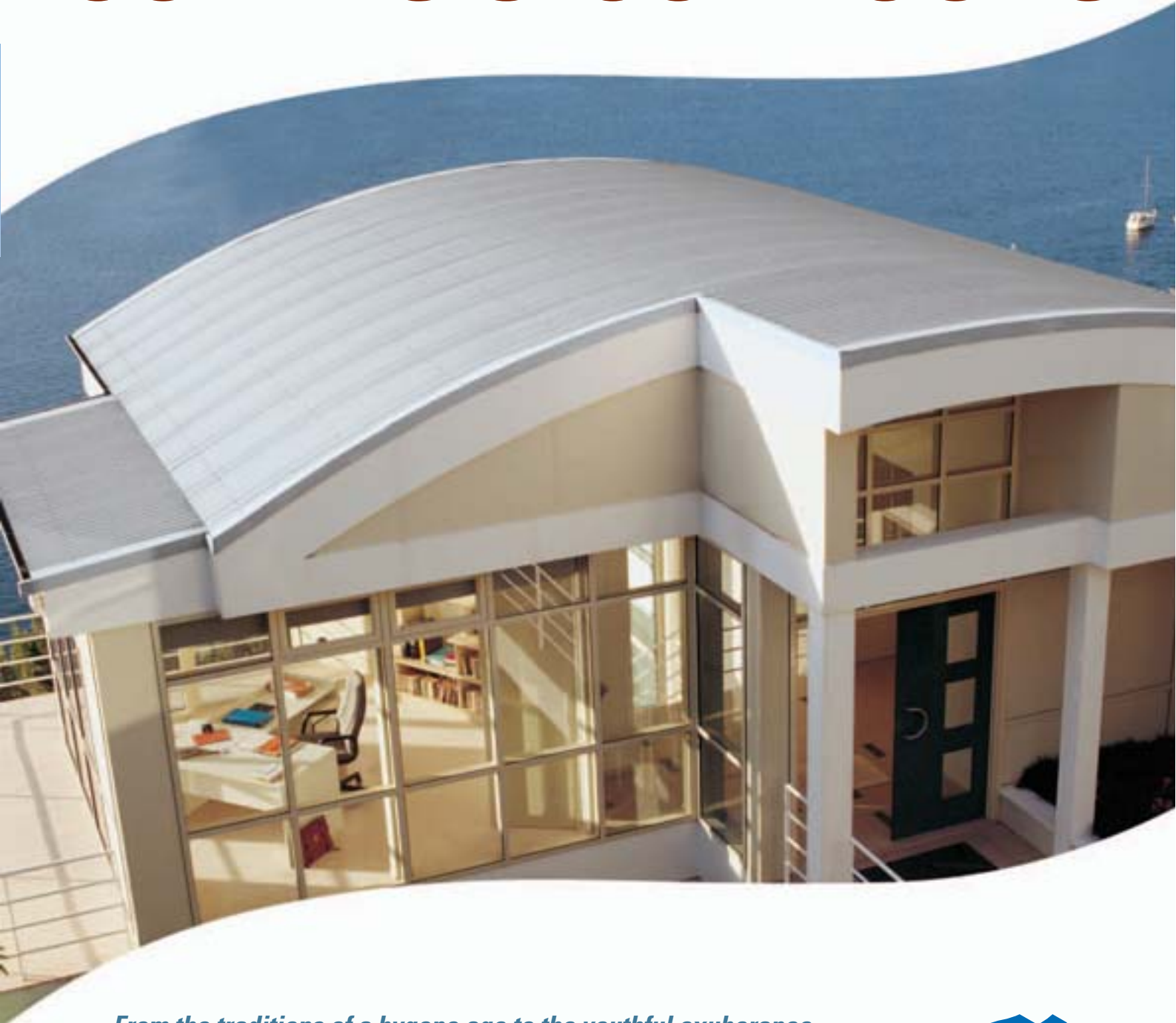
Colorbond®

Zincalume®

Made Only By BlueScope Steel

BEND IT... SHAPE IT ANY WAY YOU WANT IT...

CURVES & CONTOURS



From the traditions of a bygone age to the youthful exuberance of contemporary design, curved steel roofing is both the history and the future of Australian architecture.





*From the traditional bullnose verandah to the soft sweeping curves of today's innovative designs, curved roofing made from **COLORBOND® steel** or **ZINCALUME® steel** is designed to make an impression that really lasts.*

DESIGN

FLEXIBILITY

BULL NOSE



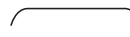
REVERSE CURVE



CRANKED RIDGE



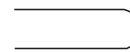
DOUBLE CURVE



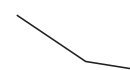
CRANKED DOUBLE CURVE



AWNING



TRANSITION



180° DOUBLE VAULT



OLD GOTHIC



CONCAVE



CONVEX



World leading steel technology

COLORBOND® and ZINCALUME® steel are two of the most advanced roofing materials in the world.

All standard COLORBOND® steel product starts with a ZINCALUME® steel base for outstanding anti-corrosion performance and durability. Next a conversion layer is chemically applied to enhance coating adhesion. Then a primer is baked onto the surface. Finally a durable exterior grade top coat is baked on in one of a large range of designer COLORBOND® steel colours.

Newer for longer

COLORBOND® steel continues to set new performance benchmarks.

The latest enhancement is an advanced Super Polyester pre-painted coating technology that is proven, by extensive exposure testing, to help keep your roof looking newer for longer.

Award winning designs

Year after year, curved steel roofing regularly features in architectural award winning housing and commercial designs. COLORBOND® and ZINCALUME® steel's versatility is renowned. By combining lightweight with strength, steel provides excellent flexibility in maximising floor plan designs. Its clean uncluttered lines give building designers the means to create clearly defined and attractive structures. Over the last decade structures designed with curved roofing have developed a unique affinity with Australia's coastal and natural environment not only in complementing the look of the landscape but also in creating light, airy and spacious living environments for its inhabitants.





UNIQUE

BEND ME SHAPE ME

Durability backed by BlueScope Steel

Curved roofing made from COLORBOND® steel resists chipping, peeling and cracking. It is also non combustible, termite resistant and weather tight, helping to protect the structure from the harsh Australian environment. In fact BlueScope Steel has monitored the performance of its steel for decades using exposure testing sites across a wide range of Australian conditions.

On top of all this BlueScope Steel offers a warranty of up to 30 years* from the date of installation for a steel roof against perforation by weathering in the natural environment. It's hard to go past COLORBOND® and ZINCALUME® steel.

Two approaches to achieving a curved roof

When designing a curved steel roof there are two different methods of achieving a curved roof design – Sprung curved or Factory pre-formed.

Sprung curved

A sprung curved roof can be concave or convex, a combination of concave and convex, or a combination of straight and curved as long as it's within the practical limitations of the steel.

Sprung curved roofing is the process of free forming the roof sheets over the contours of the roof frames, progressively fixing the individual sheets to the battens (or purlins). The finished curved form being totally dependent on the correct alignment of the batten fixing points of the roof framing – much like stretching modern camping tents over the correctly positioned tent frame struts.



BlueScope Steel's exposure site at Bellambi's Point, New South Wales.





The main advantage of sprung curved roofs is that standard corrugated steel sheets made from COLORBOND® and ZINCALUME® steel can be used – delivered to the building site in straight flat sheets. Consequently sprung curved steel roof sheeting in this regard is no more costly. In designing a sprung curved roof it is important to work within the curving range of the steel. For standard corrugated sheeting made from COLORBOND® and ZINCALUME® steel, a concave curve must have a radius of no lower than 12m and a convex roof a radius of no lower than 10m.

As a result of these design parameters the sprung curved technique lends itself to soft sweeping curves.

For tighter convex or concave radii, sprung curving cannot be used, rather, factory pre-formed curved corrugated sheeting must be used. It is important to note that curved roofs do require a different approach to roof frame construction than that of normal pitched roofs and that any extra cost differential can be minimised through having correct information at the design stage.

Several steel roofing suppliers have produced comprehensive guides to installation of curved roofs covering various aspects of installation and design principles. There are also other roof deck profiles, than the standard corrugated shape, which have different curving abilities – steel roofing suppliers will also be able to assist in providing this information.

Factory pre-formed curved roofing

Sometimes called “machine rolled” roofing, factory pre-formed roofing is necessary for convex and concave curves which are tighter than what can be achieved with sprung curving. The factory pre-forming process involves passing individual sheets through a set of curving rollers several times, adjusting the rollers with each pass to tighten the radius until the desired curve is achieved. This process allows the creation of very tight curves as required by bullnose verandahs and cranked ridging. Using this process even a full circle can be created. Numerous steel roofing suppliers offer this service as do steel water tank fabricators. Not surprisingly individuality comes at a cost with some additional charges likely for the pre-forming process.



BEND ME
SHAPE ME



Colorbond® Zinalume®



This simple checklist is your guarantee of the superior BlueScope Steel difference:

- Made only by BlueScope Steel and tested for Australian conditions
- Meets Australian building standards
- Product performance is field-tested
- Supported by a BlueScope Steel warranty*

To make sure your product is manufactured from steel made by BlueScope Steel, look for the COLORBOND® steel brand.



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*Warranty available on application. For full terms and conditions and to determine the eligibility of your roof see www.colorbond.com or call 1800 022 999.

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COLOUR CHOICES



HI-TECH PRODUCTION



DURABILITY



DESIGN FLEXIBILITY



ENVIRONMENTALLY FRIENDLY



THERMAL EFFICIENCY



WARRANTY



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For further information please phone 1800 022 999 or visit www.colorbond.com