# **ENDUROFRAME®** building system

The smart, simple solution to house framing

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#### The smart, simple solution to house framing

The ENDUROFRAME® building system can be used to design, detail and manufacture steel frames for both the residential and light commercial markets.

The ENDUROFRAME® building system has been designed according to the following Australian Standards:



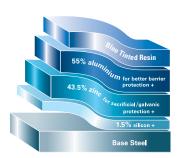
- AS/NZS 4600:2005 Cold formed steel structures
- AS4055:2006 Wind Loads for Housing
- AS/ NSZ1170:2002 Structural Design Actions
- NASH Standard Residential and Low rise Steel Framing Part 1: Design Criteria 2005
- TRUECORE® steel complies with AS1397:2011
- Building Code of Australia (BCA) 2012

All test data is based on testing at BlueScope Steel's NATA-registered materials science laboratory.

The ENDUROFRAME® building system, incorporates the ENDUROTRUSS® and ENDUROWALL® framing system, uses high tensile TRUECORE® steel to produce lightweight and 100% termite proof steel house frames that have been designed with the builder in mind.

The properties of TRUECORE® steel do not vary. This means you do not need to worry about quality, performance or inconsistency in the raw materials - it's built right into system.

#### The secret behind the superior corrosion performance of TRUCORE® steel is the coating:



STRAIGHT AND TRUE	TRUECORE® steel will not twist, shrink or warp, reducing the chance of cracked cornices, bowed internal walls, jamming doors and sagging and wavy rooflines.
STRENGTH AND DURABILITY	The unique zinc/aluminium coating ensuring corrosion protection for long term. It is a strong and durable yet light weight material with a minimum tensile strength of G550.
TERMITE PROOF	Frames made from TRUECORE® steel are 100% termite proof.
EFFICIENCIES AND COST SAVINGS	TRUECORE® steel is quick to erect, which means less time and less labor required.
HIGH TEMPERATURE RESISTANCE	TRUECORE® steel is non-combustible and reduces the risk of fire spreading.
USING ZINCALUME® STEEL TECHNOLOGY	TRUECORE® steel provides with the assurance of a building material that is specifically developed for structural performance.



## **ENDUROFRAME®** building system

#### How it works

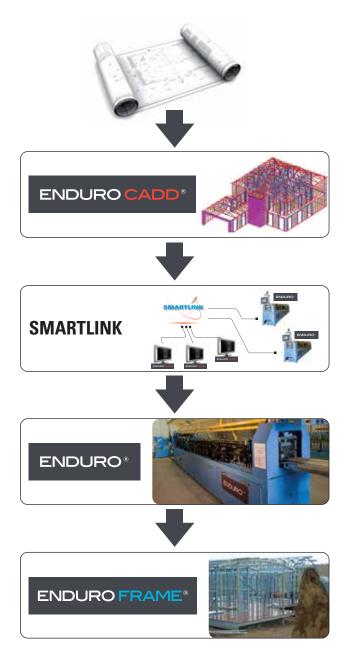
The ENDUROFRAME® building system is a complete steel framing system that you and your clients can trust. The system incorporates the world class ENDUROCADD® software system, the high speed ENDURO® rollformer, SMARTLINK scheduling system and excellent ENDUROWALL® and ENDUROTRUSS® framing system.

The ENDUROCADD® software system is the core of the ENDUROFRAME® building system incorporating over 20 years of light gauge steel research and development, and construction feedback from thousands of projects.

SMARTLINK is the link between the ENDUROCADD® software system and the ENDURO® rollformer. SMARTLINK schedules orders, optimising production and fabrication schedules.

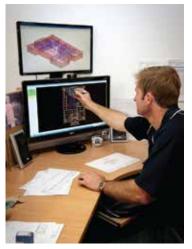
The ENDURO® rollformer is a high speed solution for manufacturing precision house frames. It is able to manufacture all the sections required for a house frame with high speed production.

The ENDUROFRAME® building system which incorporate ENDUROWALL® and ENDUROTRUSS® framing system is a cost competitive, easy to install building system that is self-certified for non-cyclonic regions and includes all brackets and accessories required for a complete housing solution.





## **ENDUROCADD®** software system



Key to the ENDUROFRAME® building system is the sophisticated ENDUROCADD® software system.

The ENDUROCADD® software system is a brilliant computer package developed and enhanced by BlueScope Steel over the past 20 years and used successfully in thousands of homes around the world.

The ENDUROCADD® software system is easy to use - no specialist CAD skills are required. All that's needed is the building skills of the user.

The ENDUROCADD® software system creates strong, reliable truss designs which are self-certified by the software for non-cyclonic regions.

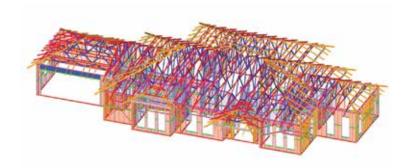
Structural engineering sign off is not required by certified users as the ENDUROCADD® software system is the only steel framing software

package to be entirely self-certified and audited in accordance with the ABCB Protocol for Structural Software.

The ENDUROCADD® software system and associated design manuals are based on hundreds of hours of testing to confirm actual performance — not just theory. The result is a more efficient system you can trust.

The ENDUROCADD® software system integrates with SMARTLINK manufacturing software enabling shop floor sorting, scheduling, linking, branding and display of components and assemblies.





#### **ENDURO®** rollformer

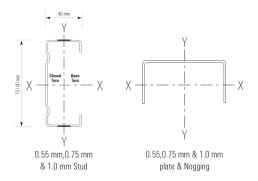
The ENDURO® rollformer is an all-in-one rollformer, producing all steel sections required for trusses and wall frames. This saves you space on your factory floor and reduces manufacturing complexity.

The ENDURO® rollfomer comes in two sizes: 75mm and 90mm.

Manufacturing using the ENDURO® rollformer is fast and simple as the rollformer has been specially designed for high speed rollforming and punching. The Quality Control procedures take the guess work out of operation. It's not just a machine — it is a complete manufacturing system.



Two sections are manufactured — a ribbed C-section giving strength to trusses and studs and a U-section for nogging and plate. There is also an optional L-profile for ceilings. The ENDURO® rollformer will also manufacture many of the brackets required for the ENDUROFRAME® building system.



Ribbed C-section and U-section





#### **ENDUROTRUSS®** framing system

#### The ultimate roof framing solution

The ENDUROTRUSS® framing system is your opportunity to gain the competitive edge in roof construction – with added peace of mind.

The ENDUROTRUSS® framing system is designed similar to timber trusses so there is little re-skilling required to detail or install, and standard timber truss brackets are used. It is hassle free and competitive system delivering a superb job without the need for specialist "steel skilled" site labour.

The key feature of the ENDUROTRUSS® framing system is that it's entirely self-jigging with fixing frame from one side only. It uses a combination of industry standard timber frame bracketry and brackets made on the ENDURO® rollformer, all tested by our NATA accredited laboratory

The ENDUROTRUSS® framing system provides options for back to back or in-plane trusses. This increases the speed of truss production and reduced the stack volume for trusses designed at 600mm centers.

By using the ENDUROTRUSS® framing system you benefit from:-

- Fully engineered and certified, lightweight steel roof framing
- Incorporates a wide range of truss designs making it easy to design all types of houses.
- Accurate dimensions
- Factory assembled or site assembly when flat pack is used.
- Fast & easy site assembly
- Minimum storage space
- Assembly is in its strong axis with a vertical facing web.





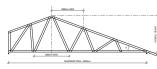
Mansard Truss



**Cantilever Truss** 



**Bell Truss** 



Cut Off Truss



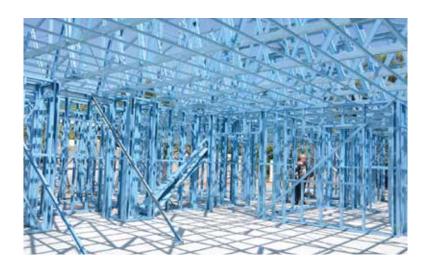
Scissor Truss

## **ENDUROWALL®** framing system

#### The smart walling system

The ENDUROWALL® framing system is a lightweight wall framing system that has been specifically designed with follow on trades in mind.

The inclusion of trussed headers makes the ENDUROWALL® framing system an efficient wall framing system.





The ENDUROWALL® framing system is designed with follow on trades in mind

Pre-punched holes and recessed dimples in the ENDUROWALL® framing system act as locators for easy assembly and ensure a flush finish. Multiple service holes mean that services can be run without the need to drill holes. Plasterboard is easily attached to the ENDUROWALL® framing system.





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This brochure supersedes all previous version.