

# LiteSteel® beam in Application



Residential Sub-Floors



## LiteSteel beam – First choice in Residential Sub-Floors.

LiteSteel beam (LSB) with AZ+™ corrosion protection coating offers superior structural performance in residential sub-floor construction.

The long span and light weight capability of LSB makes it the perfect choice for both sloping and flat sites.

The innovative LSB flooring system gives builders the benefits of reduced installation time, fewer trades or sub-contractors, and it delivers a brilliant looking and superior structural platform to stand the walls.

### 40% lighter.

LSB is an impressive 40% lighter, on average, than the equivalent hot rolled structural beam. It can be generally lifted and positioned in place without the need for a crane. LSB beams are also lighter than the equivalent LVL timber beam.



### Easy connections.

Steel-Max Stump Tops make post to bearer connections easy with adjustable height and Tek screw fixing, getting a level is fast and simple.

Bases also screw to the post ready for setting in concrete. By using Steel-Max Stump Tops - offsite steel fabrication can be reduced and often, totally eliminated.

All joist to bearer connections are Tek-screw with dedicated brackets that provide connection solutions for both in-plane and joist on bearer.

The Pryda LSB60 and LSB75 joist connectors provide high restraint blocking performance, preventing rotation.

Bracing is secured with a 16mm rod solution to cover the long spans between the posts with the ease of fast fix Tek screw mounts.

### Longer spans, less stumps, less time.

Whether you're building on sloping or flat sites, LSB can deliver up to 5 metres clear span on floor bearers and 6 metres on floor joists – giving you up to 25% fewer posts and holes.

Less posts on-site offers builder's significant advantages:

- Less holes and site excavation
- Less concrete, which can be up to one cubic metre per hole
- Less post to bearer connections
- Less floor bearers
- Less construction time

### Floor plan design conversion and technical support.

LiteSteel Technologies has a network of state based Customer Support Engineers to provide you with the latest technical advice and support.

Our engineers also offer a design conversion service. Just send us your floor plans and we will deliver a full structural sub-floor design solution, complete with take-off and full parts break down. Just part of our service!

For a free floor design conversion, technical assistance or further product information call 1300 789 572 or visit [www.litesteel.com.au](http://www.litesteel.com.au)





**Visit our website**

[www.litesteelbeam.com.au](http://www.litesteelbeam.com.au)

### Easy to work on-site with industry standard tools.

You can cut, nail, drill and screw LSB on-site using the same professional power tools as timber. Just follow our installation and fixing guide recommendations for saw blades, nails and screws and you'll be building faster than ever.

### Flooring – Screw it or nail it.

Whether you're fixing timber floor sheet, fibre cement, Hebel Powerfloor™ or making a feature of native timber decking – LSB works with both pneumatic nailing and self drilling screws. The choice is yours.

### Standard accessories.



Contact us to find out more.



### Nail and screw fixings.



### Tools and consumables.

### Weigh up LSB, then weigh up your total installed costs.

Weigh up the savings in posts, concrete, on-site works and the reduction in actual building time – then compare the installed cost savings to your bottom line.

You'll not only appreciate the difference, but experience a superior structural solution.





**FREE**  
 LIMITED OFFER  
 RESIDENTIAL  
 FLOOR  
 STRUCTURAL  
 DESIGN SERVICE  
 1300 789 572

## LSB AZ+ product features.

LSB bearers and joists in residential sub-floors don't shrink, warp, rot or rust. Our manufacturing tolerances are to the highest standards, so you can be confident that LSB is always straight, making it easy to build with – the job comes in square first time. And because the AZ+ coating offers new levels of corrosion protection against red rust formation than standard galvanised coating, you'll experience a new level of product durability. But best of all, because it's steel, LSB gives you total peace of mind against any structural damage from termites. Now that's impressive.

## LSB AZ+ Corrosion Protection Brilliance.

LiteSteel beam gives you the added peace of mind of the world's best anti-corrosion system. AZ+ is a brilliant aluminium/zinc alloy that provides more than double the atmospheric corrosion protection of ordinary zinc coating of the same mass. AZ+ takes corrosion protection against the formation of red rust to new levels; a massive advantage when you're building in Australia's harsh coastal environments.

The AZ+ alloy contains 55% aluminium and 45% zinc. The aluminium provides excellent durability while the sacrificial protection of zinc helps prevent red rust formation on exposed surfaces. As a corrosion barrier, AZ+ is effective for up to 50 years.



Corrosion  
 Protection  
 Brilliance.  
 AZ+

## Comparison and Suitability of Protective Coatings

Coating	Moderate Environment		Severe Environment	
	More than 1 km from breaking surf, or more than 100 m from salt water not subject to breaking surf, or non-heavy industrial areas		Within 1 km from breaking surf, or within 100 m from salt water not subject to breaking surf, or heavy industrial areas	
	Internal	External	Internal	External
LSB AZ+	✓	✓	✓	Paint Top Coat Required
Hot Dip Galvanised (post manufacture)	✓	✓	✓	Suppliers Recommendation
Z200 (100 g/m2 per side)	✓	Paint Top Coat Required	Paint Top Coat Required	×
Prime Painted	✓	Paint Top Coat Required	Paint Top Coat Required	×

- Notes:
1. "✓" means that the protective coating satisfies the requirements of Table 3.4.4.2 of the BCA Volume Two.
  2. "Paint Top Coat Required" means that to satisfy the requirements of Table 3.4.4.2 of the BCA Volume Two, further top coat protective treatment is required.
  3. "Prime Painted" refers to standard water based EnviroKote paint primer.
  4. The comparative performance of the AZ+ coating with the other coatings is obtained from the following references:
    1. Smorgon Steel Reinforcing, Sunshine Laboratory (2007), "Test Report No. TR07-01 (including NATA Endorsed Test Certificate 06N001)", Victoria, Australia, 10 January 2007.
    2. Townsend, H. E. and Borzillo, A. R. (1997), "55% Al-Zn Alloy Coated Steel Sheet Steel: The Versatile, Long Lasting Building Panel Steel", 5th International Conference on Zinc Coated Steel Sheet, Birmingham, England, 12-13 June 1997.

**LSB**   
 LiteSteelbeam

With fewer stumps  
and longer spans,  
LiteSteel® beam is brilliant  
for residential floors.

Cut it.



Drill it.



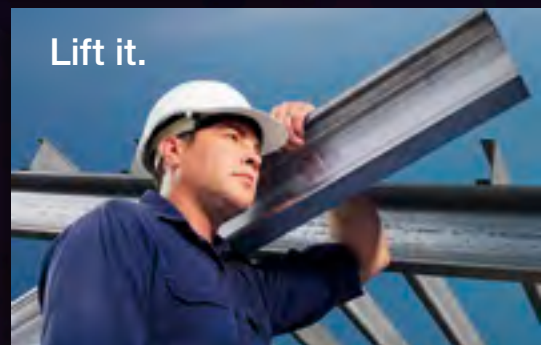
Screw it.



Nail it.



Lift it.



Call 1300 789 572  
for LSB product support

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The performance of the LSB AZ+ coating against corrosion only applies to the undamaged coating and not to:

- ✚ Unprotected cut surfaces (these areas require touch up with zinc-rich paint to maintain protection);
- ✚ Scratched or damaged product;
- ✚ Product in contact with non-compatible alloys, treated timber or other non-compatible materials.

Areas not subject to washing, with a potential for build-up of dirt and/or which are constantly moist, will exhibit considerably higher corrosion rates. Refer to the Australian corrosion standard for further information of potential micro-climates and the affect on corrosion rates.

Residential floor structural design offer includes only design of joists, bearers and connections within the specifications as published in the Residential Construction Manual for LiteSteel beam.

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**Product availability and other information** – Always ensure that you are using current information on the LSB product range. The **current version date** of this and other LSB publications can be obtained by referring to [www.litesteelbeam.com.au](http://www.litesteelbeam.com.au) or by contacting LiteSteel Technologies on **1300 789 572**.

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