

THE VERSATILE SCAFFOLD PLANK

ENGINEERED
BUILDING
PRODUCTS

futurebuild

LVL
SCAFFOLD
PLANKS

Z-PLANK

z-Plank® is a strong yet lightweight Laminated Veneer Lumber scaffold plank. The structural uniformity of LVL combined with the strict quality control of all processes of manufacture ensures z-Plank is safe and reliable scaffold planking.

Features include:

- Individually proof tested
- Tough and long lasting
- Lightweight and versatile
- 100% renewable wood resources



z-Plank Specification

z-Plank is structural Laminated Veneer Lumber (LVL) manufactured in accordance with AS/NZS 4357:1995 'Structural Laminated Veneer Lumber' and is Product Certified by the Plywood Association of Australasia to equal or exceed the performance claims specified in this brochure.

Size

Thickness – 1.5” nominal
Widths – 9.25”, 9.5” and 11.75”

Approximate Weight (lbs/ft)

9.25” – 3.9
9.5” – 4.0
11.75” – 4.9

Veneer

Thickness 3.2 mm (Nominal)
Species Radiata pine
Joints Scarf

Moisture Content

6%-18%

Dimensional Tolerances

Length -0, + 3/8”
Width -0, + 1/16”

Adhesive

Phenolic

Finish

Unsanded faces, sawn edges
Arrises removed by chamfering
Ends painted burnt orange to inhibit moisture uptake

Branding

Each plank is permanently embossed along each edge with the following information:

1. z-Plank – *for identification*
2. 2.15 E RC – *indication of premium grade scaffold plank*
3. OSHA – *indicating design is per OSHA requirements*
4. Date of Proof Loading
5. Custom Embossing

Each plank is permanently stamped on the face of the plank with the following information:

1. AS/NZS 4357 – *LVL manufacturing standard*
2. PAA JAS-ANZ – *The Plywood Association of Australasia Product Certification marks*
3. WBG Technologies – *Proof Loading Operation*
4. Scaffold Plank Premium LVL

Optional edge painting is also available in blue, yellow, orange, green and red.

Quality Control and Product Certification

z-Plank is manufactured in a quality controlled process as required by ANSI A10.8. The compliance and process based quality control requirements is third party audited by the Plywood Association of Australasia (PAA). The audits, end product testing and market inspection are used as the basis for Product Certification by the PAA as a JAS-ANZ accredited Product Certification body. JAS-ANZ stands for the government established “Joint Accreditation System of Australia and New Zealand” which exists as the peak organization for accreditation of Product Certification bodies. The PAA’s Quality Control Program has been a registered Quality Management System under ISO-9002.



Applicable Design Standards

- AS/NZS 4357 : 1995 - Structural laminated veneer lumber.
- ANSI A10.8 - 2001, Safety Requirements for Scaffolding.
- OSHA, Occupational Safety & Health Administration, U.S. Dept. Of Labour, Regulations (Standards - 29 CFR) Scaffold Specifications - 1926 Subpart L, Appendix A.
- BS 5973 : 1993 Code of practice for access and working scaffolds and special scaffold structures in steel.
- BS 2482 Specification for timber scaffold boards.

Strength and Stiffness Verification

- 1) LVL is periodically sampled from production and tested for Modulus of Elasticity and Modulus of Rupture in accordance with AS/NZS 4357. In addition,
- 2) Each scaffold plank is proof loaded using the **ProofStep!** Quality Control program and its stiffness measured for verification of strength and stiffness claims.

For use in accordance with OSHA

Maximum spans determined for standardized live loads in accordance with OSHA, Standards 29 CFR 1926.451 and Subpart L, Appendix A.

Table 1 z-Plank Scaffold Plank Span Table

Load Condition	Simple Span Loading Condition		
	Plank Size – Standard 1.5” Nominal Thickness		
	9.25” Width	9.5” Width	11.75” Width
50 psf	10’ – 6”	10’ – 6”	10’ – 6”
75 psf	9’ – 0”	9’ – 0”	9’ – 0”
1-Person	10’ – 6”	10’ – 6”	11’ – 6”
2-Person	8’ – 6”	8’ – 6”	9’ – 0”
3-Person	6’ – 0”	6’ – 0”	7’ – 0”

Notes:

1. Spans are from center to center of scaffold supports.
2. Deflections are limited to L/60 per OSHA requirements.
3. The “Person” load is defined in ANSI A10.8 as a 200-pound person with 50 pounds of equipment.
 - a. The “1-Person” Load is applied at mid-span.
 - b. The “2-Person” Load is applied with each “person” load placed 18” to either side of mid span.
 - c. The “3-Person” Load is applied with a “person” load at mid span, and a “person” load at 18” to either side of mid span.
4. For conditions other than those listed above, contact WBG Technologies or a professional engineer.
5. z-Plank meets all criteria and conditions as prescribed by OSHA and ANSI A10.8 standard.
6. Planks are available in lengths of 8’ to 20’.

Table 2 z-Plank Scaffold Plank Design Capacities

Stiffness Capacity	Moment Capacity
7.26 x 10 ⁶ (in ² -lbs/ft of plank width)	12083 (in-lbs/ft of plank width)

Notes:

1. The design properties are for untreated LVL scaffold planks used under dry conditions. Dry conditions are defined as an environment where the moisture content of the planks will not exceed 16%.
2. The design properties are based on a “flat” or plank orientation.
3. If the moisture content of the planks is expected to exceed 16%, the Moment Capacity shall be multiplied by 0.8 for wet use conditions.
4. Fastener values for scaffold planks shall be equivalent to SPF Lumber values.
5. The allowable Moment Capacity was determined in accordance with the ANSI A10.8 subcommittee guidelines Appendix C.



Proof testing process: Before shipment, all z-Planks are proof tested using the unique **ProofStep!** - loading process to verify that each plank meets the design values shown in Table 2.

Care, storage and maintenance

At the time of shipment z-Plank is suitable for use as a scaffold plank based upon meeting strict performance requirements. Care in the use and storage of z-Plank will ensure continued safe performance for maximum service life.

Maintenance, entailing regular inspection and strength testing (if required), is necessary to ensure that planks reaching the end of their service life and no longer safe for use are detected and removed from service.

The following recommendations for care in use, storage and maintenance are provided to assist users to maximize service life while maintaining required levels of safety.

Avoid Damage

z-Plank may be damaged and rendered unsafe by misuse. Some commonly observed examples of misuse that have resulted in reduced service life provide the basis for the following recommendations:

- Do not use planks over spans greater than those recommended by the scaffold designer
- Do not drop z-Plank from excessive heights
- Do not drop heavy materials or jump onto z-Plank
- Do not allow vehicles to drive over z-Plank
- Do not use z-Plank as a saw bench - even shallow saw cuts reduce strength
- Take precautions against slag burns from oxy cutting or welding

z-Plank that has been subjected to any of the above (or other) types of misuse may be damaged and should be removed from service. Note that fractures caused by misuse may not be readily apparent by inspection and testing may be the only means to detect damage.

Chemical Effects

z-Plank will be largely unaffected by exposure to moderate strength acids or alkalis (pH range 2 to 10). Strong acids and alkalis will however attack the naturally occurring lignin which binds wood fibre and, in time, cause a reduction in strength. For planks used in these environments, regular strength testing is recommended.

Decay

Generally, scaffold planks in service and subject to the normal wetting and drying from weather will not remain wet for protracted periods. In these circumstances, decay is not likely.

Typically where planks have decayed, this has resulted from wet planks being stored away closely stacked with little or no ventilation. Any circumstance in which planks remain constantly wet for long periods (months) is likely to result in fungal decay.

Planks that show any evidence of fungal decay (such as mold on the surface) should be removed from service.

Recommendations for storage

Wet planks - Stack on level bearers well clear of the ground with spacers (fillets) between each layer
- Locate stack in a dry, well ventilated area and align fillets with bearers
- A minimum of three bearers/fillets per layer is recommended

Dry planks - Stored under cover - no special requirement
- Stored outside - stack as for wet planks and cover to keep dry

Maintenance

Regular inspection is strongly recommended. Any plank that is subjected to trauma or showing obvious signs of misuse should be removed from service.

Available From:
