

LOAD TESTS IN TILLEY STUD PLANK

Load tests were carried out by Smith Wood Engineering Consultants Ltd to the deflection limitations of NZS 4203: 1992 General Structural Design and Design Loadings for Buildings.

Max. deflection of floor members SPAN/180

The concentrated load was applied in the centre of the span.

The two-point load was applied as span/4.50 from each end support

BASIC DESIGN INFORMATION

1 KN = 101.97 kg.
E = 200000 Mpa

Moment of Inertia

Values of I vary with Load and Span and can be calculated as follows.

Single Point Load I = $\frac{\text{Load} \times \text{Span}^3}{48 E \times \text{deflection}}$ Two Point Load I = $\frac{\text{Load} \times \text{Span}^3}{28.173 E \times \text{deflection}}$

Loads limited by deflection not by allowable distributed load ie. 5.0 kPa.

Span (M)	1.5	2	2.5	3
Deflection (mm)	8	10	14	16
2.5mm Hot Dipped Galvanised				
Concentrated Load (N)	4218	2423	1540	1060
Two Point Load (N)	6327	3865	2413	1655

CUSTOM MANUFACTURING

Talk with us about your project. Our CNC Turret presses and manual C-Frame presses enable a wide range of Stud Plank variations to be custom manufactured to your requirement.



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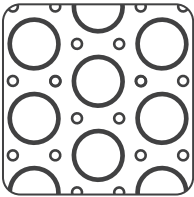
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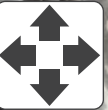
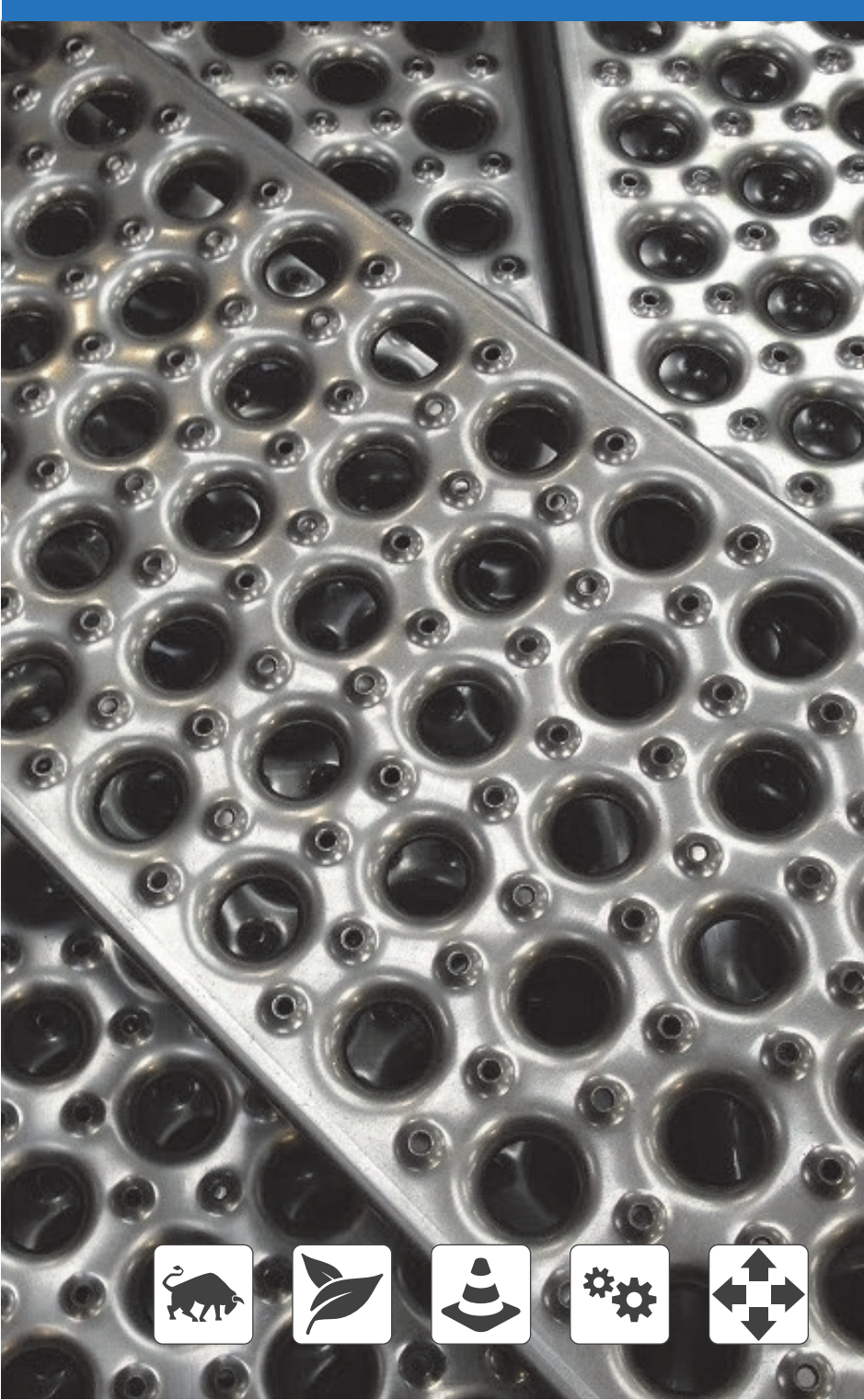
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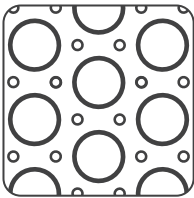
 **Tilley Group Ltd**



TILLEY STUD PLANK
NON-SKID WALKWAY
PLANKING AND STAIR TREADS



tilleygroup.co.nz



TILLEY STUD PLANK

NON-SKID WALKWAY PLANKING AND STAIR TREADS



DON'T SLIP ON SAFETY, HYGIENE AND QUALITY

For industrial, agricultural and architectural applications, Tilley Stud Plank provides superior results where slip resistance is key

The open pattern allows liquids and materials to pass through easily – enhancing traction.



RIGIDITY

Maximum strength for minimum weight with fewer supporting members required.



HYGIENE

Round raised studs and large drainage holes allow for easy flushing away of dirt and material.



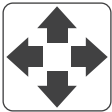
SAFETY

Directional slipping is significantly lessened due to raised holes.



COMFORT

Loads are easily distributed creating a live surface to cushion workers' movements, thereby reducing muscular strain, conserving energy and increasing productivity.



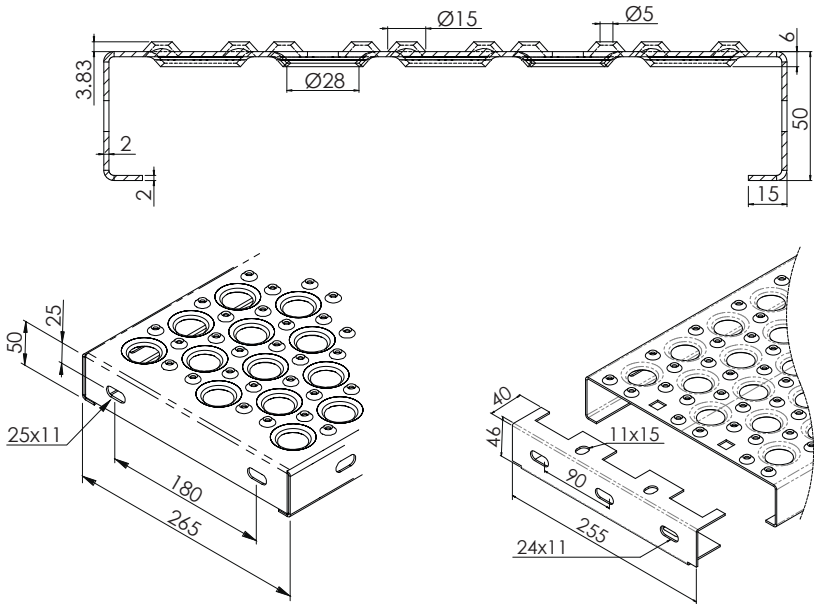
APPLICATION

Tilley Stud Plank and Tilley Stair Treads are designed for use in a diverse range of applications with ease of fitting and functionality. Ideal for outdoor use in parks and seating, steps and bridges. The safety features make the product well suited for sea vessels and factory use. Other applications include industrial look housing, shop fitting and fire escapes.

SPECIFICATIONS

Item	DIMENSION	MS	MSHDG
Planking	265X50X3000X2.5mm	•	•
Stair Treads	265X50X618x2.0mm	•	•
	265X50X737x2.0mm	•	•
	265X50X916x2.0mm	•	•
Stair Treads-with ends	265X50X618x2.0mm	•	•
	265X50X737x2.0mm	•	•
	265X50X916x2.0mm	•	•
End Bracket		•	•
Splice Plate		•	•

Non standard lengths, materials and colours can be manufactured to order.



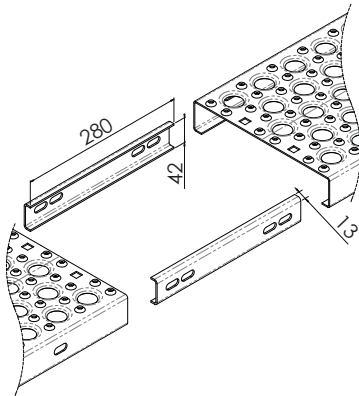
Stair Treads with ends

Feature a folded end for fixing the Stair Tread to stringers.

End Bracket

For end fixing of the Stud Plank eg. Stair tread to stringers. Fixing points are also provided in the underside of the bracket.

End Brackets are manufactured from 2mm Mild Steel.



Splice Plate

For end to end fixing of Stud Planking in a long run situation such as catwalks, access walkways, large decks or floor areas.

Splice Plates and End Brackets are supplied with M10 x20 coach bolts, nuts and washers.

