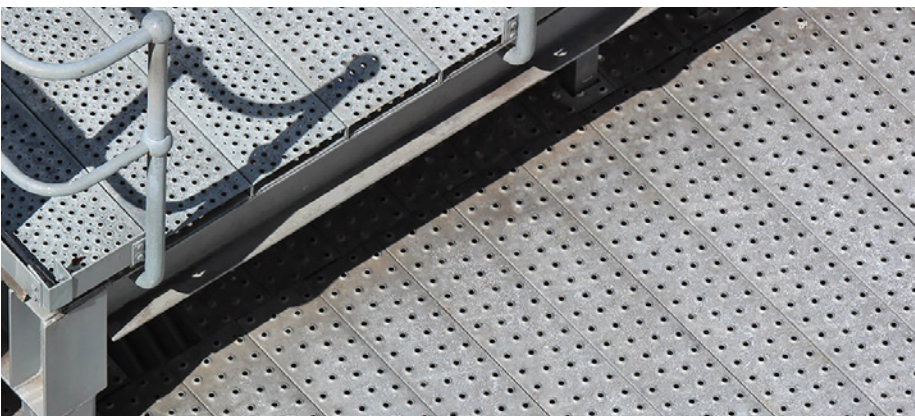
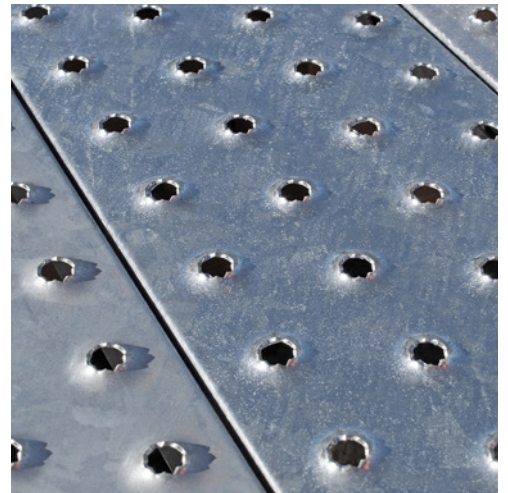
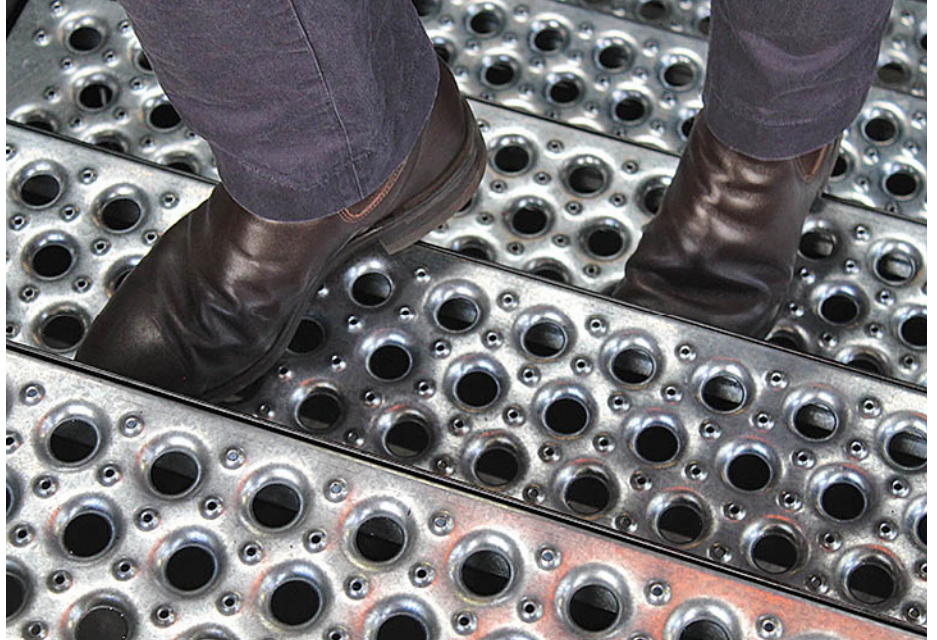
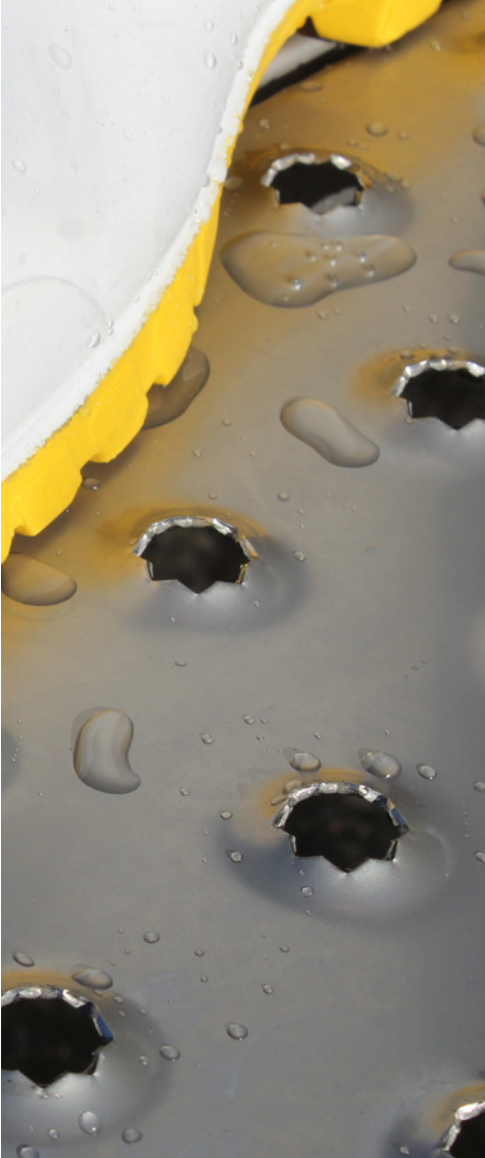


PLANKING & STAIR TREAD SOLUTIONS

TRIED AND TESTED SLIP-RESISTANT OPTIONS FOR SAFER WORK SPACES



TILLEY PLANK

VERSATILE PROVEN NON-SKID SOLUTION



Tilley Non-Skid Planking a proven and versatile non-skid solution for the most demanding of environments.

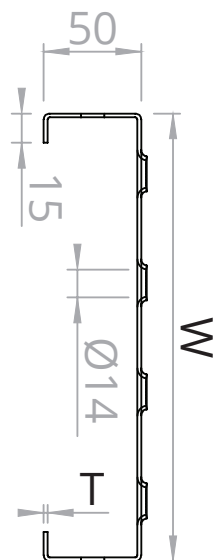
Originally designed and manufactured to meet the stringent health and safety requirements of the meat processing industry, Tilley Plank is now used in a variety of applications. Catwalks, stair treads, mezzanine oil storage platforms, walkways, duckboards, drain covers and loading platforms, are but a few of this product's diverse uses. Tilley Plank is the go-to standard for worker safety for all general use situations.

TILLEY PLANK

Code	W x T	Material	KG/M
TPI230AA	230 x 3.0	ALUMINIUM	2.7
TPI230S	230 x 2.0	MSBLK	5.2
TPI230SG	230 x 2.0	MSHDG	5.4
TPI230SS4	230 x 2.0	SS304	5.6
TPI230SS6	230 x 2.0	SS316	5.6
TPI300AA	300 x 3.0	ALUMINIUM	3.2
TPI300S	300 x 2.5	MSBLK	7.6
TPI300SG	300 x 2.5	MSHDG	8.1
TPI300SS4	300 x 2.0	SS304	6.0
TPI300SS6	300 x 2.0	SS316	6.0
TPR300S	300 x 3.0	MSBLK	9.3
TPR300SG	300 x 3.0	MSHDG	10.2

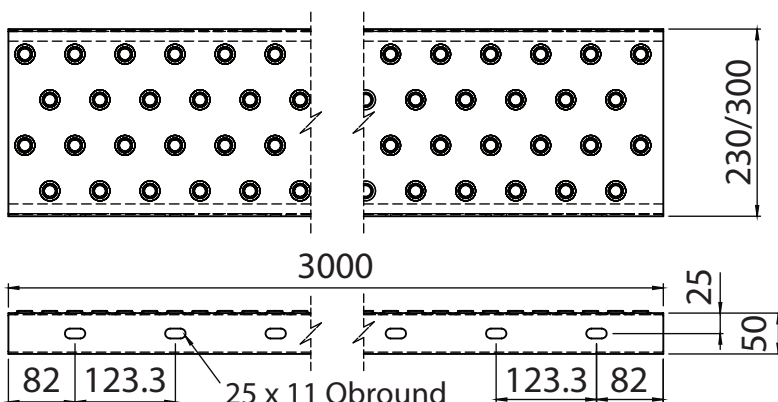
TILLEY STAIR TREAD

Code	W x Length x T	Material
TPS230600S	230 x 600 x 2.0	MSBLK
TPS230600SG	230 x 600 x 2.0	MSHDG
TPS230750S	230 x 750 x 2.0	MSBLK
TPS230750SG	230 x 750 x 2.0	MSHDG
TPS230910S	230 x 910 x 2.0	MSBLK
TPS230910SG	230 x 910 x 2.0	MSHDG
TPS300600S	300 x 600 x 2.5	MSBLK
TPS300600SG	300 x 600 x 2.5	MSHDG
TPS300750S	300 x 750 x 2.5	MSBLK
TPS300750SG	300 x 750 x 2.5	MSHDG
TPS300910S	300 x 910 x 2.5	MSBLK
TPS300910SG	300 x 910 x 2.5	MSHDG



- Plank standard length: 3000mm
- Plank & Stair standard height: 50mm
- Custom solutions available.

- Stair Tread also available in aluminium, ss304 & 316



TILLEY STAR-X PLANK

EXTRA GRIP FOR ENHANCED TRACTION IN CHALLENGING ENVIRONMENTS



Tilley Star-X Planking takes our popular industry leading Plank and enhances it with a star perforation for enhanced slip-resistance and improved foot traction in the most challenging conditions.

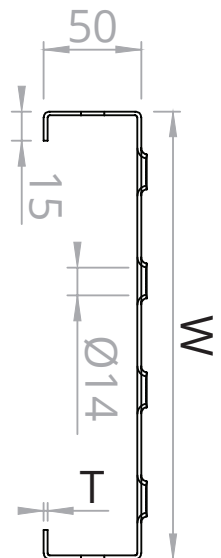
The Star-X was designed to meet the specific challenges faced by industries requiring greater assurance when it comes to keeping workers safe. It is ideal for high-risk industries and applications including elevated production and mezzanine/roof access walkways, high spillage and wash-down zones, loading areas, maintenance platforms, processing plants and the farming industry among many others.

TILLEY STAR-X PLANK

Code	W x T	Material	KG/M
TPI230AA-X	230 x 3.0	ALUMINIUM	2.7
TPI230S-X	230 x 2.0	MSBLK	5.2
TPI230SG-X	230 x 2.0	MSHDG	5.4
TPI230SS4-X	230 x 2.0	SS304	5.6
TPI230SS6-X	230 x 2.0	SS316	5.6
TPI300AA-X	300 x 3.0	ALUMINIUM	3.2
TPI300S-X	300 x 2.5	MSBLK	7.6
TPI300SG-X	300 x 2.5	MSHDG	8.1
TPI300SS4-X	300 x 2.0	SS304	6.0
TPI300SS6-X	300 x 2.0	SS316	6.0
TPR300SG-X	300 x 3.0	MSHDG	10.2

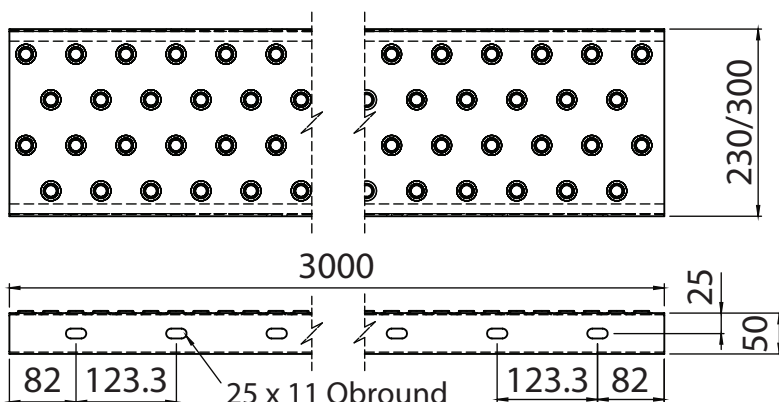
TILLEY STAR-X STAIR TREAD

Code	W x Length x T	Material
TPS230600S-X	230 x 600 x 2.0	MSBLK
TPS230600SG-X	230 x 600 x 2.0	MSHDG
TPS230750S-X	230 x 750 x 2.0	MSBLK
TPS230750SG-X	230 x 750 x 2.0	MSHDG
TPS230910S-X	230 x 910 x 2.0	MSBLK
TPS230910SG-X	230 x 910 x 2.0	MSHDG
TPS300600S-X	300 x 600 x 2.5	MSBLK
TPS300600SG-X	300 x 600 x 2.5	MSHDG
TPS300750S-X	300 x 750 x 2.5	MSBLK
TPS300750SG-X	300 x 750 x 2.5	MSHDG
TPS300910S-X	300 x 910 x 2.5	MSBLK
TPS300910SG-X	300 x 910 x 2.5	MSHDG



- Plank standard length: 3000mm
- Plank & Stair standard height: 50mm
- Custom solutions available.

- Stair Tread also available in aluminium, ss304 & 316



TILLEY STUD PLANK

OPEN PATTERN DESIGN FOR EASY MATERIAL PASS-THROUGH



The Stud Plank was designed to handle situations where larger, thicker material would clog standard slip-resistant offerings, harming their reliability. It overcomes the challenges faced in demanding environments, delivering effective material pass-through without sacrificing grip reliability.

It is perfect for hazardous environments industries and applications including waste management and recycling, the forestry sector, powder/particulate-heavy environments, agricultural applications, the farming industry and any heavy-access sites where mud, rainwater or debris commonly collect.

TILLEY STUD PLANK

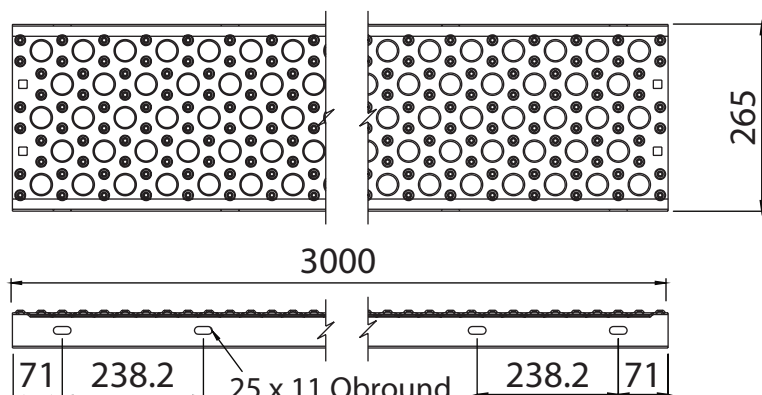
Code	W x T	Material
TSP26520G3	265 x 2.0	PREGALV
TSP26525S3	265 x 2.5	MSBLK
TSP26525SG3	265 x 2.5	MSHDG

- Plank Length: 3000mm

Code	W x T	Material
TSP26520G24	265 x 2.0	PREGALV

- Plank Length: 2400mm

- Plank & Stair standard height: 50mm
- Custom solutions available.



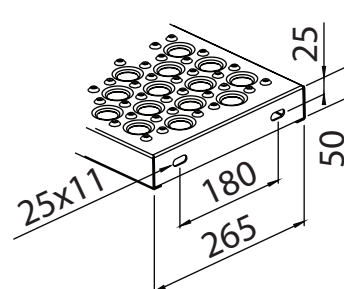
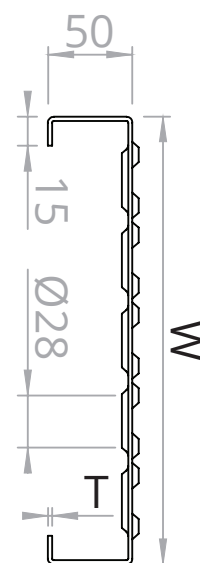
TILLEY STUD STAIR TREAD

Code	W x Length x T	Material
TSPS618SG	265 x 618 x 2.0	MSHDG
TSPS737S	265 x 737 x 2.0	MSBLK
TSPS737SG	265 x 737 x 2.0	MSHDG
TSPS916G	265 x 916 x 2.0	PREGALV
TSPS916SG	265 x 916 x 2.0	MSHDG

TILLEY STUD STAIR TREAD W/ENDS

Code	W x Length x T	Material
TSPS618SGE	265 x 618 x 2.0	MSHDG
TSPS737SGE	265 x 737 x 2.0	MSHDG
TSPS745SGE	265 x 745 x 2.0	MSHDG
TSPS750315SGE	315 x 750 x 2.5	MSHDG

- Stair Tread with ends feature folded ends for fixing to stringers.



DON'T SLIP UP ON HEALTH, SAFETY, HYGIENE AND PRODUCTIVITY



RIGIDITY

Superior design maximises strength, while minimising weight and support requirements.



HYGIENE

Innovative raised studded pattern designs prevent dirt traps, ensuring easy cleaning and maintenance.



SAFETY

Our range of designs provide superior slip resistance in even the most demanding environments.



COMFORT

Loads are easily distributed, cushioning movement. This reduces muscular strain, conserves energy and increases productivity.



CUSTOM SOLUTIONS AVAILABLE

Need a specific plank or stair tread length? Custom dimension or material requirements? Give us a call.

LOAD TESTS: Tilley Plank & Tilley Star-X Plank

MAXIMUM DEFLECTION (mm) ●

Under 2.5kPa Uniformly Distributed Load and 1kN Point Load (whichever is less)

Span	600	900	1200	1500	1800	2100	2400	2700	3000
Steel 230x2	0.4	0.6	1.5	2.9	5.0	8.0	11.9	16.9	25.0
Steel 300x2.5	0.4	0.5	1.1	2.2	3.9	6.1	10.3	16.5	25.2
Steel 300x3	0.3	0.4	0.8	1.7	2.9	4.5	7.6	12.2	18.6
AL 230x3	0.8	1.1	2.7	5.2	9.0	14.4	21.4	30.5	45.1
AL 300x3	0.8	1.1	2.7	5.2	9.0	14.3	24.1	38.6	58.8
SS 230x2	0.6	0.6	1.5	3.0	5.1	8.2	12.2	17.3	25.6
SS 300x2	0.6	0.7	1.6	3.1	5.4	8.6	14.5	23.2	35.4

MAXIMUM SPAN (m)

Simply supported limited to deflection under Span/250

Live Load (kPa)	1.0	1.5	2.0	2.5	3.0	3.5
Steel 230x2	2.1	2.1	2.1	2.1	2.1	2.0
Steel 300x2.5	2.4	2.4	2.4	2.3	2.2	2.0
Steel 300x3	2.8	2.8	2.7	2.5	2.4	2.3
AL 230x3	1.6	1.6	1.6	1.6	1.6	1.6
AL 300x3	1.6	1.6	1.6	1.6	1.6	1.5
SS 230x2	2.1	2.1	2.1	2.1	2.1	2.0
SS 300x2	2.0	2.0	2.0	2.0	1.9	1.8

Key	Deflection > Span/150	Deflection < Span/150	Deflection < Span/200	Deflection < Span/250	Deflection < Span/300	Deflection < Span/350
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● Bold Line: Span/250 Barrier

Point load as per NZS 1170.0:2002 using a maximum deflection of Span/250 with a point load of 1.0kN (floors for operator access and maintenance).

Live Load as per NZS 1657:1992 Fixed Platforms, walkways, stairways and ladders - requires using a minimum superimposed live loading of 2.5kPa uniformly distributed and 1kN point load.

● **Note:** Coloured cells are limited by deflection under 1kN Point Load and Span/250. Non-highlighted cells are limited by deflection under UDL and given span limit.

LOAD TESTS: Tilley Stud Plank

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

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. Maximum 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:

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

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



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CHRISTCHURCH

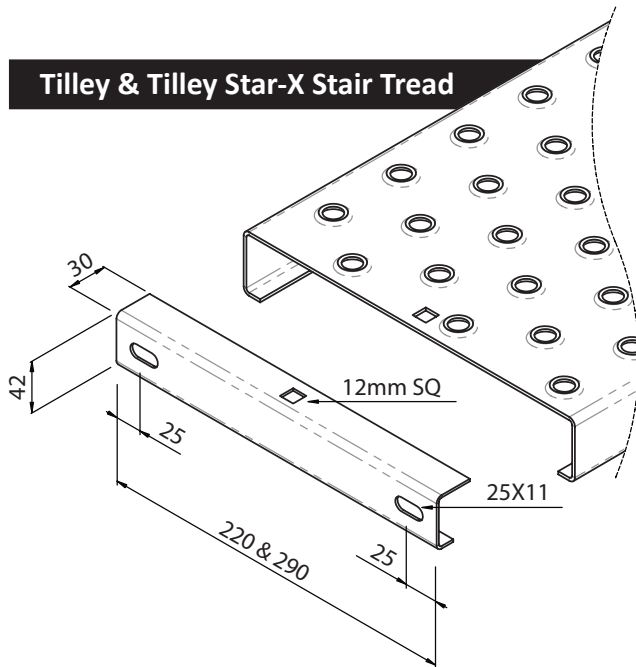
Level 1/306 Port Hills Rd, Hillsborough,
Christchurch 8022, New Zealand

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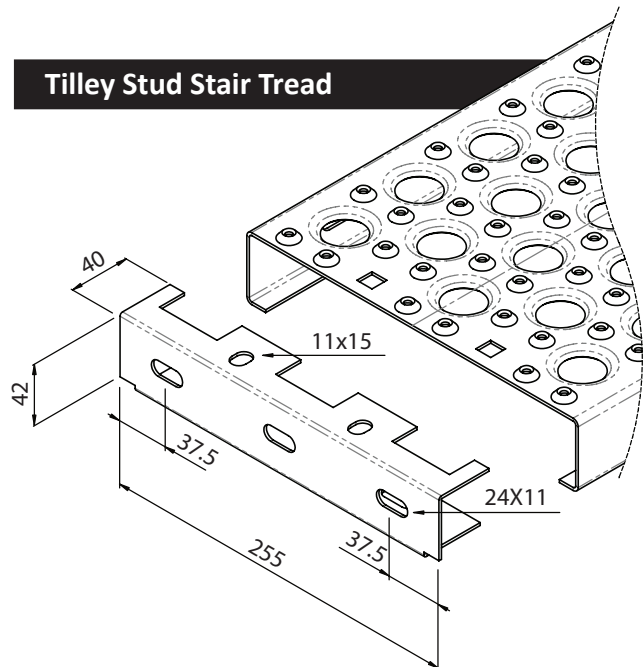
STAIR TREAD END BRACKETS

FOR END FIXING TO STRINGERS

Tilley & Tilley Star-X Stair Tread



Tilley Stud Stair Tread



PLANK SPLICE PLATE

FOR END TO END FIXING OF PLANKS IN LONG RUN SITUATIONS

- Catwalks
- Access Walkways
- Large Decks
- Floor Areas

