

Useful information

All Tri-Fixx self drilling screws are identified by three figures:

12.14 x 48

① ② ③

- ① The first figure refers to the screw gauge.
- ② The second figure refers to the number of threads per inch (TPI).
- ③ The third figure refers to the length of the screw (mm).

Drilling Capacity of Self Drilling screws for Metal

Gauge	Diameter (mm)	Threads per Inch (TPI)	Max. Drilling Capacity (mm)
6	3.5	20	2.3
8	4.2	18	2.5
10	4.8	16	4.5
10	4.8	24	4.5
12	5.5	14	4.5
12	5.5	24	5.3
12 (Series 500)	5.5	24	12.5
14	6.3	10	3.0
14	6.3	20	6.3

As metal properties may vary, the above values should only be used as a guide only.

Mechanical Properties of Self Drilling screws for Metal

Gauge	Threads per Inch (TPI)	Min. Axial Withdrawal Force (kN)	Min. Axial Strength (kN)	Min. Torque for Torsional Strength (Nm)	Single Shear Strength (kN)
10	16	2.5	8.6	6.9	6.2
10	24	2.5	10.0	7.3	6.2
12	14	2.8	11.6	10.9	8.5
12	24	2.8	14.4	11.3	8.5
14	10	3.1	14.9	14.1	9.9
14	20	3.1	18.9	17.6	11.3

Values shown are ultimate loads not recommended working loads. Minimum axial withdrawal force is based on 1.5mm metal thickness (G450-Z350).

Mechanical Properties of Type 17 screws for Timber

Gauge	Threads per Inch (TPI)	Min. Axial Withdrawal Force (kN)	Min. Axial Strength (kN)	Min. Torque for Torsional Strength (Nm)
10	12	2.5	7.5	5.4
12	11	2.8	11.3	9.4
14	10	3.1	15.0	14.1

Values shown are ultimate loads not recommended working loads. Minimum axial withdrawal force is based on F5 seasoned radiata pine.

Recommended Screw-Driving Speeds

Gauge	Speed
Self Drilling Screws for Metal	
6 - 10	2500
12 - 14	1800
Type 17 Screws for Timber	
6 - 14	1000
Bugle Screws for Drywall	
Needle Point	3000 - 4000
Drill Point	2500
Chipboard Screws	
Stitching Screws	2500 - 3000
Thread Forming Screws	800 - 1000