# **PRODUCT DATA**





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## **Bi-Metal Wings Countersunk**

### Metal Wings CSK Self Drilling Screw (SDS) #10-16

### **Applications**

- Timber to metal fixing
- Fences, chipboard, composite panels and timber floors
- 6 ribs under the head enable self embedment into timber
- · Ideal for corrosive conditions

**Material** 



Bi-Metal 304 Stainless

**Finish** 



R1000 Hours Protective Coating

Pullout Values							
Plate (Purlin)	Metal Plate Thickness	¹Mean Load	<sup>2</sup> Characteristic Load	³Working Load			
	(mm)	(N)	(N)	(N)			
G2	0.7	900	750	300			
G2	1.2	1500	1350	550			
G550	1.5	3150	2750	1100			
G450	2.0	4400	4100	1650			
G450	2.5	5950	5550	2200			





Wings assist in producing a clearance hole in timber Wings break off once the screw starts to drill through the metal



Drill Point Test						
Plate (Purlin)	Metal Plate Thickness	Load	Drill Speed	Drill Time	Drill Time	
	(mm)	(kg)	(RPM)	(Max. individual) Seconds	(Max. average) Seconds	
G450	2.0	18	2200	4	3	

Mechanical Properties						
Torsional <sup>1</sup> Mean Tensile Strength Strength		<sup>1</sup> Mean Shear Strength	<sup>2</sup> Characteristic Tensile Strength	<sup>2</sup> Characteristic Shear Strength		
(Nm)	(N)	(N)	(N)	(N)		
6.9	8350	5000	8100	4850		

Note: 1000N = 1kN

<sup>1</sup>Mean Load/Strength is the average ultimate strength of samples tested.

<sup>2</sup>Characteristic Load/Strength: 95% of these screws are expected to have a strength greater than the loads shown.

<sup>3</sup>Working Load is the governing minimum allowable load obtained by comparing relevant concrete and steel working loads. Factor of Safety (FOS=2.5 for steel, FOS=2.5 for timber and FOS=3.0 for concrete) are already included.

All values are obtained under laboratory conditions using DRiLLX product. Safety factors should be considered for design purposes. Actual pullout loads may differ slightly depending on certain properties of the base material.

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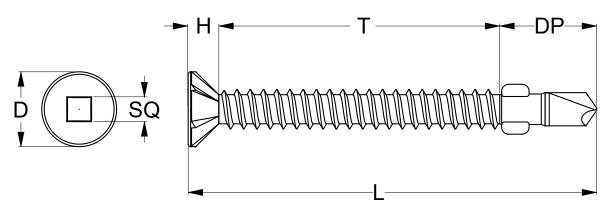




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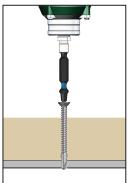
Part	QFind	Gauge	TPI	Length	Thread Length	Drill Point Length	Head Height	Head ø	Drive Size	Pack Qty
				L (mm)	T (mm)	DP (mm)	H (mm)	D (mm)	SQ	
T4XGXRQ1016050	Q925	10	16	50	33.5	12.8	4	9.4	Square #2	500

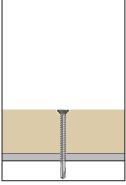


### Installation









#### **Technical Note:**

Wing screws are not recommended for fixing long lengths of timber directly to steel joints. The screw may break in the application due to potential movement between the metal and timber caused by:

- · Thermal expansion
- Humidity
- Building movement/settling
- Overdriving during installation

# Recommended Square Size #2 Drive Bit:

Part	QFind	Length	
		(mm)	
TXDIPSQS20050	B371	50	
TXDIPSQS20100	B375	100	
TXDIPSQS20150	B380	150	

### **Installation Guide**

- **1.** Use a cordless screw driver set between 2,200-3,000 RPM. Fit the Square Drive Bit over the screw and place at the fastening position.
- **2.** Apply consistently firm pressure to the screw driver while the screw is drilling.
- 3. Care should be taken not to over-tighten the screw.

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<sup>\*</sup>Installation with impact drivers not recommended.