PRODUCT DATA





Page 1 of 2

Bi-Metal Wing S500 Countersunk

Metal Wings CSK Self Drilling Screw (SDS) #12-24

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	² Characteristic Load	³Working Load			
	(mm)	(N)	(N)	(N)			
G2	3.0	5100	4300	1700			
HRS	5.0	11200	9950	4000			
HRS	6.0	11750	10950	4400			
HRS	8.0	11950	11500	4600			

12 Gauge CSK S500 Extended Drill Point



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)			Drill Speed	Drill Time	Drill Time	
	(mm)	(kg)	(RPM)	(Max. individual) Seconds	(Max. average) Seconds	
HRS	8	27	2200	10	7	

Mechanical Properties							
Torsional ¹ Mean Tensile Strength Strength		¹ Mean Shear Strength	² Characteristic Tensile Strength	² Characteristic Shear Strength			
(Nm)	(N)	(N)	(N)	(N)			
11.3	12500	7500	12300	7400			

Note: 1000N = 1kN

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

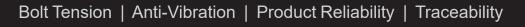
²Characteristic Load/Strength: 95% of these screws are expected to have a strength greater than the loads shown.

³Working 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.

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of printing, Hobson Engineering®, its agencies and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.









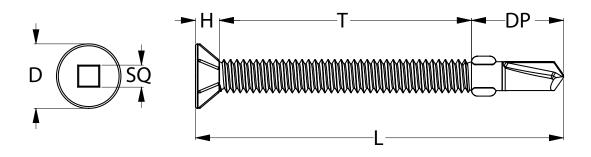




Bi-Metal Wing S500 Countersunk

Page 2 of 2

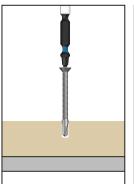
Part	QFind	Gauge	TPI	Length	Thread Length	Drill Point Length	Head Height	Head ø	Drive Size	Pack Qty
				L (mm)	T (mm)	DP (mm)	H (mm)	D (mm)	SQ	
T4XHXRQ1224060	QB16	12	24	60	36	20	4	10.5	Square #3	500

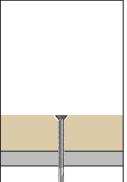


Installation









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 Bits:

Part	QFind	Length	
		(mm)	
TXDIPSQS30050	BA33	50	
TXDIPSQS30100	BA34	100	
TXDIPSQS30150	BA35	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.

Disclaimer: While every reasonable effort has been made to ensure that this document is correct at the time of printing, Hobson Engineering®, its agencies and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.



^{*}Installation with impact drivers not recommended.