# PRODUCT DATA





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## **Metal Wings Countersunk**

### Metal Wings Countersunk (SDS) #10-16

## **Applications**

- Timber to metal fixing
- Fences, chipboard, composite panels and timber floors
- 6 nibs under the head enable self embedment into timber

**Material** 



**Finish** 



Class 3

Pullout Values								
Plate (Purlin)	Metal Plate Thickness	¹Mean Load	<sup>2</sup> Characteristic Load	³Working Load				
	(mm)	(N)	(N)	(N)				
G2	0.7	950	900	350				
G2	1.0	1850	1600	650				
G550	1.5	4000	3600	1450				
G450	2.0	5250	4850	1950				
G450	2.5	7150	6300	2500				
G2	3.0	5950	5500	2200				

# 10 Gauge





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	Load Drill Speed		Drill Time			
	(mm)	(kg)	(RPM)	(Max. individual) Seconds	(Max. average) Seconds			
G450	2.0	18	2200	4	3			

Mechanical Properties							
Torsional Strength	¹Mean Tensile Strength	<sup>1</sup> Mean <sup>2</sup> Characteris Shear Tensile Strength Strength		<sup>2</sup> Characteristic Shear Strength			
(Nm)	(N)	(N)	(N)	(N)			
6.9	10550	6350	8700	5200			

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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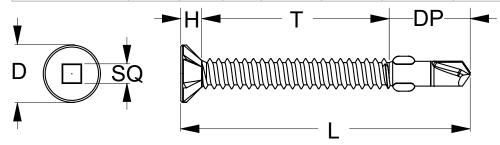




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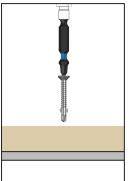
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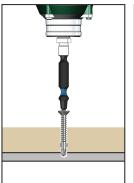
Part	QFind	Gauge	TPI	Length	Thread Length	Drill Point Length	Head Height	Head ø	Drive Size	Pack Qty
				L (mm)	T (mm)	DP (mm)	H (mm)	D (mm)	SQ	
T9PG3RQ1016035	Q401			35	20	11	3.7	9	#2	1000
T9PG3RQ1016040	Q402			40	25					
T9PG3RQ1016045	Q404	10	16	45	30					
T9PG3RQ1016050	Q405			50	35					500
T9PG3RQ1016060	Q407	1		60	45					

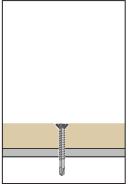


### Installation









#### **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	Size		
		(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.
  - \*Installation with impact drivers not recommended.

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