

HEADLOK® DESIGN DATA SHEET FOR USE WITH BS5268-2

The permissible strength data in this design sheet was derived, using appropriate safety factors, from characteristic strength data determined in accordance with prEN14592

FEATURES

DESCRIPTION

- . The fasteners are made from carbon steel using a standard cold-forming process and are heat-treated
- · The fasteners have a proprietary epoxy coating that provides corrosion protection while lowering installation torque

INSTALLATION

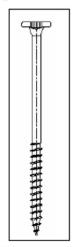
- NO PRE-DRILLING IS REQUIRED
- Chamfering underside of head effectively eliminates snapping during installation

DIMENSIONS

HeadLok fasteners are available in ten lengths - 73mm, 95mm, 114mm, 127mm, 152mm, 178mm, 190mm, 203mm, 228mm & 254mm

Washer head with spider drive





Head Style		15.5 mm wide Washer with	
		Spider Drive	
Diameters	Plain Shaft	4.8 mm	
	Outer Thread	6.5 mm	
	Inner Thread	4.4 mm	
Thread Length		51 mm	

DESIGN DATA FOR USE WITH BS5268-2

Permissible withdrawal strengths

Long-term permissible withdrawal strengths of HeadLok fasteners for the following wood-based materials:

Wood-based material	Permissible withdrawal strength (N/mm)
C16 Timber	14
C24 Timber	21
TR26 Timber	24
All softwoods – end grain	10

<u>NOTES</u>

- The minimum pointside penetration for HeadLok fasteners acting in withdrawal should be 30mm.
- HeadLok fasteners are not threaded for their entire length and the maximum achievable withdrawal strengths are those
 equivalent to the full threaded length (51mm).

DESIGN DATA FOR USE WITH BS5268-2

Permissible lateral load-carrying capacities

The permissible lateral load-carrying capacity of HeadLok fasteners can be evaluated for any combination of wood member thickness using Annex G of BS5268-2, based on the following parameters:

- A screw diameter (d) of 4.8mm
- A design yield moment (My,d) of 11300 Nmm
- Load-duration modification factors of 1.00 for long-term, 1.12 for medium-term and 1.25 for short-term and very short-term load durations
- Design embedding strength (fn,d) as detailed in the following table :

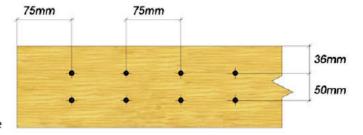
Wood-based material	f _{h,d} (N/mm²)		
C16	14.8		
C24	16.7		
TR26	17.6		

Lateral load-carrying capacities

Long-term permissible lateral load for a single HeadLok fastener for common combinations of 2-member joints:

Thickness of	Thickness of pointside member (mm)	Length of fastener (mm)	Long-term permissible lateral load-carrying capacity (kN) of 2-member joints made from:		
headside member (mm)			C16 timber	C24 timber	TR26 timber
38	38	73	0.67	0.76	0.80
63	63	114	0.89	0.94	0.97
89	89	152	0.89	0.94	0.97

- The load may be acting either parallel or perpendicular to the grain
- Minimum edge and end distances of 36mm and 75mm respectively
- Minimum spacing between fasteners perpendicular and parallel to the grain of 50mm and 75mm respectively
- The permissible capacities in the above table are calculated using Annex G of BS 5268-2 based on the design input parameters given above and a minimum pointside penetration of 30mm



Always maintain minimum end, edge & fastener spacing distances



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