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

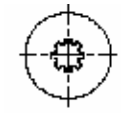
INSTALLATION

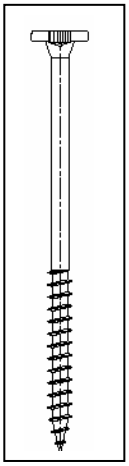
- **NO PRE-DRILLING IS REQUIRED**
- Chamfering underside of head effectively eliminates snapping during installation

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

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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

NOTES

- 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).

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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 ($M_{y,d}$) 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 ($f_{h,d}$) as detailed in the following table :

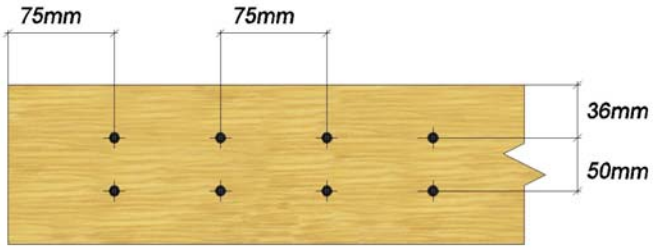
Wood-based material	$f_{h,d}$ (N/mm²)
C16	14.8
C24	16.7
TR26	17.6

Lateral load-carrying capacities

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

Thickness of headside member (mm)	Thickness of pointside member (mm)	Length of fastener (mm)	Long-term permissible lateral load-carrying capacity (kN) of 2-member joints made from:		
			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

FOR PRODUCT / ORDERING INFORMATION PLEASE CONTACT:

Olympic Supply Company
Freephone: 0800 652 2203

FOR FURTHER TECHNICAL DATA PLEASE CONTACT:
TimberSolve Ltd.
Tel: 01420 549201
Email: Solutions@TimberSolve.co.uk