

TIMBERLOK®

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

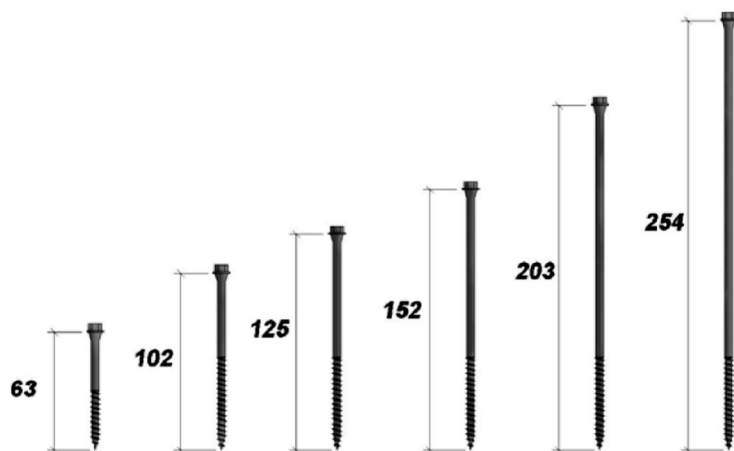
- The fasteners are made from carbon steel using a standard cold-forming process and are heat-treated
- The fasteners have a proprietary epoxy coating that provides corrosion protection while lowering installation torque

INSTALLATION

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

DIMENSIONS

TimberLok fasteners are available in five lengths – 63mm, 102mm, 125mm, 152mm, 203mm & 254mm



Head Style		7.8 mm Hex Drive
Diameters	Plain Shaft	4.8 mm
	Outer Thread	6.5 mm
	Inner Thread	4.4 mm
Thread Length		51* mm

* except in the case of 63mm long fastener where the thread length is 31mm

DESIGN DATA FOR USE WITH BS5268-2

Permissible withdrawal strengths

Long-term permissible withdrawal strengths of TimberLok 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

The minimum pointside penetration for TimberLok fasteners acting in withdrawal should be 30mm

DESIGN DATA FOR USE WITH BS5268-2

Permissible lateral load-carrying capacities

The permissible lateral load-carrying capacity of **TimberLok** 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 :

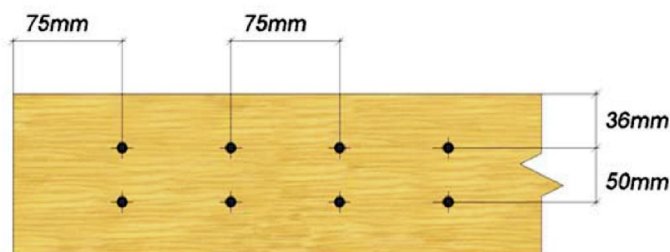
Wood-based material	$f_{h,d}$ (N/mm ²)
C16	14.8
C24	16.7
TR26	17.6

Lateral load-carrying capacities

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

Thickness of headside member (mm)	Thickness of pointside member (mm)	Length of fastener (mm)	Long-term lateral load-carrying capacity (kN) of 2-member joints made from:		
			C16 timber	C24 timber	TR26 timber
47	63	102	0.89	0.94	0.97
63	63	102	0.83	0.92	0.96
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



DUBLIN

Unit 64,
Cookstown Industrial Estate,
Tallaght, Dublin 24

Tel.: 01-4519900
Fax: 01-4519004

E-mail: Sales@MakFasteners.com

CORK

Doughcloyne Industrial Estate,
Sarsfield Road,
Wilton, Cork

Tel.: 021-4342890
Fax: 021-4342396

E-mail: CorkSales@MakFasteners.com

TYRONE

17D Derryloran Industrial Estate,
Sandholes Road, Cookstown,
Co. Tyrone, BT80 9LU

Tel.: 028-86758574
Fax: 028-86758578

E-mail: salesNI@makfasteners.com