MTLD[™] Mass Timber Lifting Device



The MTLD Mass Timber Lifting Device provides a fast and efficient method for erecting panels and beams. It quickly attaches to and detaches from a single screw anchored into the mass timber element, saving time during the rigging process.

Features

- Fast attachment and detachment
- Attaches with a single screw
- Load-rated with multiple screw options
- Screw installed with or without milled pocket
- Directive 2006/42/EC on machinery compliant

Material: Steel

Finish: Galvanized

Lifting Device Design and Installation

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- See Lifting Device Design Guide (TEB-C-LIFTING-EU) for general notes and design considerations pertaining to lifting device design and the MTLD.
- Do not use the MTLD until you have read all warnings, disclaimers, instructions and information in TEB-C-LIFTING-EU, MANUAL-EU-MTLD.
- A qualified design professional must specify screw (options include Strong-Drive[®] SSH12.0x100, SSH12.0x160 and ESCRFTC12.0x260). Screws may be installed with drill motors in accordance with MANUAL-EU-MTLD. See the next page for more details regarding recommended screws.

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Allowable Loads

Medel No.	Qty. and Type of	Minimum Wood Member	Allowable Tension Load, F (kg)	
MOUEI NO.	Screw	Thickness (mm)	$\theta = 90^{\circ}$	$\theta = 60^{\circ}$
MTLD	(1) SSH12.0x100	100	282	244
	(1) SSH12.0x160	160	561	486
	(1) ESCRFTC12.0x260	260	1126	975

For additional information, see Lifting Device Design Guide (TEB-C-LIFTING-EU). 1.

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Allowable loads are calculated with a k_{mod} =0.9, Gamma M=1.3, a safety factor for lifting equal to 1.5 and Gamma G=1.35. Screws are only permitted to be used for a single lift and shall not be used for structural applications thereafter. Allowable loads are valid for a screw installed at 90° into the face-grain of the CLT panel or glulam. 3 4.

Allowable loads apply to C24 timber.
Allowable loads act in the direction of the sling angle (0), i.e., the angle between the horizontal plane (wood surface) and the sling leg. Additional

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Advance location is required to determine the allowable weight of the element to be lifted (See TEB-C-LIFTING-EU). Tabulated values are not valid if $\theta < 60^\circ$. Linear interpolation is allowed for $60^\circ < \theta < 90^\circ$. A qualified design professional must specify the screw that best suits to the applied load within the references SSH12.0xL and ESCRFTC12.0xL. 8. 9. All rigging components and spreader bars that are used in conjunction with the MTLD shall be of sufficient strength and stiffness to carry the required load

WARNING: Before using the lifting device, consult a qualified design professional and ensure that you have read and understood all instructions and safety guidelines, including the information published at strongtie.com/MTLD and any information provided with the lifting device and its related accessories or equipment. Failure to follow such instructions or the applicable OSHA provisions can lead to property damage, bodily injury and death.

Dimensions

(Read and follow detailed installation instructions in T-MT-MTLDUSE)



1. Install Screw



2. Attach MTLD to screw

3. Attach rigging to MTLD and lift

 $\theta = 60$

to 90



4. After lift, detach MTLD from screw

5. Remove screw or drive flush with surface

Product Information

Ordering SKU	Description	Quantity		
MTLD-R2E	Mass Timber Lifting Device (2-Pack)	2		
75165	Hexagon Head Connector Screw SSH12.0x100	25		
75168	Hexagon Head Connector Screw SSH12.0x160	25		
ESCRFTC12.0x260	Fully Threaded Countersunk Screw ESCRFTC12.0x260	25		

Note: MTLD-R2E package includes the MTLD-GAUGE tool for dimensional checks of the MTLD.

For additional information, please contact your Simpson Strong-Tie representative.

