









Connectors - Assembly Series

Product information

The installation series is well-suited for the safe and easy construction of winter gardens, carports, stairs, balconies, platforms, and much more. Easy to handle, safe and reliable, fast preparation and installation. For professionals and DIY enthusiasts.





Assembly Series	
	<p>Mini 10</p> <p>Dimensions: 10 x 40mm Thickness: 10mm</p> <p>Screws</p> <p>4 units, 3 x 35</p>
	<p>WTS 3 Special</p> <p>Dimensions: 55 x 35mm Thickness: 20mm 1 x locking screw</p> <p>Screws</p> <p>6 units, 5 x 60</p>
	<p>Mini 17</p> <p>Dimensions: 17 x 40mm Thickness: 10mm</p> <p>Screws</p> <p>4 units, 3.5 x 35</p>
	<p>WTS 5 Special</p> <p>Dimensions: 110 x 35mm Thickness: 20mm 2 x locking screws</p> <p>Screws</p> <p>9 units, 5 x 60</p>
	<p>WTS 1</p> <p>Dimensions: 32 x 30mm Thickness: 17mm</p> <p>Screws</p> <p>6 units, 5 x 60</p>
	<p>WTS 6 Special</p> <p>Dimensions: 110 x 35mm Thickness: 20mm 2 x locking screws</p> <p>Screws</p> <p>9 units, 8 x 80</p>
	<p>WTS 1 Special</p> <p>Dimensions: 32 x 35mm Thickness: 20mm 1 x locking screw</p> <p>Screws</p> <p>6 units, 5 x 60</p>
	<p>A 3</p> <p>Dimensions: 40 x 80mm Thickness: 20mm</p> <p>Screws</p> <p>6 units, 5 x 60</p>

Connectors - Timber XS Series

Product information

The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.

Timber XS Series¹

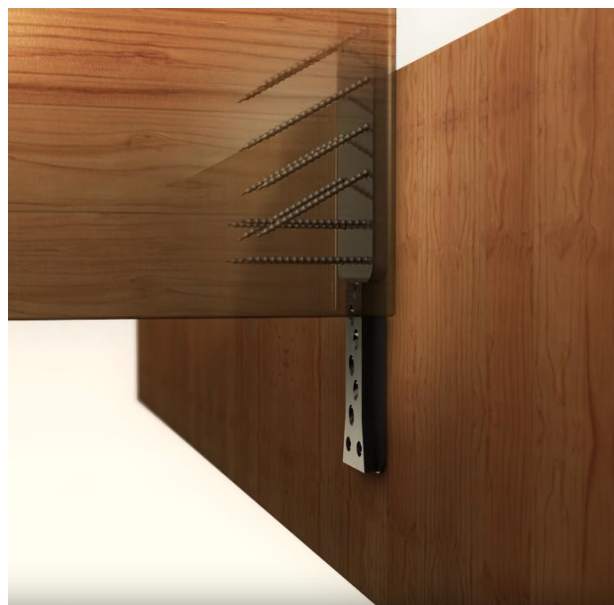
	XS 5 Dimensions: 30 x 50mm Thickness: 12mm Minimum cross-section: MB 50x80mm, SB 50x80mm		XS 10 Dimensions: 30 x 70mm Thickness: 12mm Minimum cross-section: MB 50 x 100mm, SB 50 x 100mm
	Screws 12 units, 4.5 x 50		characteristic carrying capability (GL 24h) approx. 5 kN
	XS 15 Dimensions: 30 x 90mm Thickness: 12mm Minimum cross-section: MB 50 x 120mm, SB 50 x 120mm		XS 20 Dimensions: 30 x 110mm Thickness: 12mm Minimum cross-section: MB 50 x 140mm, SB 50 x 140mm
	Screws 21 units, 4.5 x 50		characteristic carrying capability (GL 24h) approx. 15 kN

Note - SHERPA special screws are to be used with these products.

Minimum cross-section: minimum cross-sections apply if the upper edge of the main and secondary beams are mounted flush.

MB - main beam
 SB - secondary beam

¹ including standard drill hole for a locking screw





Connectors - Timber S Series


Product information


The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.

Timber S Series¹

	S 5
	Dimensions: 40 x 50mm Thickness: 12mm Minimum cross-section: MB 60x80mm, SB 60x80mm
Screws	characteristic carrying capability (GL 24h)
12 units, 4.5 x 50	approx. 5 kN

	S 10
	Dimensions: 40 x 70mm Thickness: 12mm Minimum cross-section: MB 60 x 100mm, SB 60 x 100mm
Screws	characteristic carrying capability (GL 24h)
18 units, 4.5 x 50	approx. 10 kN

	S 15
	Dimensions: 40 x 90mm Thickness: 12mm Minimum cross-section: MB 60 x 120mm, SB 60 x 120mm
Screws	characteristic carrying capability (GL 24h)
21 units, 4.5 x 50	approx. 15 kN

	S 20
	Dimensions: 40 x 110mm Thickness: 12mm Minimum cross-section: MB 60 x 140mm, SB 60 x 140mm
Screws	characteristic carrying capability (GL 24h)
25 units, 4.5 x 50	approx. 20 kN

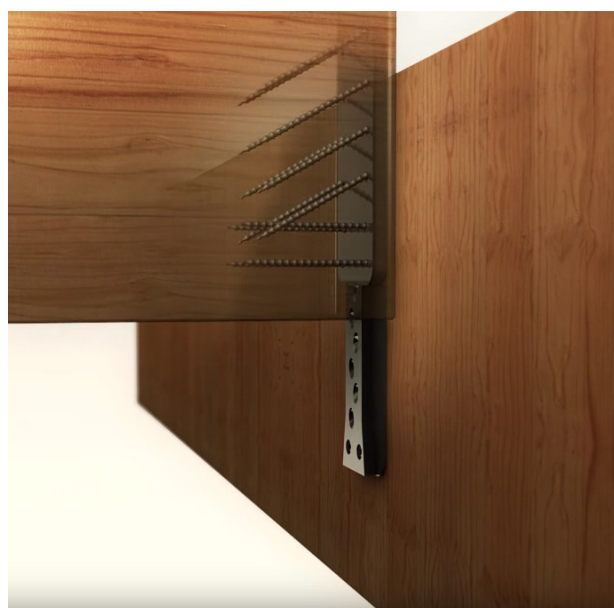
Note - SHERPA special screws are to be used with these products.

Minimum cross-section: minimum cross-sections apply if the upper edge of the main and secondary beams are mounted flush.

MB - main beam

SB - secondary beam






¹ including standard drill hole for a locking screw



Connectors - Timber M Series

Product information

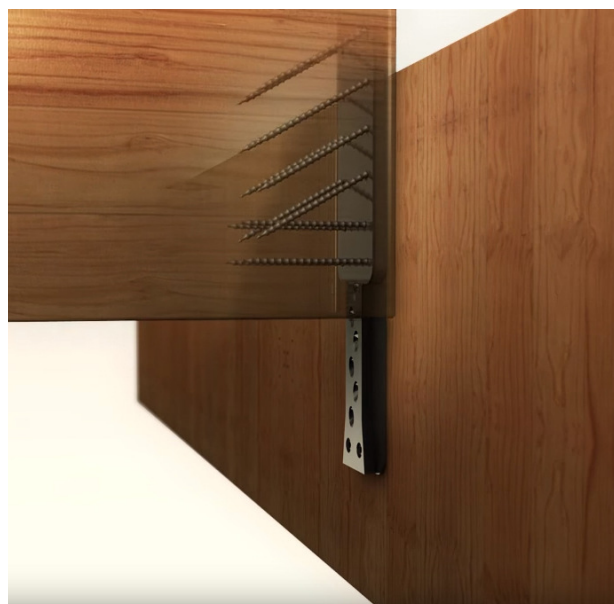
The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.

Timber M Series ¹	
	<p>M 15</p> <p>Dimensions: 60 x 90mm Thickness: 14mm Minimum cross-section: MB 65x120mm, SB 80x120mm</p> <p>Screws</p> <p>16 units, 6.5 x 65</p> <p>characteristic carrying capability (GL 24h)</p> <p>approx. 15 kN</p>
	<p>M 20</p> <p>Dimensions: 60 x 110mm Thickness: 14mm Minimum cross-section: MB 65 x 140mm, SB 80 x 140mm</p> <p>Screws</p> <p>20 units, 6.5 x 65</p> <p>characteristic carrying capability (GL 24h)</p> <p>approx. 20 kN</p>
	<p>M 25</p> <p>Dimensions: 60 x 130mm Thickness: 14mm Minimum cross-section: MB 65 x 160mm, SB 80 x 160mm</p> <p>Screws</p> <p>23 units, 6.5 x 65</p> <p>characteristic carrying capability (GL 24h)</p> <p>approx. 25 kN</p>
	<p>M 30</p> <p>Dimensions: 60 x 150mm Thickness: 14mm Minimum cross-section: MB 65 x 180mm, SB 80 x 180mm</p> <p>Screws</p> <p>26 units, 6.5 x 65</p> <p>characteristic carrying capability (GL 24h)</p> <p>approx. 30 kN</p>
	<p>M 40</p> <p>Dimensions: 60 x 170mm Thickness: 14mm Minimum cross-section: MB 65 x 200mm, SB 80 x 200mm</p> <p>Screws</p> <p>30 units, 6.5 x 65</p> <p>characteristic carrying capability (GL 24h)</p> <p>approx. 40 kN</p>

Minimum cross-section: minimum cross-sections apply if the upper edge of the main and secondary beams are mounted flush.
 MB - main beam
 SB - secondary beam

¹ including standard drill hole for a locking screw

Note - SHERPA special screws are to be used with these products.





Connectors - Timber L Series


Product information


The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.


Timber L Series²

		L 30
		Dimensions: 80 x 150mm Thickness: 18mm Minimum cross-section: MB 100x180mm, SB 100x180mm
Screws		characteristic carrying capability (GL 24h)
15 units, 8 x 100 fully threaded		approx. 30 kN

		L 40
		Dimensions: 80 x 170mm Thickness: 18mm Minimum cross-section: MB 100x200mm, SB 100x200mm
Screws		characteristic carrying capability (GL 24h)
18 units, 8 x 100 fully threaded		approx. 40 kN

		L 50
		Dimensions: 80 x 210mm Thickness: 18mm Minimum cross-section: MB 100x240mm, SB 100x240mm
Screws		characteristic carrying capability (GL 24h)
21 units, 8 x 100 fully threaded		approx. 50 kN

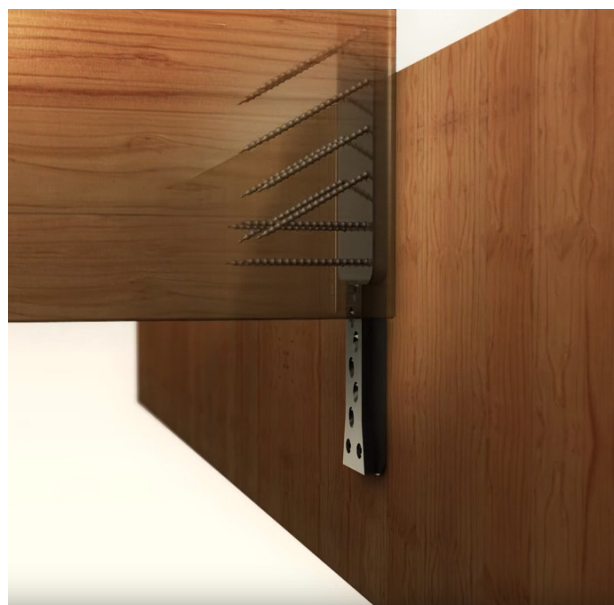
		L 60
		Dimensions: 80 x 250mm Thickness: 18mm Minimum cross-section: MB 100x280mm, SB 100x280mm
Screws		characteristic carrying capability (GL 24h)
25 units, 8 x 100 fully threaded		approx. 60 kN

		L 80
		Dimensions: 80 x 290mm Thickness: 18mm Minimum cross-section: MB 100x320mm, SB 100x320mm
Screws		characteristic carrying capability (GL 24h)
29 units, 8 x 100 fully threaded		approx. 80 kN

Minimum cross-section: minimum cross-sections apply if the upper edge of the main and secondary beams are mounted flush.
 MB - main beam
 SB - secondary beam

² including standard drill holes for 2 locking screws

Note - SHERPA special screws are to be used with these products.












Connectors - Timber XL Series

Product information

The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.

Timber XL Series²

	<p>XL 55 Dimensions: 120 x 250mm Thickness: 20mm Minimum cross-section: MB 160x280mm, SB 140x280mm</p>		<p>XL 70 Dimensions: 120 x 290mm Thickness: 20mm Minimum cross-section: MB 160x320mm, SB 140x320mm</p>
<p>Screws</p>	<p>characteristic carrying capability (GL 24h)</p>	<p>Screws</p>	<p>characteristic carrying capability (GL 24h)</p>
<p>18 units, 8 x 160 fully threaded</p>	<p>approx. 55 kN*</p>	<p>21 units, 8 x 160 fully threaded</p>	<p>approx. 70 kN*</p>
	<p>XL 80 Dimensions: 120 x 330mm Thickness: 20mm Minimum cross-section: MB 160x360mm, SB 140x360mm</p>		<p>XL 100 Dimensions: 120 x 370mm Thickness: 20mm Minimum cross-section: MB 160x400mm, SB 140x400mm</p>
<p>Screws</p>	<p>characteristic carrying capability (GL 24h)</p>	<p>Screws</p>	<p>characteristic carrying capability (GL 24h)</p>
<p>24 units, 8 x 160 fully threaded</p>	<p>approx. 80 kN*</p>	<p>25 units, 8 x 160 fully threaded</p>	<p>approx. 100 kN*</p>
	<p>XL 120 Dimensions: 120 x 410mm Thickness: 20mm Minimum cross-section: MB 160x400mm, SB 140x440mm</p>		<p>XL 140 Dimensions: 120 x 450mm Thickness: 20mm Minimum cross-section: MB 160x480mm, SB 140x480mm</p>
<p>Screws</p>	<p>characteristic carrying capability (GL 24h)</p>	<p>Screws</p>	<p>characteristic carrying capability (GL 24h)</p>
<p>29 units, 8 x 160 fully threaded</p>	<p>approx. 120 kN*</p>	<p>32 units, 8 x 160 fully threaded</p>	<p>approx. 140 kN*</p>
	<p>XL 170 Dimensions: 120 x 490mm Thickness: 20mm Minimum cross-section: MB 160x520mm, SB 140x520mm</p>		<p>XL 190 Dimensions: 120 x 530mm Thickness: 20mm Minimum cross-section: MB 160x560mm, SB 140x560mm</p>
<p>Screws</p>	<p>characteristic carrying capability (GL 24h)</p>	<p>Screws</p>	<p>characteristic carrying capability (GL 24h)</p>
<p>36 units, 8 x 160 fully threaded</p>	<p>approx. 170 kN*</p>	<p>40 units, 8 x 160 fully threaded</p>	<p>approx. 190 kN*</p>
	<p>XL 250 Dimensions: 120 x 610mm Thickness: 20mm Minimum cross-section: MB 160x640mm, SB 140x640mm</p>	<p>Minimum cross-section: minimum cross-sections apply if the upper edge of the main and secondary beams are mounted flush. MB - main beam SB - secondary beam</p>	
<p>Screws</p>	<p>characteristic carrying capability (GL 24h)</p>	<p>² including standard drill holes for 2 locking screws * with SHERPA special screws, 8 x 160 Alternative screw lengths are 120/140/180mm</p>	
<p>48 units, 8 x 160 fully threaded</p>	<p>approx. 250 kN*</p>		


Note - SHERPA special screws are to be used with these products.


Connectors - Timber XXL Series


Product information


The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.


Timber XXL Series²


	
XXL 170	
Dimensions: 140 x 410mm Thickness: 20mm Minimum cross-section: MB 160x440mm, SB 160x440mm	
Screws	characteristic carrying capability (GL 24h)
37 units, 8 x 160 fully threaded	approx. 170 kN*

	
XXL 190	
Dimensions: 120 x 450mm Thickness: 20mm Minimum cross-section: MB 160x480mm, SB 160x480mm	
Screws	characteristic carrying capability (GL 24h)
42 units, 8 x 160 fully threaded	approx. 190 kN*

	
XXL 220	
Dimensions: 140 x 490mm Thickness: 20mm Minimum cross-section: MB 160x520mm, SB 160x520mm	
Screws	characteristic carrying capability (GL 24h)
47 units, 8 x 160 fully threaded	approx. 220 kN*

	
XXL 250	
Dimensions: 140 x 530mm Thickness: 20mm Minimum cross-section: MB 160x560mm, SB 160x560mm	
Screws	characteristic carrying capability (GL 24h)
52 units, 8 x 160 fully threaded	approx. 250 kN*

	
XXL 280	
Dimensions: 140 x 570mm Thickness: 20mm Minimum cross-section: MB 160x600mm, SB 160x600mm	
Screws	characteristic carrying capability (GL 24h)
54 units, 8 x 160 fully threaded	approx. 280 kN*

	
XXL 300	
Dimensions: 140 x 610mm Thickness: 20mm Minimum cross-section: MB 160x640mm, SB 160x640mm	
Screws	characteristic carrying capability (GL 24h)
59 units, 8 x 160 fully threaded	approx. 300 kN*

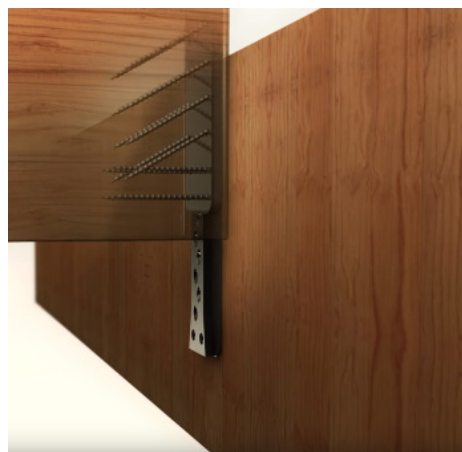
Note - SHERPA special screws are to be used with these products.

Minimum cross-section: minimum cross-sections apply if the upper edge of the main and secondary beams are mounted flush.

MB - main beam
SB - secondary beam

² including standard drill holes for 2 locking screws

* with SHERPA special screws, 8 x 160
Alternative screw lengths are 120/140/180mm



Connectors - Special Products

Special Products



Fire-stop 2.5 (fire resistant laminate)

Roller lengths [m]: 25
Width/thickness [mm]: 20/2.5



Routing template case






1 x routing template
1 x Allen key
2 x cutters, including spacer disk

Connectors - Sherpa Self Tapping Locking Screws

Product information

If the connection requires it, the two connecting plates can be held together through the use of specially developed locking screws.

Because these are self tapping screws, there is an optimum ideal fit between aluminium and the thread edges. This ensures high safety against independent loosening, even when exposed to relatively high stresses. Installation of the locking screws requires little effort.

Self Tapping Locking Screws	
	XS Series Dimensions: 3 x 12mm
	S Series Dimensions: 3 x 20/9mm
	M Series Dimensions: 4 x 20/12mm
	L Series Dimensions: 5 x 47.8/20mm
	XL & XXL Series Dimensions: 6 x 100/55mm

Fasteners for Concrete Steel Series	
Used for M Series	Multi-Monti MMS-F 7.5 x 60
Used for L, XL & XXL Series	Multi-Monti MMS-F 10 x 80
Used for XL Series - Alternative for MMS-F 10 x 80	HL anchor, FH II 12/15 SK Dimensions: 12 x 90mm








Connectors - Sherpa Special Screws

Product information




Screws for SHERPA series XS to XXL. Depending upon the connector type, the relevant special screws must be used as defined in the ETA-12/0067 certification in order to ensure the specified characteristic carrying capability values. These systems screws are yellow zinc galvanised or, if requested, can be obtained with a zinc-nickel layer, and have a strengthened screw head. The head stamping also allows for monitoring even when screwed in.

SHERPA special screws with a rated diameter of 8mm have a patented half tip which reduces the danger of cracking, and provides optimum screw bite.



Yellow Zinc Galvanised	
	X & S Series Dimensions: 4.5 x 50mm
	Installation Series Dimensions: 5.0 x 60mm
	M Series Dimensions: 6.5 x 65mm
	Installation Series Dimensions: 8.0 x 80mm
	L Series Dimensions: 8.0 x 100mm
	Installation Series Dimensions: 8.0 x 120mm
	XL & XXL Series Dimensions: 8.0 x 120mm 8.0 x 140mm 8.0 x 160mm 8.0 x 180mm

Yellow zinc galvanised for moderate stress - corrosiveness categories C1, C2 and C3 as per EN ISO 12944-2.






Zinc Nickel	
	X & S Series Dimensions: 4.5 x 50mm
	XL & XXL Series Dimensions: 8.0 x 160mm
	L Series Dimensions: 8.0 x 100mm

Zinc-nickel plated, for severe load exposure - corrosive categories C1 to C5 M mong as per EN ISO 12944-2.

Connectors - Concrete Steel M Series

Product information

The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.

CS M Series	
	<p>M 15 CS Dimensions: 60 x 90mm Thickness: 20mm Minimum cross-section: SB 80x120mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 9 units, 6.5x65 Concrete: 4 units, MMS-F 7.5x60	approx. 12.10 kN
	<p>M 20 CS Dimensions: 60 x 110mm Thickness: 20mm Minimum cross-section: SB 80x140mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 11 units, 6.5x65 Concrete: 4 units, MMS-F 7.5x60	approx. 13.60 kN
	<p>M 25 CS Dimensions: 60 x 130mm Thickness: 20mm Minimum cross-section: SB 80x160mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 13 units, 6.5x65 Concrete: 4 units, MMS-F 7.5x60	approx. 15.10 kN
	<p>M 30 CS Dimensions: 60 x 150mm Thickness: 20mm Minimum cross-section: SB 80x180mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 15 units, 6.5x65 Concrete: 6 units, MMS-F 7.5x60	approx. 16.60 kN
	<p>M 40 CS Dimensions: 60 x 170mm Thickness: 20mm Minimum cross-section: SB 80x200mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 17 units, 6.5x65 Concrete: 6 units, MMS-F 7.5x60	approx. 18.10 kN






* Measured values with HECO MMS-F concrete screws in kN with steel-reinforced concrete quality C 25/30, adhering to the minimum edge distances and minimum component thicknesses. The connection to the timber cross-section must be considered and assessed depending on the timber quality.

Note - SHERPA special screws are to be used with these products.

Connectors - Concrete Steel L Series

Product information

The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.

CS L Series	
	<p>L 30 CS Dimensions: 80 x 150mm Thickness: 29mm Minimum cross-section: SB 100x180mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 9 units, 8.0x100 Concrete: 4 units, MMS-F 10x80	approx. 39.50 kN
	<p>L 40 CS Dimensions: 80 x 170mm Thickness: 29mm Minimum cross-section: SB 100x200mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 11 units, 8.0x100 Concrete: 4 units, MMS-F 10x80	approx. 42.70 kN
	<p>L 50 CS Dimensions: 80 x 210mm Thickness: 29mm Minimum cross-section: SB 100x240mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 13 units, 8.0x100 Concrete: 6 units, MMS-F 10x80	approx. 49.70 kN
	<p>L 60 CS Dimensions: 80 x 250mm Thickness: 29mm Minimum cross-section: SB 100x280mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 15 units, 8.0x100 Concrete: 6 units, MMS-F 10x80	approx. 56.50 kN
	<p>L 80 CS Dimensions: 80 x 290mm Thickness: 29mm Minimum cross-section: SB 100x320mm</p>
Screws	Rated value for carrying capability for C 25/30*
Timber: 17 units, 8.0x100 Concrete: 6 units, MMS-F 10x80	approx. 63.30 kN










Minimum cross-section SB | minimum cross-section, secondary timber beam

Note - SHERPA special screws are to be used with these products.

Connectors - Concrete Steel XL Series

Product information

The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.

CS XL Series	
	<p>XL 55 CS</p> <p>Dimensions: 120 x 250mm Thickness: 29mm Minimum cross-section: SB 140x280mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 63.60 kN</p> <p>Timber: 10 units, 8x160 Concrete: 6 units, MMS-F 10x80</p>
	<p>XL 70 CS</p> <p>Dimensions: 120 x 290mm Thickness: 29mm Minimum cross-section: SB 140x320mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 64.00 kN</p> <p>Timber: 12 units, 8x160 Concrete: 6 units, MMS-F 10x80</p>
	<p>XL 80 CS</p> <p>Dimensions: 120 x 330mm Thickness: 29mm Minimum cross-section: SB 140x360mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 79.30 kN</p> <p>Timber: 14 units, 8x160 Concrete: 8 units, MMS-F 10x80</p>
	<p>XL 100 CS</p> <p>Dimensions: 120 x 370mm Thickness: 29mm Minimum cross-section: SB 140x400mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 85.30 kN</p> <p>Timber: 14 units, 8x160 Concrete: 8 units, MMS-F 10x80</p>
	<p>XL 120 CS</p> <p>Dimensions: 120 x 410mm Thickness: 29mm Minimum cross-section: SB 140x440mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 85.30 kN</p> <p>Timber: 16 units, 8x160 Concrete: 8 units, MMS-F 10x80</p>
	<p>XL 140 CS</p> <p>Dimensions: 120 x 450mm Thickness: 29mm Minimum cross-section: SB 140x480mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 85.30 kN</p> <p>Timber: 18 units, 8x160 Concrete: 8 units, MMS-F 10x80</p>
	<p>XL 170 CS</p> <p>Dimensions: 120 x 490mm Thickness: 29mm Minimum cross-section: SB 140x520mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 85.30 kN</p> <p>Timber: 20 units, 8x160 Concrete: 8 units, MMS-F 10x80</p>
	<p>XL 190 CS</p> <p>Dimensions: 120 x 530mm Thickness: 29mm Minimum cross-section: SB 140x560mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 106.70 kN</p> <p>Timber: 22 units, 8x160 Concrete: 10 units, MMS-F 10x80</p>
	<p>XL 250 CS</p> <p>Dimensions: 120 x 610mm Thickness: 29mm Minimum cross-section: SB 140x640mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 106.70 kN</p> <p>Timber: 26 units, 8x160 Concrete: 10 units, MMS-F 10x80</p>

Minimum cross-section SB | minimum cross-section, secondary timber beam







* Measured values with HECO MMS-F concrete screws in kN with steel-reinforced concrete quality C 25/30, adhering to the minimum edge distances and minimum component thicknesses. The connection to the timber cross-section must be considered and assessed depending on the timber quality.

Note - SHERPA special screws are to be used with these products.

Connectors - Concrete Steel XXL Series

Product information

The innovative connectors are suitable for use in many different fields of construction. From working with nodal points in timber construction or roof and wall components to mixed and special structures with steel or concrete - everything is possible. Simple and fast calculation, high degree of prefabrication, and quick installation.

CS XXL Series	
	<p>XXL 170 CS Dimensions: 140 x 410mm Thickness: 29mm Minimum cross-section: SB 160x440mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 85.30 kN</p> <p>Timber: 21 units, 8x160 Concrete: 14 units, MMS-F 10x80</p>
	<p>XXL 190 CS Dimensions: 140 x 450mm Thickness: 29mm Minimum cross-section: SB 160x480mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 85.30 kN</p> <p>Timber: 24 units, 8x160 Concrete: 14 units, MMS-F 10x80</p>
	<p>XXL 220 CS Dimensions: 140 x 490mm Thickness: 29mm Minimum cross-section: SB 160x520mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 106.70 kN</p> <p>Timber: 27 units, 8x160 Concrete: 18 units, MMS-F 10x80</p>
	<p>XXL 250 CS Dimensions: 140 x 530mm Thickness: 29mm Minimum cross-section: SB 160x560mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 106.70 kN</p> <p>Timber: 30 units, 8x160 Concrete: 18 units, MMS-F 10x80</p>
	<p>XXL 280 CS Dimensions: 140 x 570mm Thickness: 29mm Minimum cross-section: SB 160x600mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 106.70 kN</p> <p>Timber: 30 units, 8x160 Concrete: 18 units, MMS-F 10x80</p>
	<p>XXL 300 CS Dimensions: 140 x 610mm Thickness: 29mm Minimum cross-section: SB 160x640mm</p> <p>Screws</p> <p>Rated value for carrying capability for C 25/30* approx. 106.70 kN</p> <p>Timber: 33 units, 8x160 Concrete: 18 units, MMS-F 10x80</p>

Note - SHERPA special screws are to be used with these products.

Minimum cross-section SB | minimum cross-section, secondary timber beam

* Measured values with HECO MMS-F concrete screws in kN with steel-reinforced concrete quality C 25/30, adhering to the minimum edge distances and minimum component thicknesses. The connection to the timber cross-section must be considered and assessed depending on the timber quality.

Connectors - Sherpa CLT

Product information

The SHERPA CLT connector is a coupling element for angle joints, t-joints and longitudinal joints, wall to ceiling connections, as well as ceiling joints.

Optimised for three-layer and five-layer cross-laminated timber elements, the SHERPA CLT connector can be mounted flush in solid timber or glulam already in the preinstallation phase, enabling ready-for-installation delivery to the construction site.

The CLT connector must be milled flush into cross laminated timber or glulam. The load capacity according to ETA can only be guaranteed when using SHERPA special screws.

Advantages

- Multifunctional in strength and use
- Quality reliability through the system
- Can be combined with sound-proofing
- Pre-assembled for optimal assembly
- Complete element screwing from the inside

Connector Requirement Per Connection

Wall - Wall	1 - 2 pcs / lfm
Ceiling - Wall	2 - 3 pcs / lfm
Ceiling - Ceiling	2 - 3 pcs / lfm

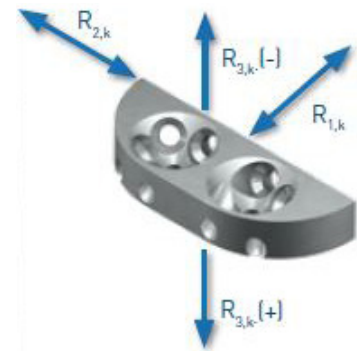
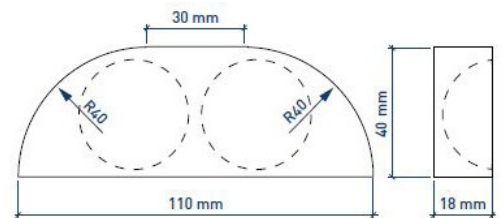
Sherpa Screws Required Per Connector

8 pcs 8.0 x 100 / 120 / 140mm
2 pcs 6.5 x 65mm

Configuration			Characteristic value ¹		
			Interlayer ≤ 12mm	Compriband ≤ 2mm	
Normal forces	Carrying capacity	$R_{1,k}$	18.80 ²		kN
	Stiffness	K_{ser}	9.750		N/mm
Shear force on the surface	Carrying capacity	$R_{2,k}$	10.00 ²		kN
	Stiffness	K_{ser}	3.300		N/mm
Shear force from the surface (positive)	Carrying capacity	$R_{3,k} [+]$	16.00 ²	16.50 ²	kN
	Stiffness	K_{ser}	3.600		N/mm
Shear force from the surface (negative)	Carrying capacity	$R_{3,k} [-]$	5.30	7.00	kN
	Stiffness	K_{ser}	870	1.000	N/mm

¹ ETA 18/0083

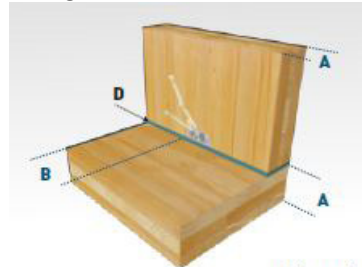
² screw l = 120mm: ns = 1.22 screw l = 140mm: ns = 1.44 $R'_k = N_s \cdot R_k$



Wall - Wall



Ceiling - Wall



Ceiling - Ceiling



A material thickness: 80 to 160mm;

> 120mm: flush milling or install both-sided

B edge distance: min 250mm

C min 100mm

Installation Instructions

- Milling: 18mm into solid timber or glulam
- Max distance between CLT connectors: $e_{max} = 2m$
- 2 pcs special screws 6.5 x 65
- 4 pcs special screws 8.0 x 100 / 120 / 140 (fix to solid timber / glulam)
- 4 pcs special screws 8.0 x 100 / 120 / 140 (mount on the second element)

D Interlayer (eg Regufoam): max 12mm

Compression hardness: min 0.2 N/mm²

Static elasticity modulus: min 1.0 N/mm²

Recommended Screw Torque

Sherpa special screws

6.5 x 65mm $M_T = 2.5 \text{ Nm}$

8.0 x 100mm $M_T = 5.0 \text{ Nm}$

Min: screw head must be in contact with counter sink