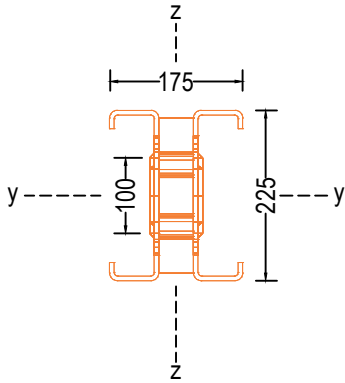


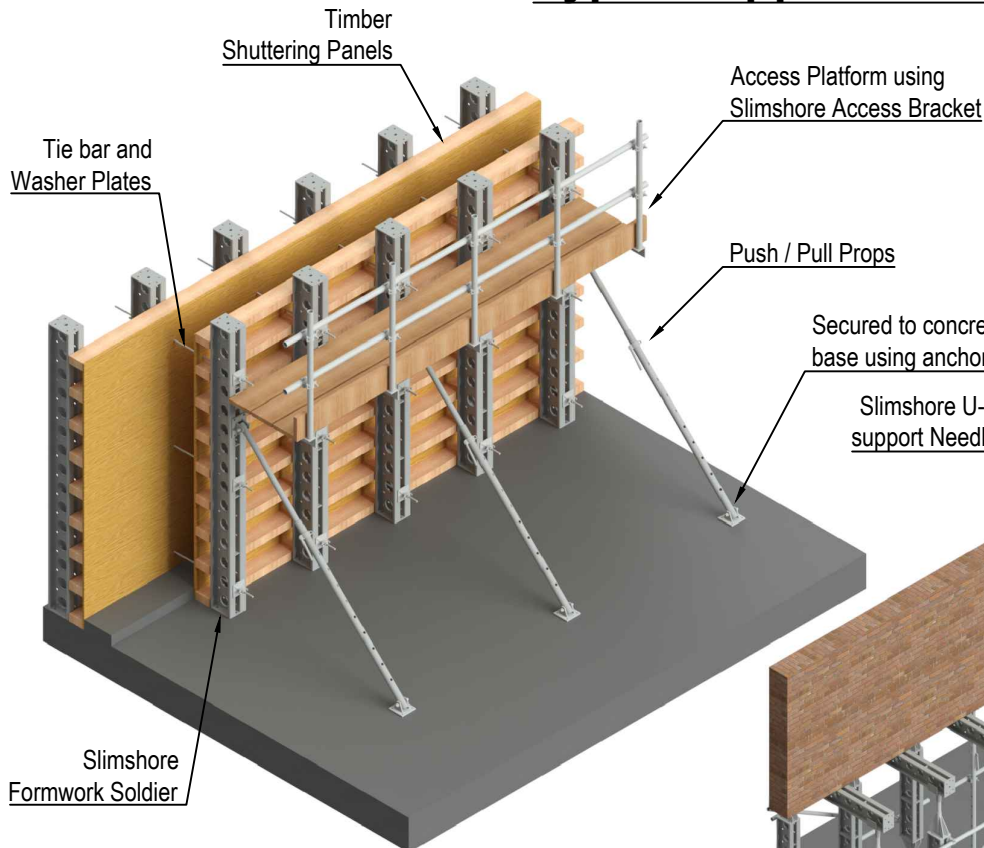
Slimshore Information Sheet



Key Permissible Properties	
Moment Capacity	42.5 kNm
Shear Capacity (at portholes)	88.0 kN
Axial Capacity (@ 4m)	232 kN
4no Bolted Joint - Moment	15.5 kNm
4no Bolted Joint - Tension	167 kN
6no Bolted Joint - Moment	20.5 kNm
6no Bolted Joint - Tension	275 kN

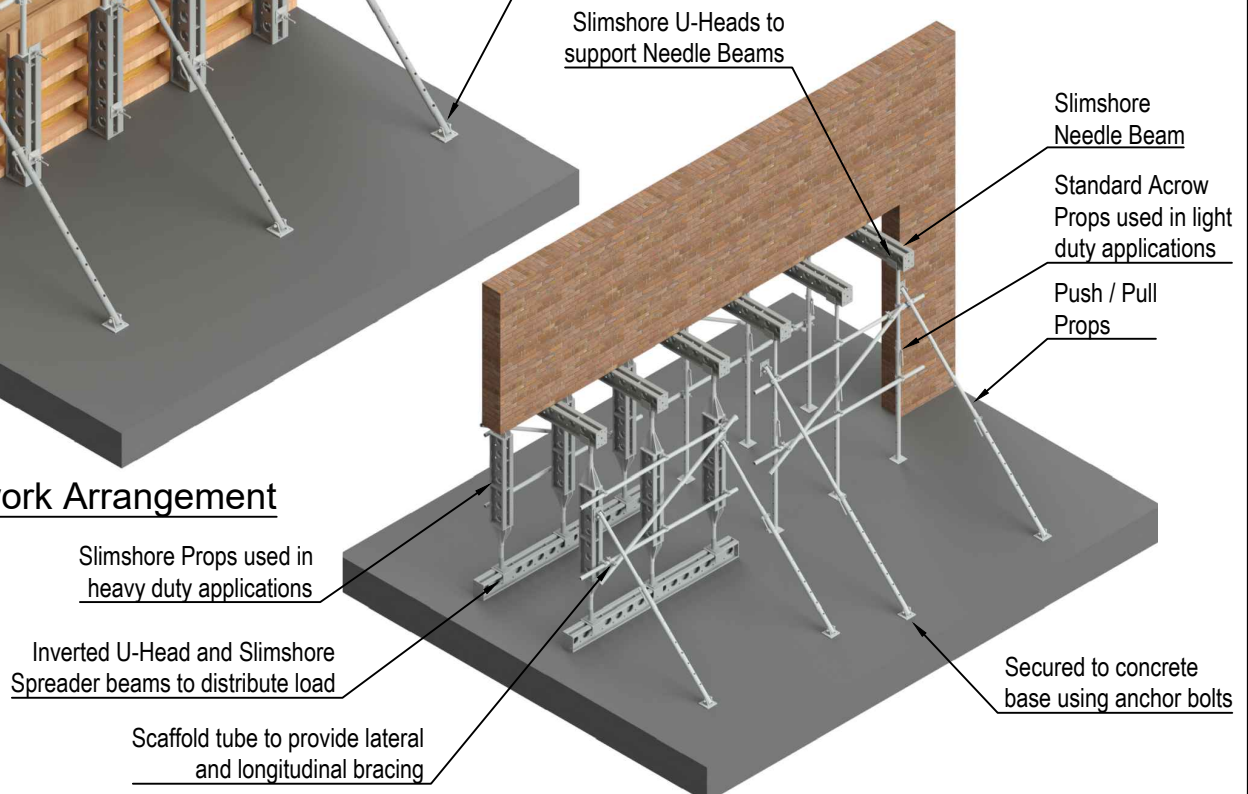
Key Section Properties	
Material Grade	S355
Net Section Area	2010.8mm ²
Net I _{yy}	1851cm ⁴
Net I _{zz}	551.9cm ⁴
Average self weight	23.5 kg/m

Typical Applications



Typical Formwork Arrangement

Typical Propping & Needling Arrangement



Slimshore Information Sheet

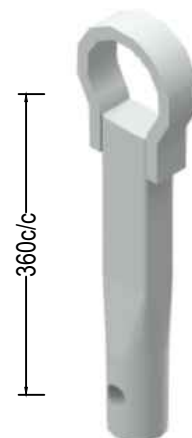
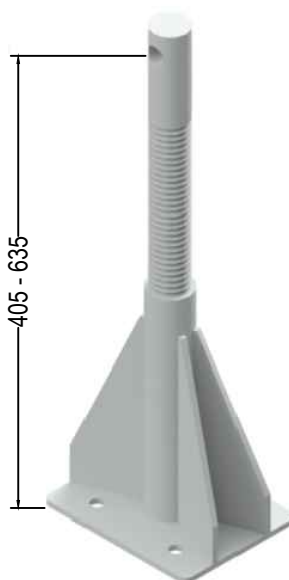
Slimshore Key Components



Slimshore Soldier

Description	Weight (kg)
0.09m Packer Unit	7.3
0.36m Soldier	11.9
0.54m Soldier	15.2
0.72m Soldier	18.7
0.90m Soldier	22.0
1.8m Soldier	38.8
2.7m Soldier	55.4
3.6m Soldier	72.2

*Slimshore Soldier units can be connected end to end using a 4no. or 6no. **M16x40** Bolted joint, depending on the required strength. The soldiers can be used as Prop units, Raking shores, Needle Beams and more.*



Adjustable Base Jack

Description	Weight (kg)
365 - 515mm Jack	19.0

*The Adjustable Base Jack allows for fine adjustment in height when combined with Slimshore Soldier prop units. Connection to Soldier units using 4no **M16x40** Bolts. Connection to a suitable concrete slab using anchor bolts (by others).*

LH / RH Jacks

Description	Weight (kg)
LH Adjustable Jack	15.0
RH Adjustable Jack	15.0

*The handed Left or Right Jacks connect to Slimshore Soldier units for Heavy Duty Push/Pull Props. Connection to Soldier units using 4no **M16x40** Bolts. Connection to Tilt Plate or Spade End Link using **M24x110** Bolts*

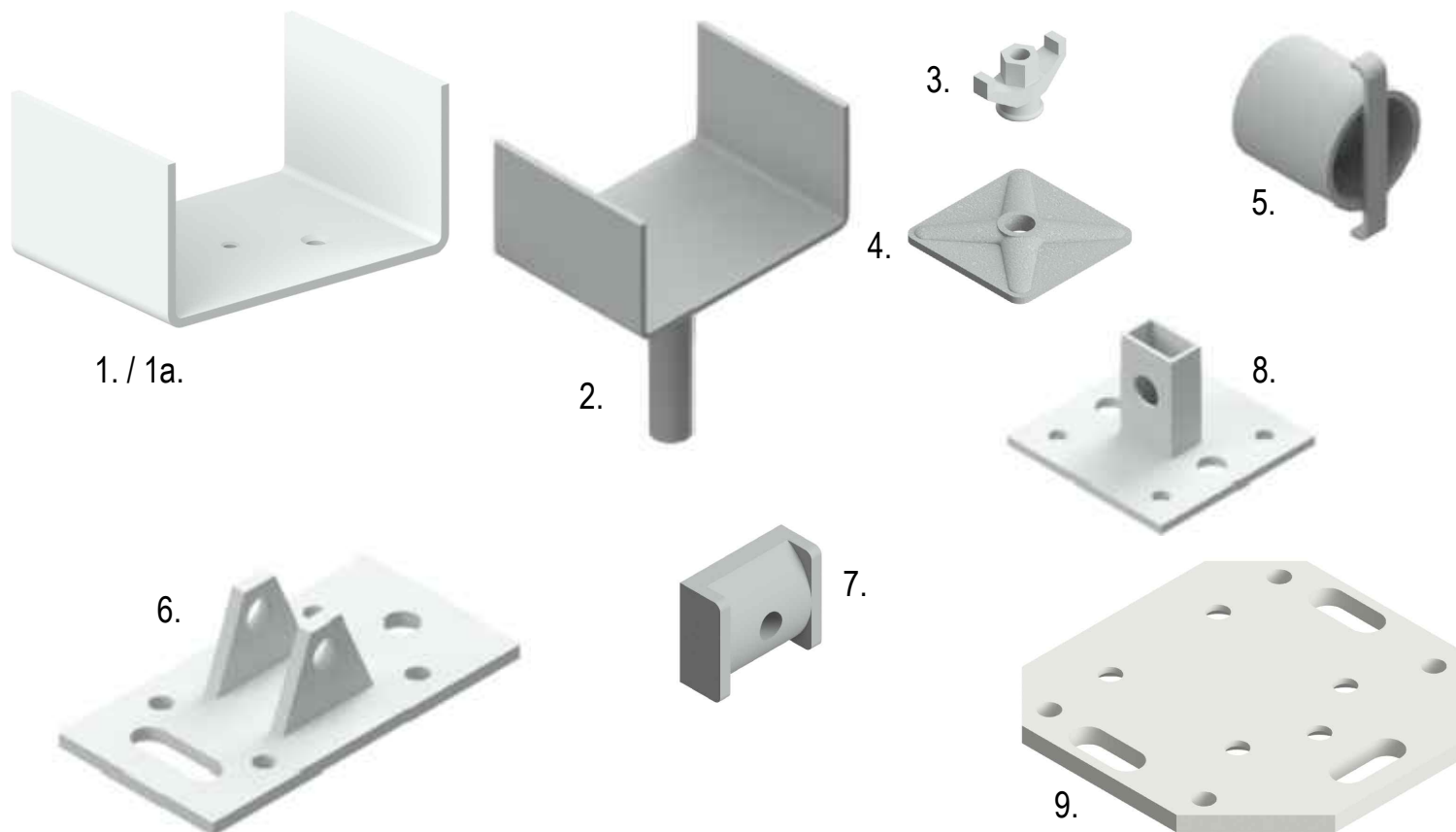
Spade End Link

Description	Weight (kg)
Spade End Link	3.1

*The Spade End Link connects to the LH/RH Jacks to enable connection to the web hole in the soldier unit using the Prop Pivot Tube. Connection to LH/RH Jacks using **M24x110** Bolts.*

Slimshore Information Sheet

Slimshore Ancillary Components

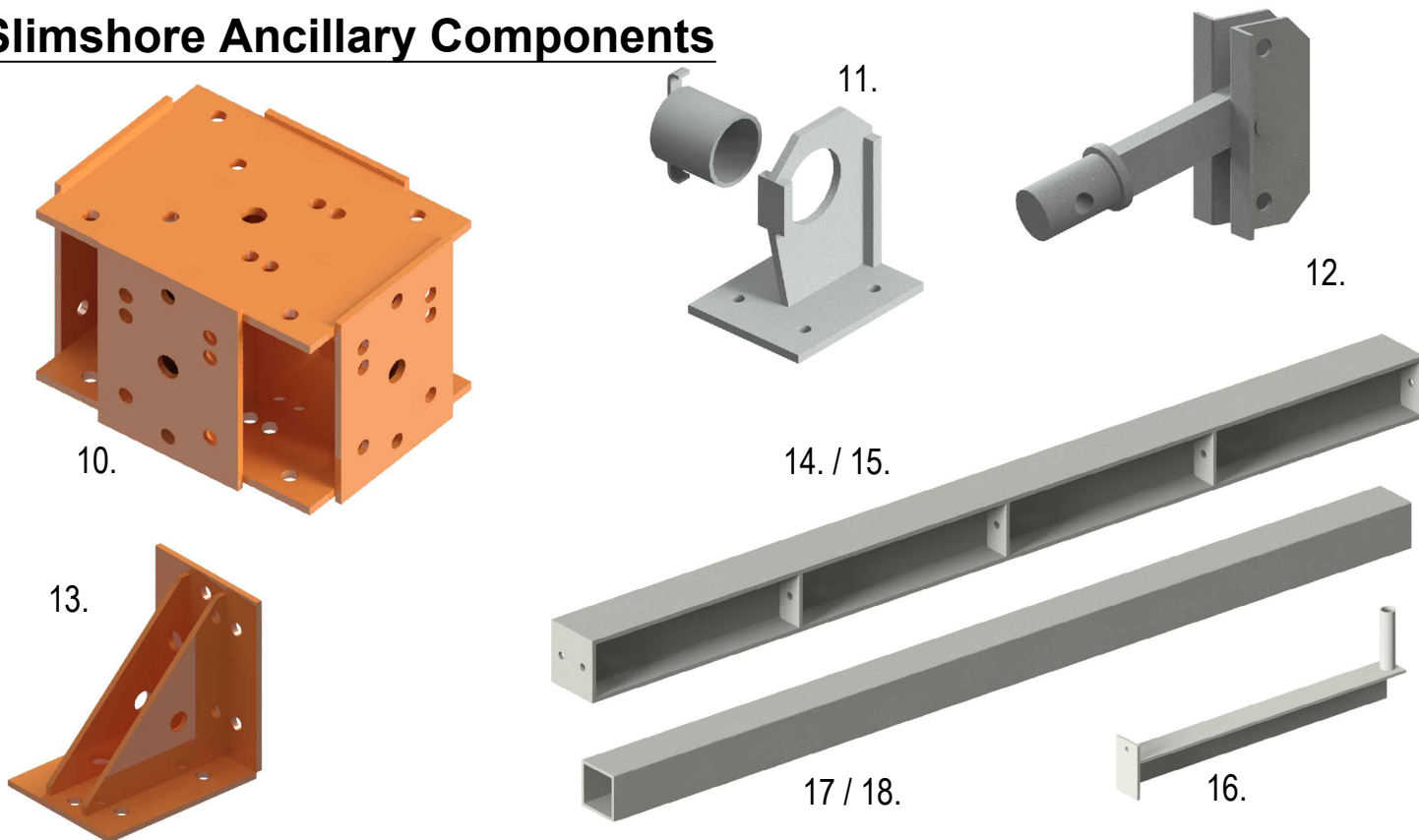


Ancillary Components

No.	Description	Weight (kg)	Comments
1	U-Head Type A	5.3	U-Head fixes to Adjustable props using 2no Countersunk M12x40 bolts to support a 180mm wide beam.
1a	U-Head Type C	5.7	Larger 220mm wide U-Head for use with the 203x203x46 Needle Beam. 2no Countersunk M12x40 bolts.
2	U-Head Type B	8.5	U-Head compatible with Standard props to support a 180mm wide beam.
3	Wing Nut	0.4	Secures 15mm Tie Bar.
4	Washer Plate	0.9	Used in conjunction with the Wing Nut to secure 15mm Tie Bar
5	Prop Pivot Tube	1.8	Secures the Spade End Link into the web hole of a Soldier
6	Tilt Plate	4.8	Used to connect Heavy Duty Push / Pull props to a concrete base.
7	Porthole Bearing	5.0	Sits within the web hole of a Soldier to allow a diagonal Tie Bar connection
8	T-Connection	1.5	Connects to the bolt hole in the web of a Soldier unit to secure a standard Push / Pull prop.
9	Anchor Plate	7.3	Connects to a Soldier section using 4no Countersunk M16x40 bolts to allow fixing to a concrete slab.

Slimshore Information Sheet

Slimshore Ancillary Components

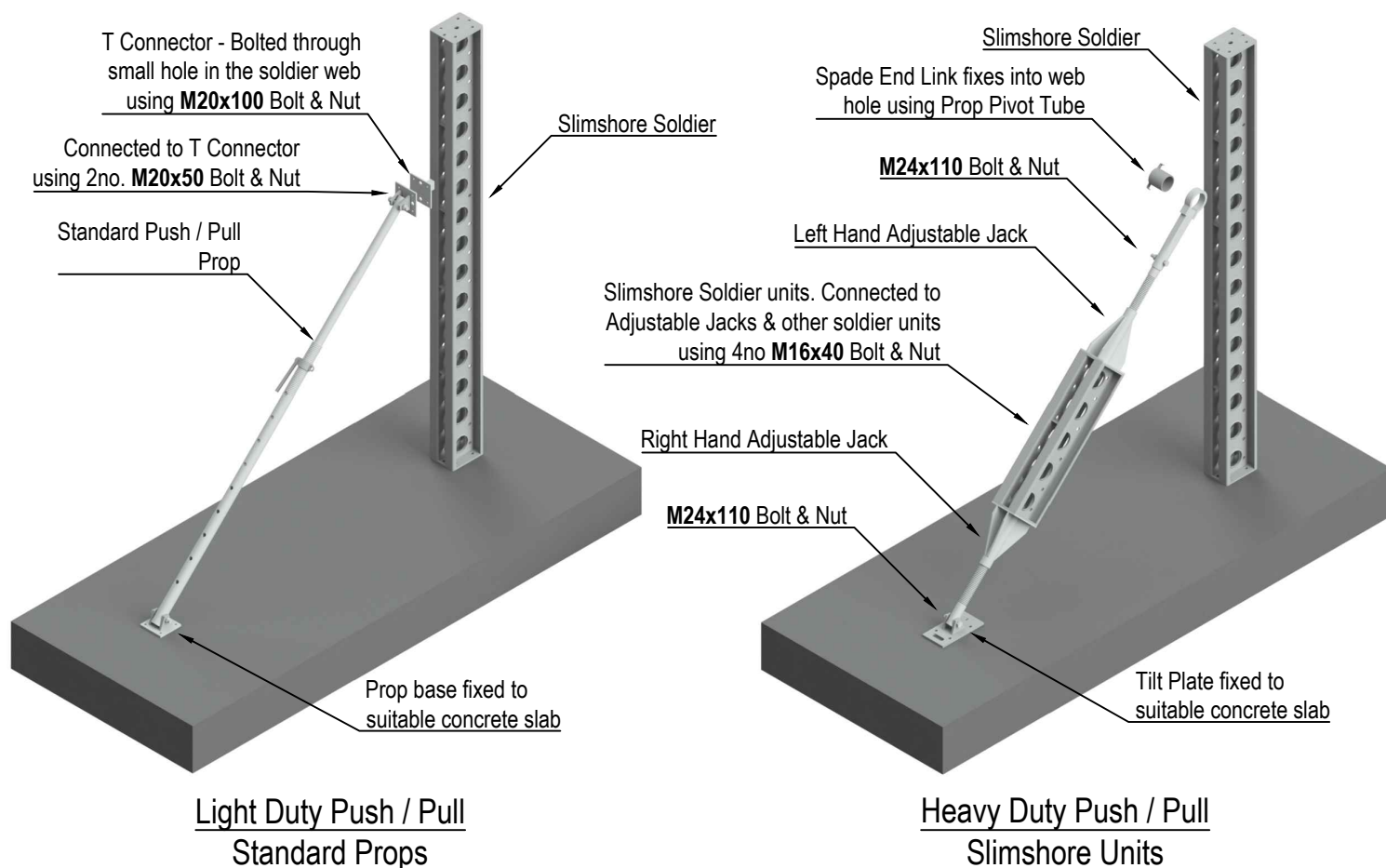


Ancillary Components

No.	Description	Weight (kg)	Comments
10	6-Way Connector	24.9	Allows connection of Slimshore Soldiers and other components at a junction.
11	Corner Pivot	7.3	Used in conjunction with a Prop Pivot Tube & Pin to connect to the main holes along a Slimshore Soldier. Can be tilted up to 15° from the perpendicular soldier. SWL = +/- 65kN.
12	100kN Connector	6.8	Allows for an increased push/pull capacity when connected to a Slimshore Soldier with M20 Bolts . See 'Heavy Duty Push/Pull' overleaf - replaces the Spade End Link & Prop Pivot Tube.
13	90° Corner	8.7	Used to connect the end plates of two Slimshore Soldiers at 90°. Can Also be used to allow connection of a push/pull at the end of a soldier.
14	152x152x37 Needle Beam	92.5	2.5m Long beam used for Needling applications when supported by suitable props. See loading charts on page 13.
15	203x203x46 Needle Beam	165.0	3.0m Long beam used for heavier applications and supported by suitable props. See loading charts on page 13.
16	Access Bracket	6.7	Connects to the bolt hole in the web of a Soldier unit utilising a captive fixing. The bracket provides support for scaffold boards and scaffold tube edge barriers.
17	120x120x8 SHS Needle Beam	65.0	2.4m Long beam used for Needling applications when supported by suitable props. See loading charts on page 13.
18	120x60x8 RHS Needle Beam	30.0	1.5m Long beam used for light needling applications in tight spaces. Fits within one standard brick height when in the landscape orientation. SWL = 1.5Tonnes (15kN)

Slimshore Information Sheet

Slimshore Push / Pull Prop Types



Light Duty Push / Pull Prop Capacities

For general light usage of push/pull props and standard props, please see the below table. The information is based on standard adjustable steel props as defined by BS 4074.

Prop No.	Dimensions		Permissible Load - Concentric loading & Max. 1.5° out of plumb	Weight - Prop Type	Weight - Push/Pull Type
	Closed	Open			
	m	m	kN	kg	kg
0	1.07	1.82	35	13.0	15.8
1	1.75	3.12	18	18.6	23.0
2	1.98	3.35	16	19.6	24.0
3	2.59	3.96	12	22.3	27.0
4	3.20	4.87	10	26.4	31.6

For heavy duty usage using Slimshore Soldier units, most typical applications will be limited by the **65kN Spade End Link** capacity. The 100kN Connector is available to increase this to +/- 100kN. For further information and advice please contact Site Equipment Ltd.

Slimshore Information Sheet

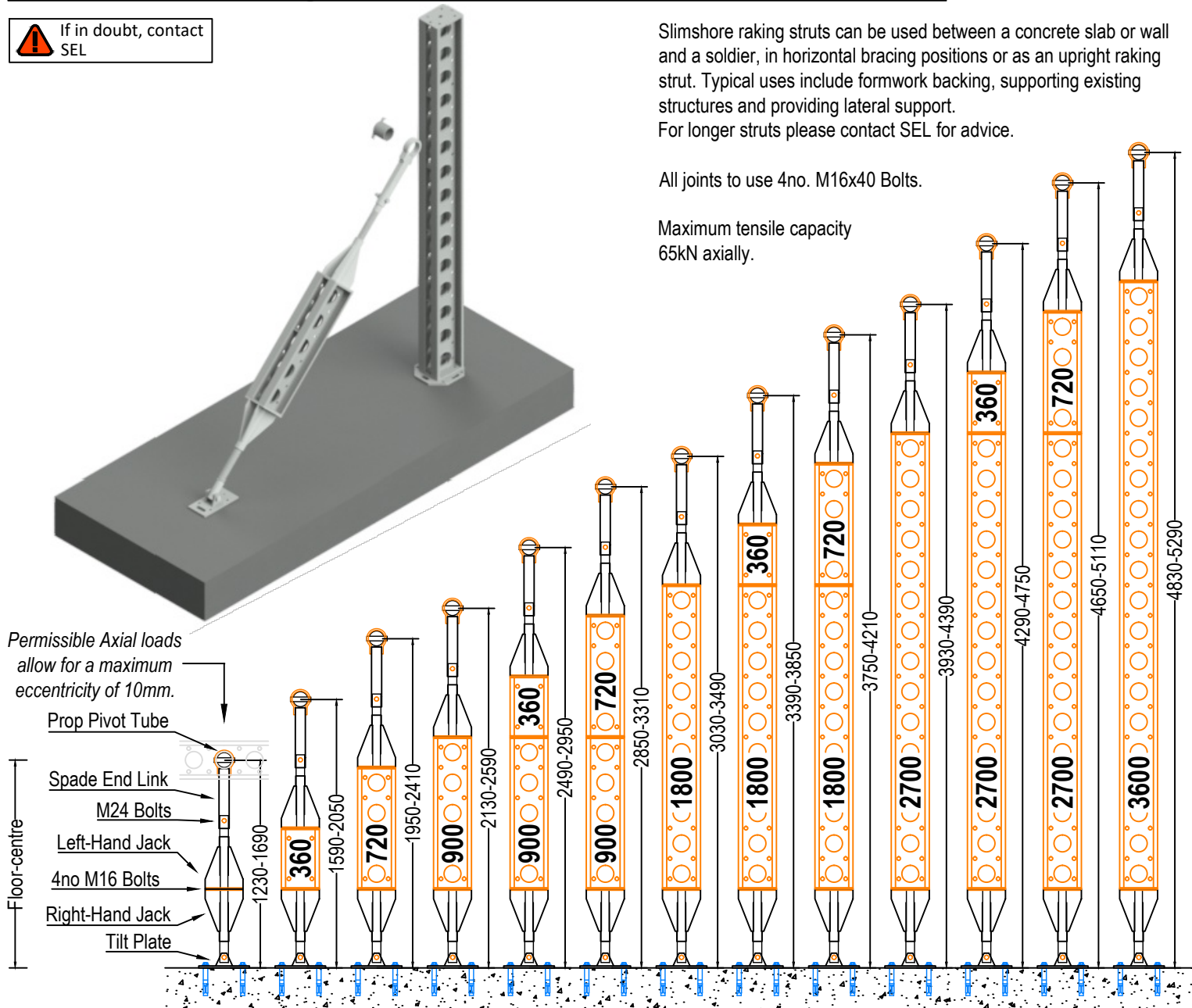
Slimshore Raking Prop - Tilt Plate + Spade End Links

 If in doubt, contact SEL

Slimshore raking struts can be used between a concrete slab or wall and a soldier, in horizontal bracing positions or as an upright raking strut. Typical uses include formwork backing, supporting existing structures and providing lateral support. For longer struts please contact SEL for advice.

All joints to use 4no. M16x40 Bolts.

Maximum tensile capacity
65kN axially.

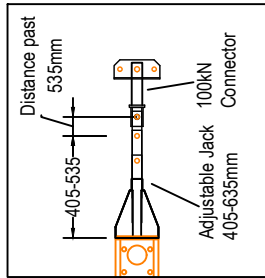


Prop No.		1	2	3	4	5	6	7	8	9	10	11	12	13
Kit Code		TS_01	TS_02	TS_03	TS_04	TS_05	TS_06	TS_07	TS_08	TS_09	TS_10	TS_11	TS_12	TS_13
Dimensions (floor/c)	Min (m)	1.230	1.590	1.950	2.130	2.490	2.850	3.030	3.390	3.750	3.930	4.290	4.650	4.830
	Max (m)	1.690	2.050	2.410	2.590	2.950	3.310	3.490	3.850	4.210	4.390	4.750	5.110	5.290
Permissible Axial Load - Y-Y Axis (kN)		65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
Permissible Axial Load - Z-Z Axis (kN)		65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
Weight (kg)		41.0	53.0	59.9	63.2	75.2	82.0	80.0	92.0	98.8	96.6	108.5	115.3	113.6

Slimshore Information Sheet

Slimshore Raking Prop - Tilt Plate + 100kN Connectors

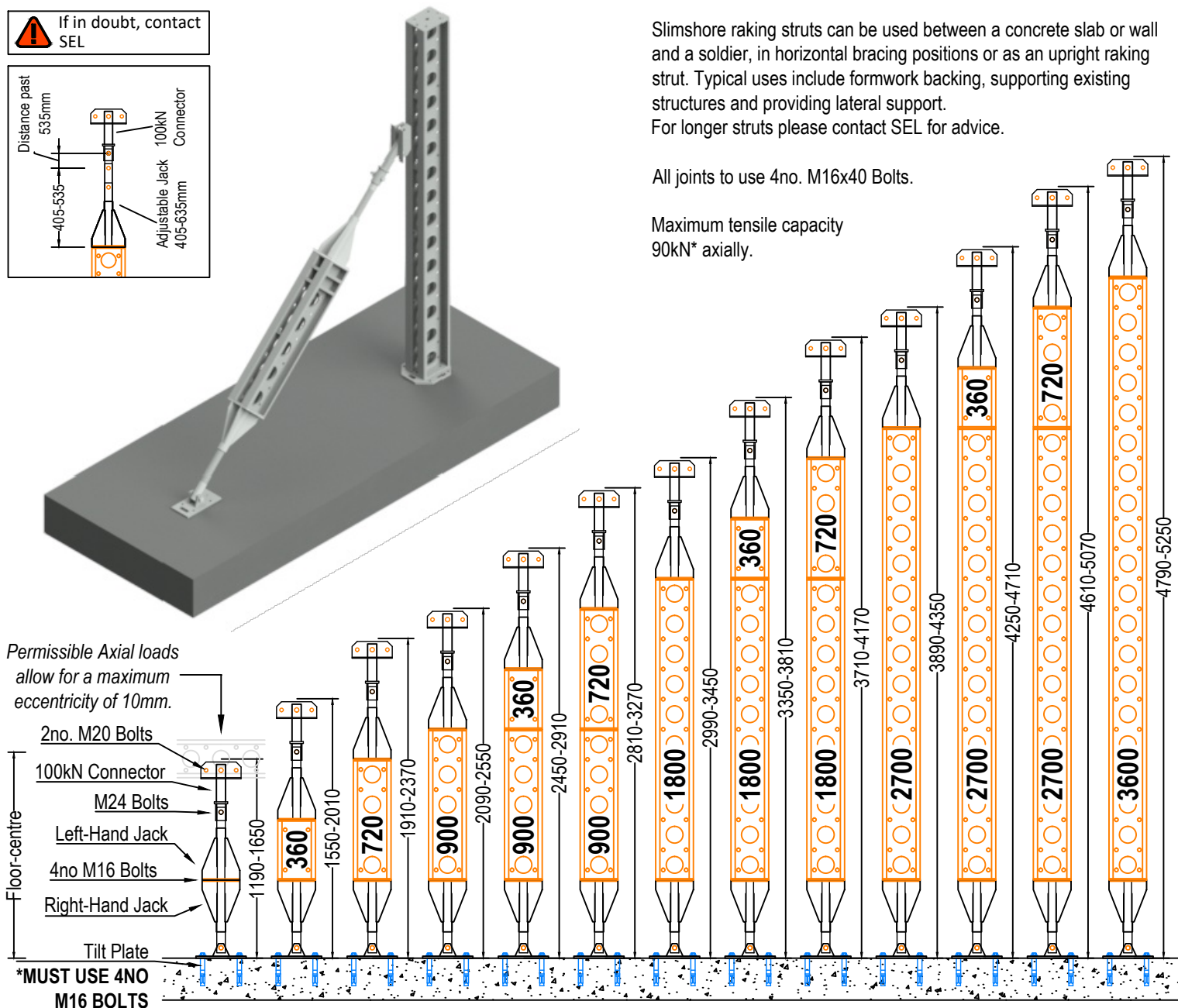
 If in doubt, contact SEL



Slimshore raking struts can be used between a concrete slab or wall and a soldier, in horizontal bracing positions or as an upright raking strut. Typical uses include formwork backing, supporting existing structures and providing lateral support. For longer struts please contact SEL for advice.

All joints to use 4no. M16x40 Bolts.

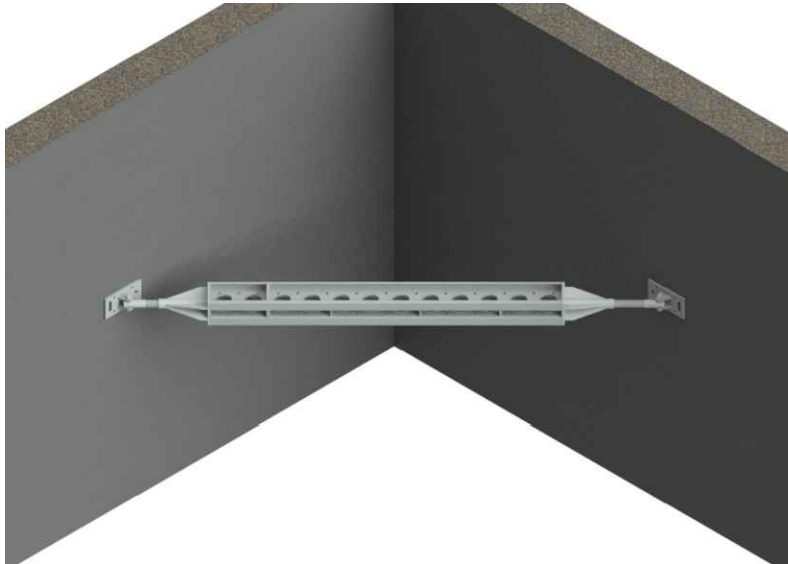
Maximum tensile capacity
90kN* axially.



Prop No.		1	2	3	4	5	6	7	8	9	10	11	12	13
Kit Code		T100_01	T100_02	T100_03	T100_04	T100_05	T100_06	T100_07	T100_08	T100_09	T100_10	T100_11	T100_12	T100_13
Dimensions (floor/c)	Min (m)	1.190	1.550	1.910	2.090	2.450	2.810	2.990	3.350	3.710	3.890	4.250	4.610	4.790
	Max (m)	1.650	2.010	2.370	2.550	2.910	3.270	3.450	3.810	4.170	4.350	4.710	5.070	5.250
Permissible Axial Load - Jack Extension 405-535mm (kN)		90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Permissible Axial Load - Jack Extension 535-635mm (kN)		Permissible Axial Load (kN) = 90kN - (0.14 x Distance past 535mm) e.g. Jack Extension = 600mm. 90 – (0.14 x 65) = 81kN												
Weight (kg)		39.1	51.1	58.0	61.3	73.3	80.1	78.1	90.1	96.9	94.7	106.6	113.4	111.7

Slimshore Information Sheet

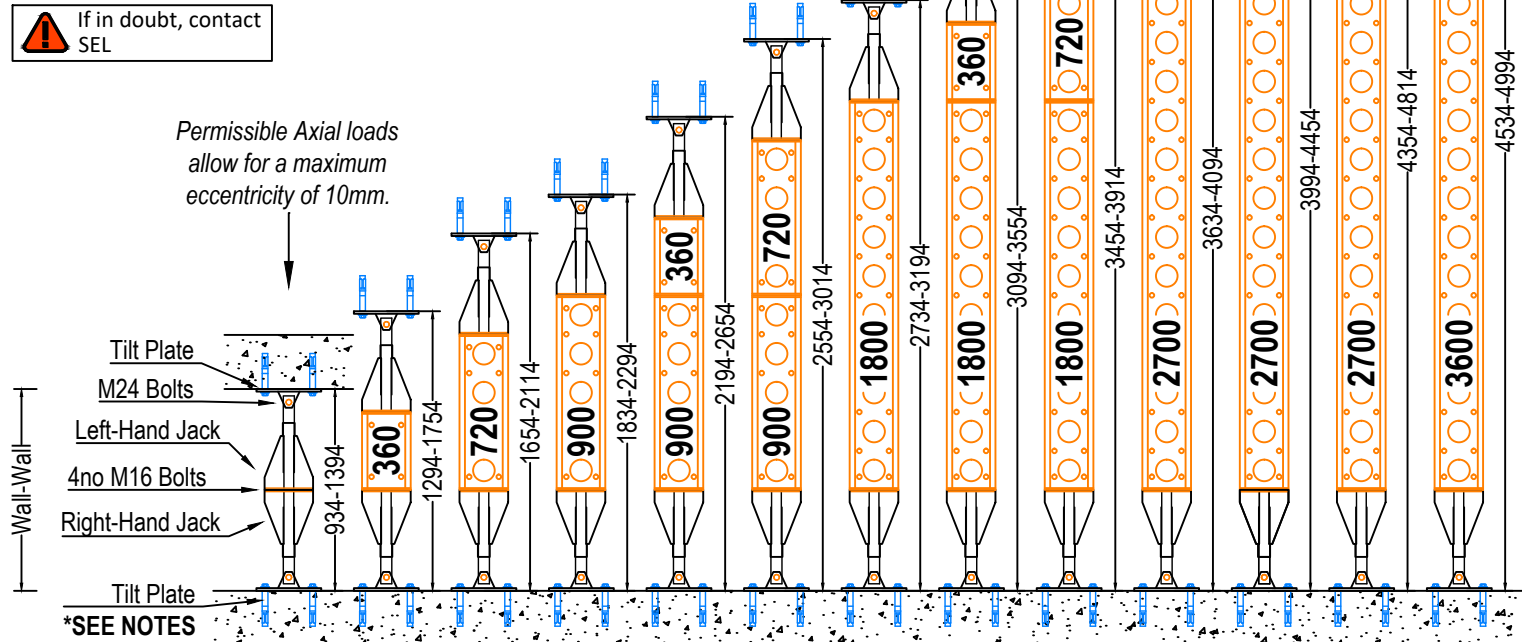
Slimshore Raking Prop - Tilt Plates Both Ends



Slimshore raking struts can be used between two soldiers, in horizontal bracing positions or as an upright raking strut. Typical uses include supporting existing structures and providing lateral support. For longer struts please contact SEL for advice.

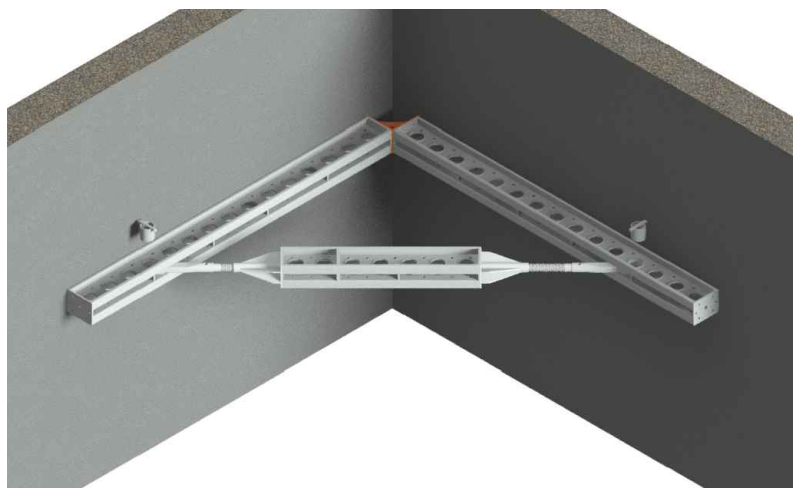
All joints to use 4no. M16x40 Bolts.

Maximum tensile capacities as table below.



Slimshore Information Sheet

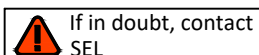
Slimshore Raking Prop - Spade End Links



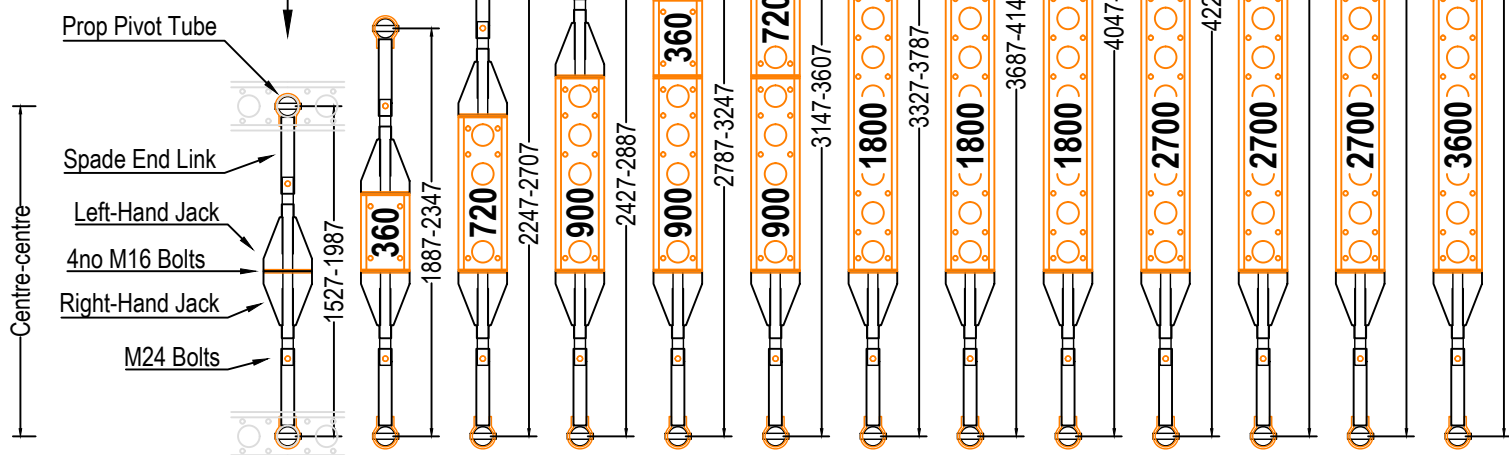
Slimshore raking struts can be used between two soldiers, in horizontal bracing positions or as an upright raking strut. Typical uses include supporting existing structures and providing lateral support. For longer struts please contact SEL for advice.

All joints to use 4no. M16x40 Bolts.

Maximum tensile capacity
65kN axially.



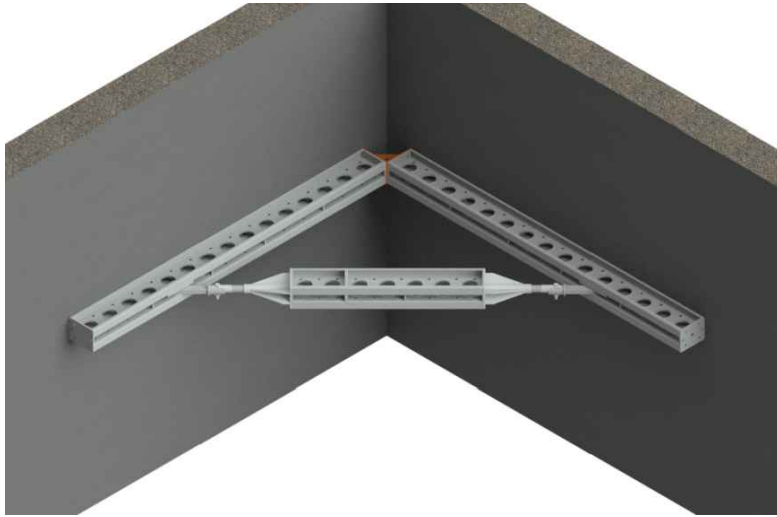
Permissible Axial loads
allow for a maximum
eccentricity of 10mm.



Prop No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Kit Code	SS_01	SS_02	SS_03	SS_04	SS_05	SS_06	SS_07	SS_08	SS_09	SS_10	SS_11	SS_12	SS_13
Dimensions (c/c)	Min (m)	1.527	1.887	2.247	2.427	2.787	3.147	3.327	3.687	4.047	4.227	4.587	4.947
	Max (m)	1.987	2.347	2.707	2.887	3.247	3.607	3.787	4.147	4.507	4.687	5.047	5.407
Permissible Axial Load - Y-Y Axis (kN)	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
Permissible Axial Load - Z-Z Axis (kN)	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
Weight (kg)	41.0	53.0	59.9	63.2	75.2	82.0	80.0	92.0	98.8	96.6	108.5	115.3	113.6

Slimshore Information Sheet

Slimshore Raking Prop - 100kN + 100kN Connectors

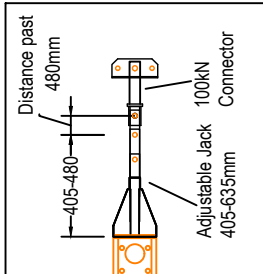


Slimshore raking struts can be used between two soldiers, in horizontal bracing positions or as an upright raking strut. Typical uses include supporting existing structures and providing lateral support. For longer struts please contact SEL for advice.

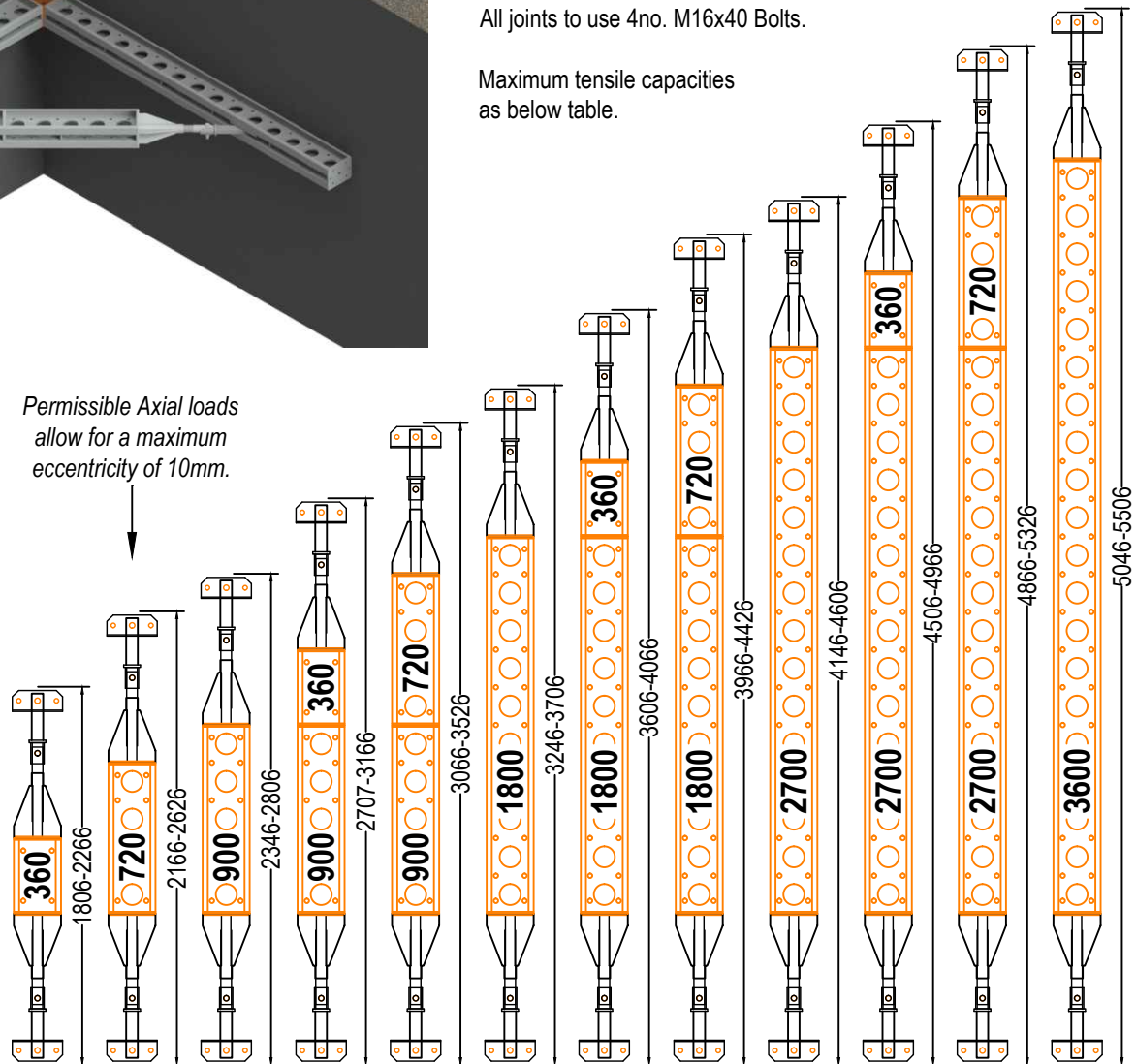
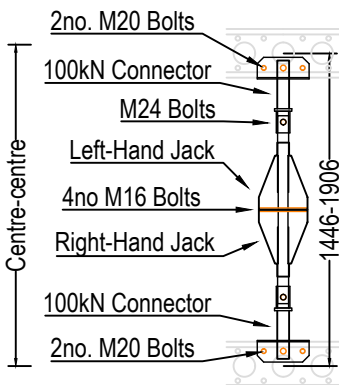
All joints to use 4no. M16x40 Bolts.

Maximum tensile capacities as below table.

! If in doubt, contact SEL



Permissible Axial loads allow for a maximum eccentricity of 10mm.



Prop No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Kit Code	1010_01	1010_02	1010_03	1010_04	1010_05	1010_06	1010_07	1010_08	1010_09	1010_10	1010_11	1010_12	1010_13
Dimensions (c/c)	Min (m)	1.446	1.806	2.166	2.346	2.707	3.066	3.246	3.606	3.966	4.146	4.506	4.866
	Max (m)	1.906	2.266	2.626	2.806	3.166	3.526	3.706	4.066	4.426	4.606	4.966	5.046
Permissible Axial Load - Jack Extension 405-480mm (kN)		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.0	85.0
Permissible Axial Load - Jack Extension 480-635mm (kN)		Permissible Axial Load (kN) = 100kN - (0.14 x Distance past 480mm (D)) e.g. Jack Extension = 550mm: 100 - (0.14 x 70) = 90.5kN										77.0	77.0
Weight (kg)		41.1	53.1	60.0	63.3	75.3	82.1	80.1	92.1	98.9	96.7	108.6	113.7

Slimshore Information Sheet

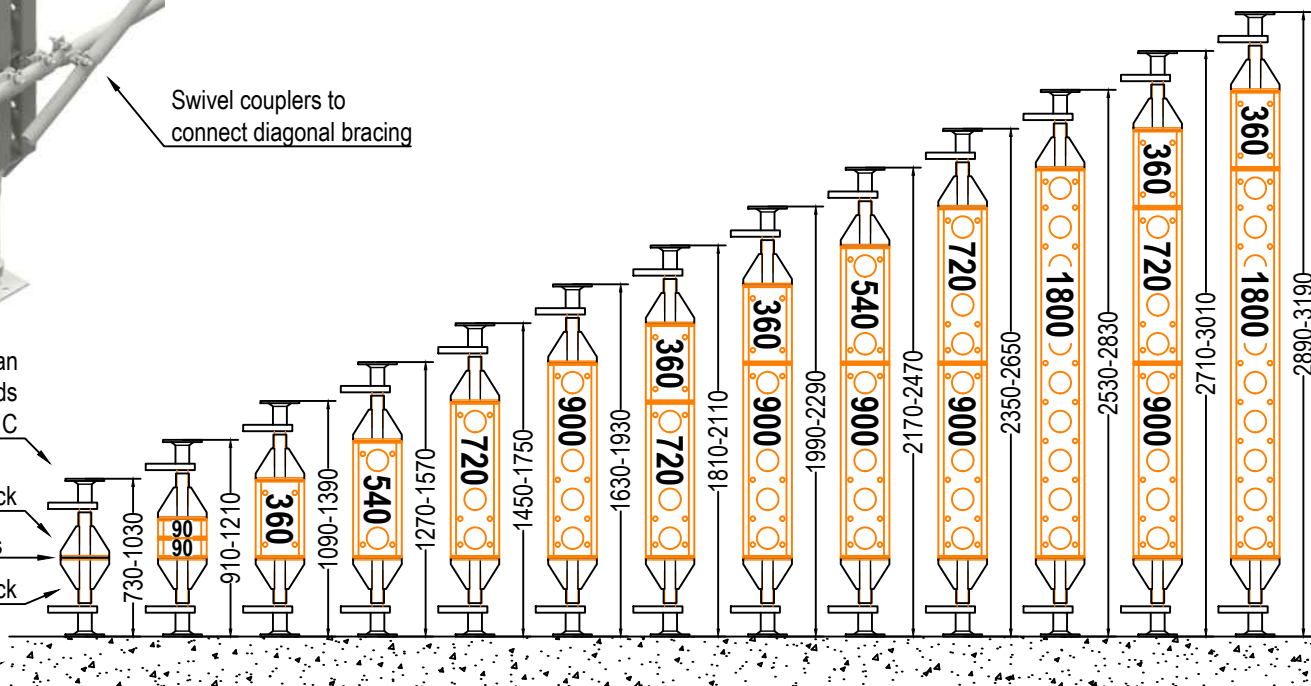
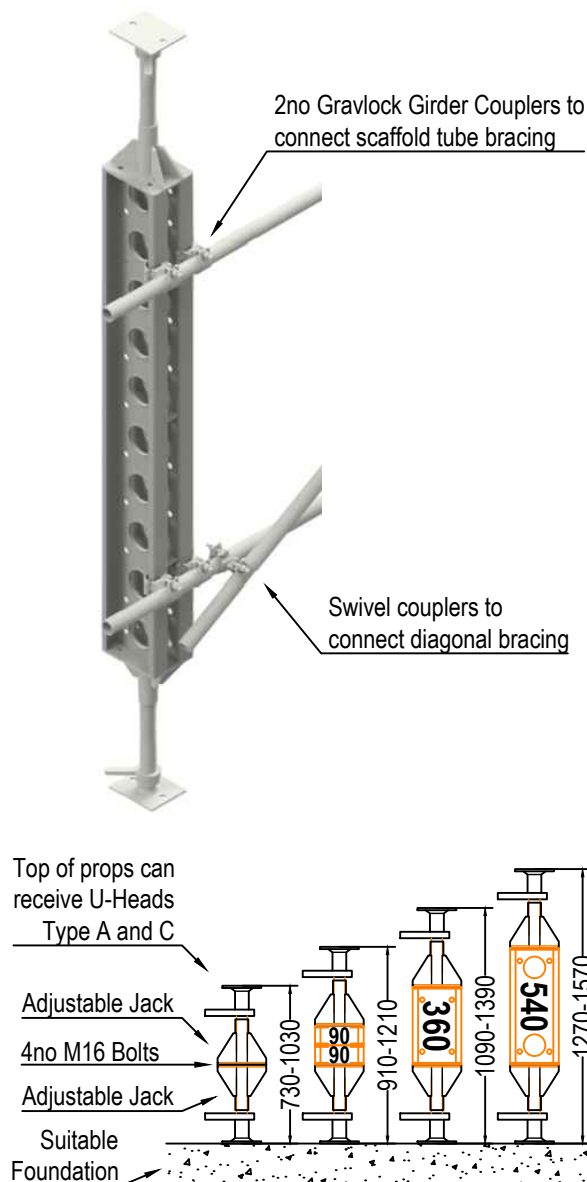
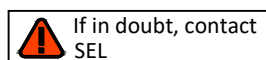
Slimshore Adjustable Prop

Slimshore Adjustable Props to be used for vertical applications, usually braced laterally using scaffold tubes connected to the soldiers using 2no Gravlocks per intersection. Typical uses include supporting existing structures (dead propping) and supporting the underside of Needle beams for Propping & Needling applications.

For longer struts please contact SEL for advice. Additional 90mm Packer pieces can be added in to any prop for increased flexibility.

All joints to use 4no. M16x40 Bolts.

Slimshore Adjustable Props must NOT be used in tension.

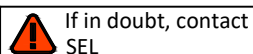


Prop No.		1	2	3	4	5	6	7	8	9	10	11	12	13
Kit Code		AP_01	AP_02	AP_03	AP_04	AP_05	AP_06	AP_07	AP_08	AP_09	AP_10	AP_11	AP_12	AP_13
Dimensions (c/c)	Min (m)	0.730	0.910	1.090	1.270	1.450	1.630	1.810	1.990	2.170	2.350	2.530	2.710	2.890
	Max (m)	1.030	1.210	1.390	1.570	1.750	1.930	2.110	2.290	2.470	2.650	2.830	3.010	3.190
Permissible Axial Load (kN) - Prop unrestrained, maximum eccentricity 10mm		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Permissible Axial Load (kN) - Buckling about the weak axis (z-z) controlled using scaffold lacing		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weight (kg)		38.2	53.0	50.2	53.5	57.0	60.3	69.1	72.4	75.7	79.2	77.1	91.2	89.2

Slimshore Information Sheet

Slimshore Adjustable Prop

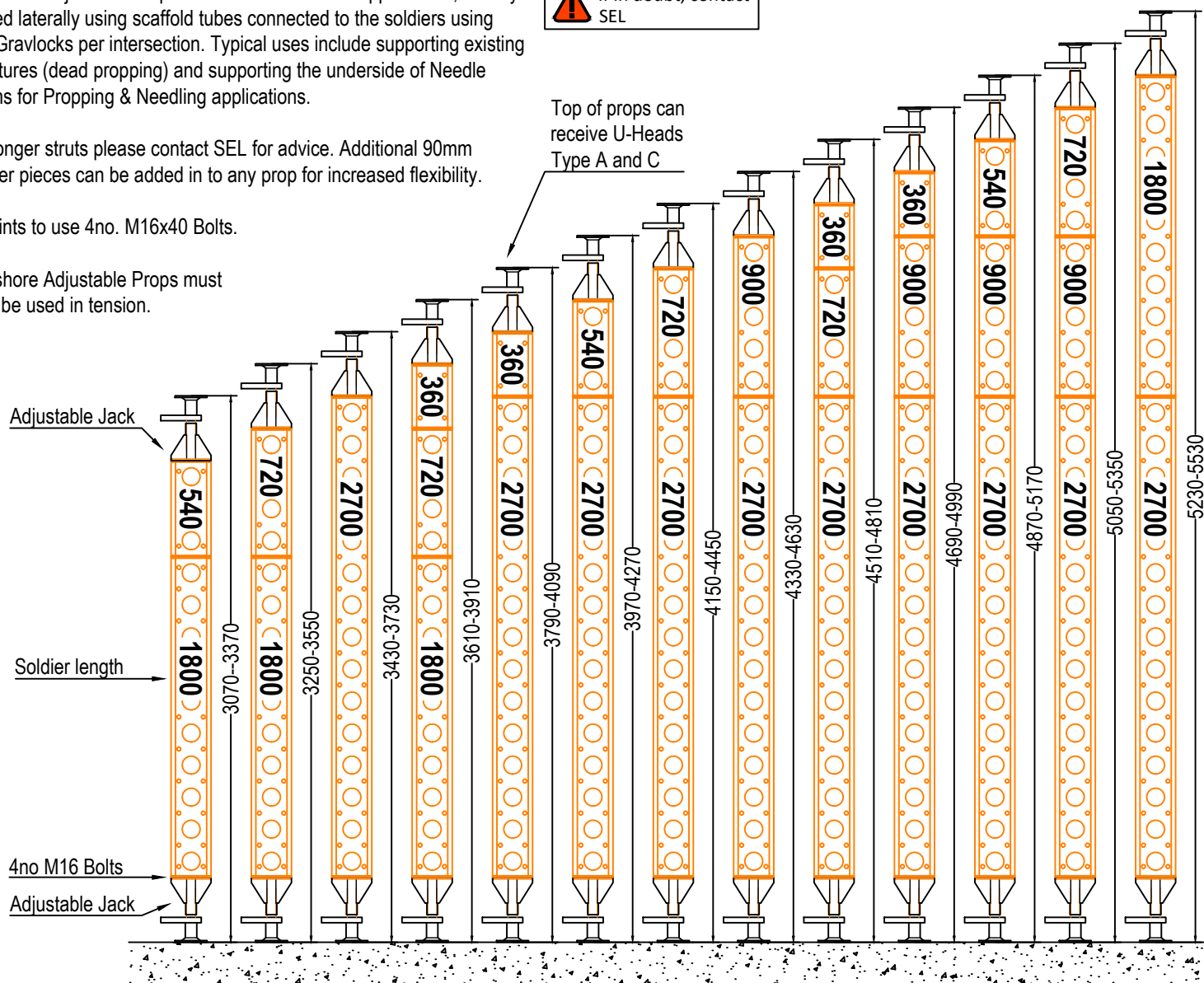
Slimshore Adjustable Props to be used for vertical applications, usually braced laterally using scaffold tubes connected to the soldiers using 2no Gravlocks per intersection. Typical uses include supporting existing structures (dead propping) and supporting the underside of Needle beams for Propping & Needling applications.



For longer struts please contact SEL for advice. Additional 90mm Packer pieces can be added in to any prop for increased flexibility.

All joints to use 4no. M16x40 Bolts.

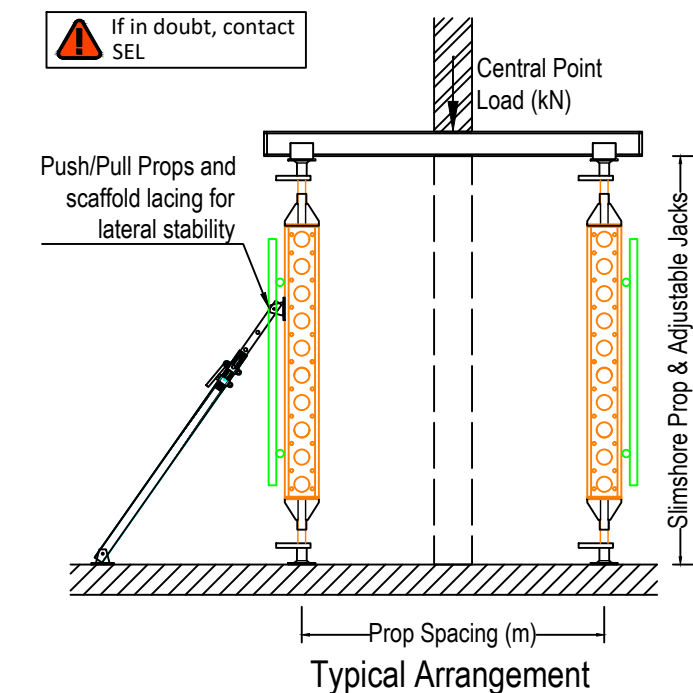
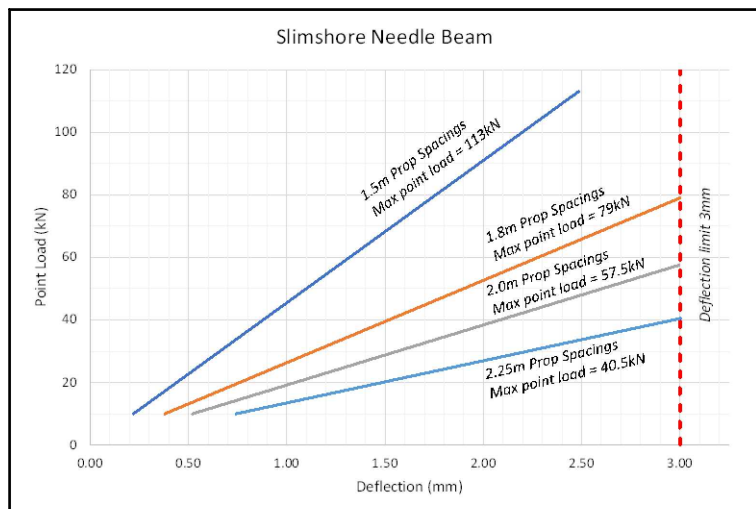
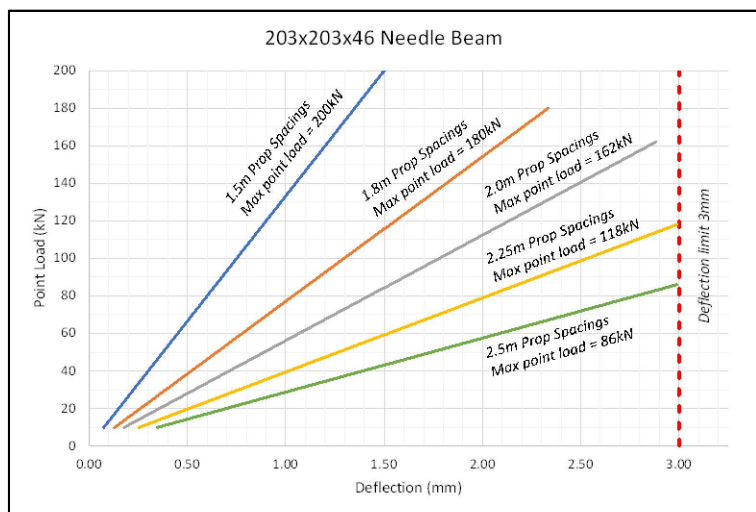
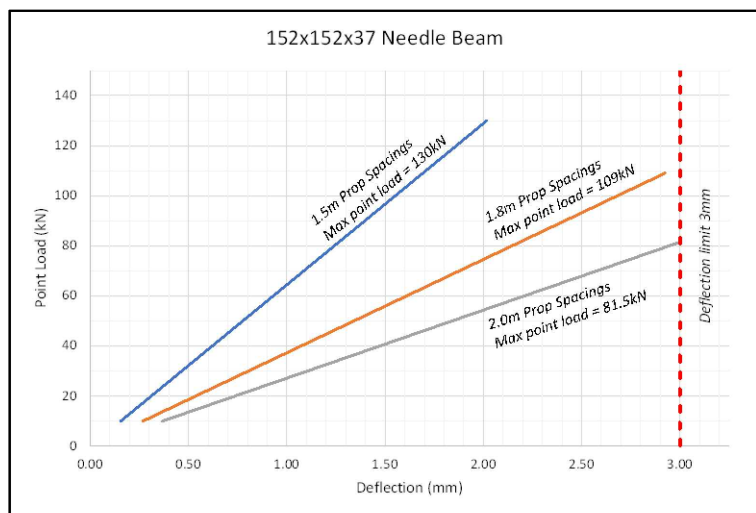
Slimshore Adjustable Props must NOT be used in tension.



Prop No.		14	15	16	17	18	19	20	21	22	23	24	25	26
Kit Code		AP_14	AP_15	AP_16	AP_17	AP_18	AP_19	AP_20	AP_21	AP_22	AP_23	AP_24	AP_25	AP_26
Dimensions (c/c)	Min (m)	3.070	3.250	3.430	3.610	3.790	3.970	4.150	4.330	4.510	4.690	4.870	5.050	5.230
	Max (m)	3.370	3.550	3.730	3.910	4.090	4.270	4.450	4.630	4.810	4.990	5.170	5.350	5.530
Permissible Axial Load (kN) - Prop unrestrained, maximum eccentricity 10mm		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.0	88.0	85.0
Permissible Axial Load (kN) - Buckling about the weak axis (z-z) controlled using scaffold lacing		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weight (kg)		92.5	96.0	93.7	108.0	105.8	109.0	112.6	115.9	124.7	128.0	131.3	134.8	132.7

Slimshore Information Sheet

Needle Beam Loading Charts

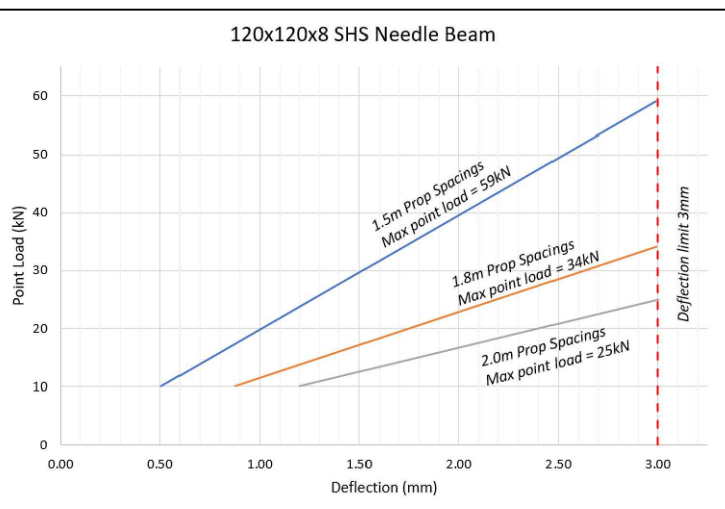


The above diagram shows a typical cross section of a Propping & Needling system. In good condition masonry, needles can be spaced at 1.0m centre-centre.

Suitable foundations must be provided. The bearing capacity of the supported masonry must be considered. In high load situations, the needle centres may need to be reduced. Consult a Structural Engineer for further advice.

The loading charts show permissible central point loads on the Needle only at various typical prop spacings, and are limited to:

- Needle deflection of 3.0mm, which is generally considered satisfactory in masonry. Please note that in heavily loaded situations, an additional consideration of prop shortening and foundation settlement may need to be considered.
- Maximum point loads as stated at each prop spacing
- Permissible Bending Moment of the needle

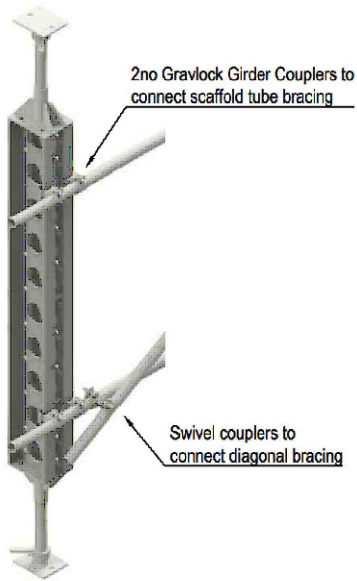


Slimshore Information Sheet

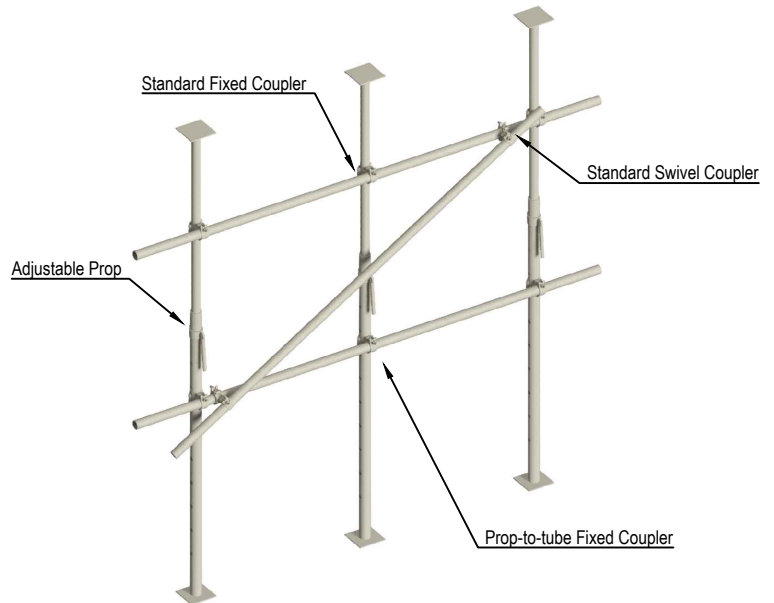
Adjustable Props & Scaffold Bracing

For many propping applications, bracing of vertical props will be required. This can often be achieved using standard scaffold tube and fixings.

HD Prop Bracing Connection



Light Prop Bracing Connection



Adjustable Prop No.	Dimensions		Permissible Load - Concentric loading & Max. 1.5° out of plumb	Weight
	Closed	Open		
	m	m	kN	kg
0	1.07	1.82	35	13.0
1	1.75	3.12	18	18.6
2	1.98	3.35	16	19.6
3	2.59	3.96	12	22.3
4	3.20	4.87	10	26.4

Scaffolding & Bracing Accessories

Description	Weight (kg)	Comments
Gravlock	1.54	Always used in pairs to fix scaffold tube to a Slimshore prop
Fixed Coupler	1.35	Standard 48/48 coupler
Prop to Tube Coupler	1.75	Larger 60/48 coupler for the lower part of an adjustable prop
Swivel Coupler	1.48	Standard 48/48 swivel coupler
Scaffold Tube - 1.0m	4.50	Standard scaffold tube
Scaffold Tube - 1.5m	6.75	Standard scaffold tube
Scaffold Tube - 2.4m	11.25	Standard scaffold tube
Scaffold Tube - 3.0m	13.50	Standard scaffold tube
Scaffold Tube - 3.9m	16.50	Standard scaffold tube