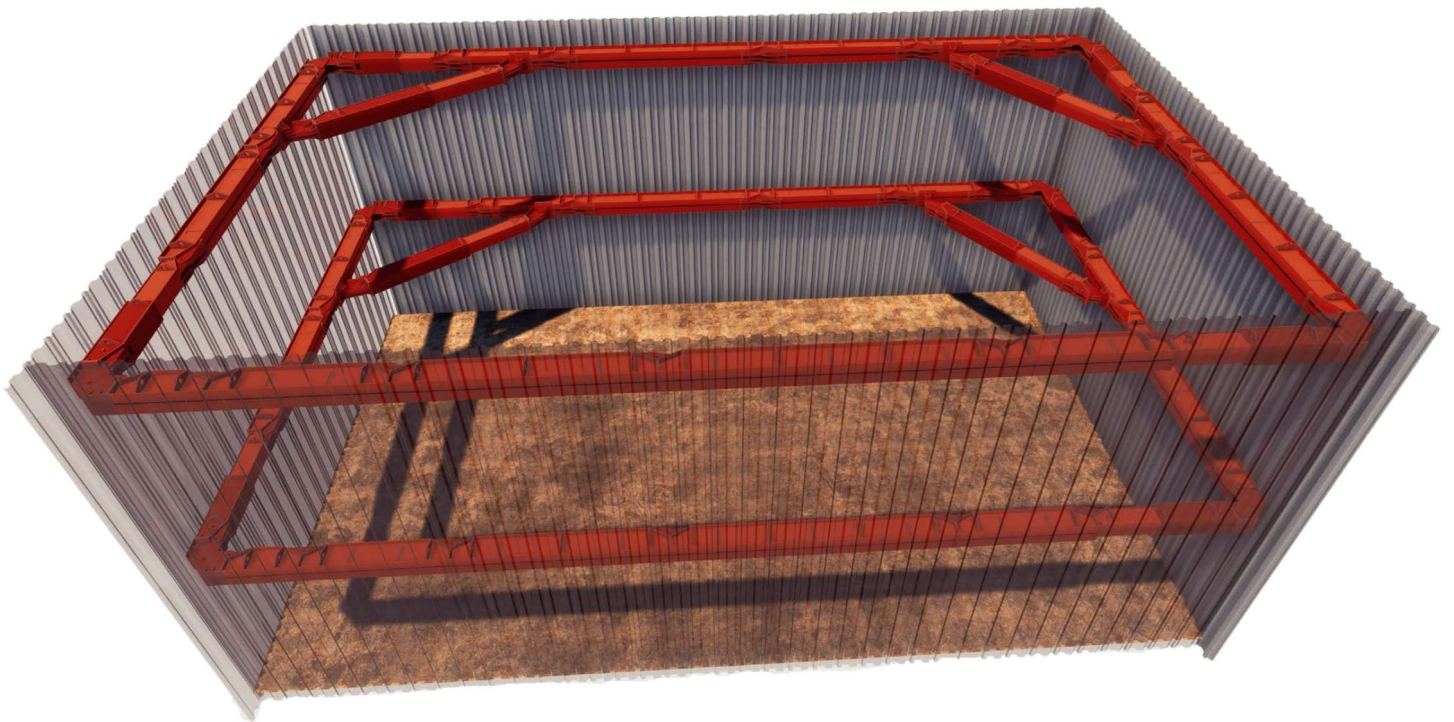


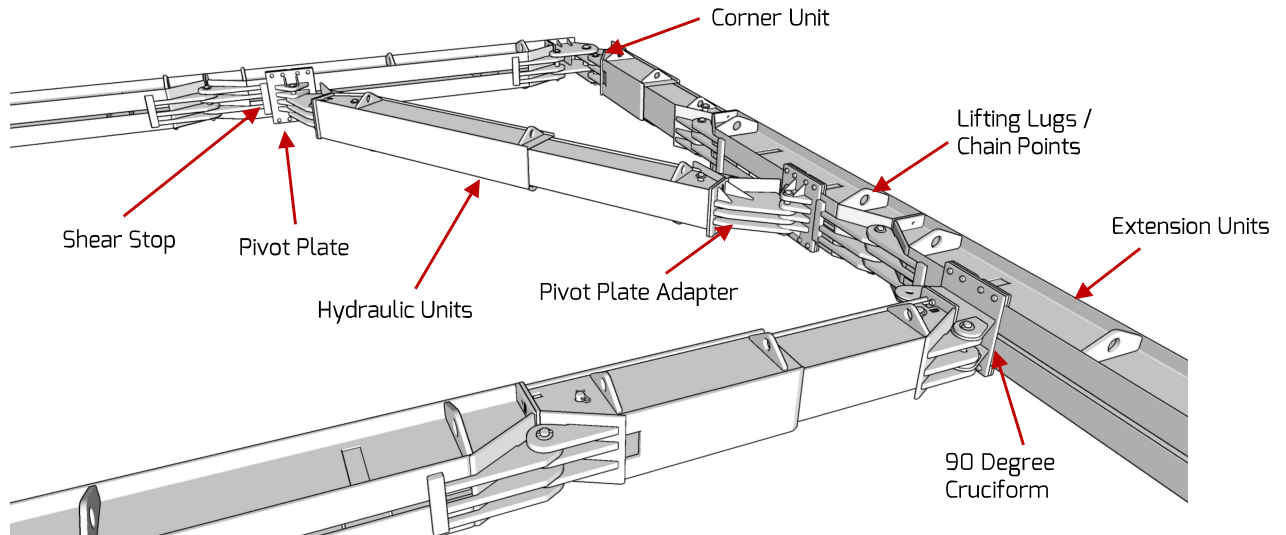


GENERATION
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GENERAL PROPERTIES



Sections

Extension Unit	Twin 533 x 210 x 109 UB	Gr S355
Extension Joints	1No 50Ø Pin + 2No M24 Bolts	Gr 10.9 pin, Gr 8.8 Bolts
Corner Joints	1No 80Ø Pin	Gr S355
Ram Outer Section	500 x 426 Welded Plate Box 15mm Sides, 25mm Top and Bottom	Gr S355
Ram Inner Section	438 x 350 Welded Plate Box 15mm Sides, 25mm Top and Bottom	Gr S355

Safe Working Loads

Axial

Hydraulic Ram Unit	800 kN	(Includes FoS of 2.0)
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Bending

Extension Unit	1183 kNm	*	(Includes FoS of 1.5)
Extension Joint Sagging (Towards Excavation)	432 kNm	*	
Extension Joint Hogging (Away from Excavation)	30 kNm	*	
Hydraulic Unit Bending	1183 kNm		

Notes

* With Zero Axial Load, See Loading Charts

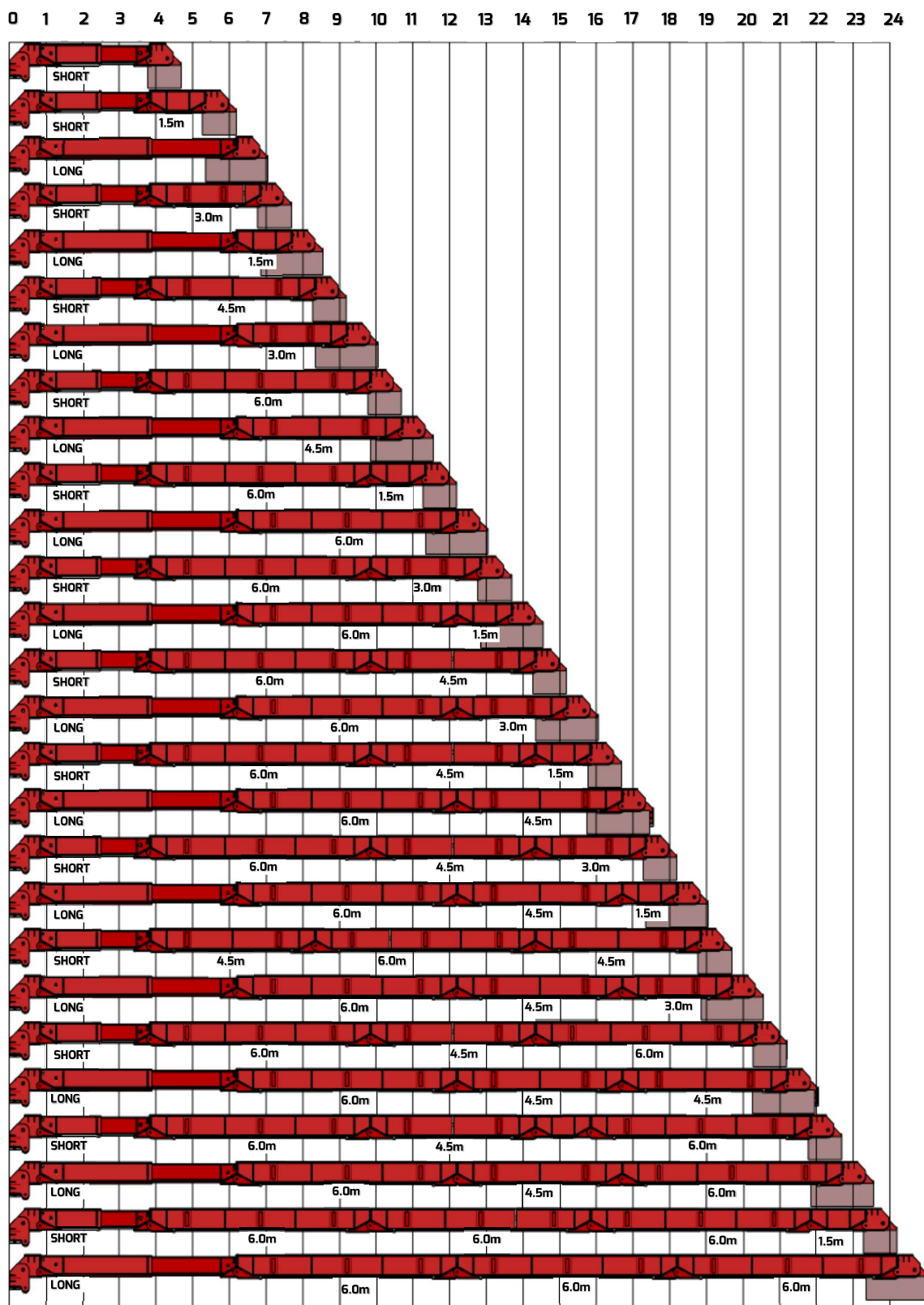
Where struts / Flying Shores are included, Extension joints should be located to avoid hogging moments at their location

For Combined Bending and Axial Loading, see Extension Unit Loading Chart

Due to the high stiffness of the twin UB section, deflections may appear smaller than similar capacity systems

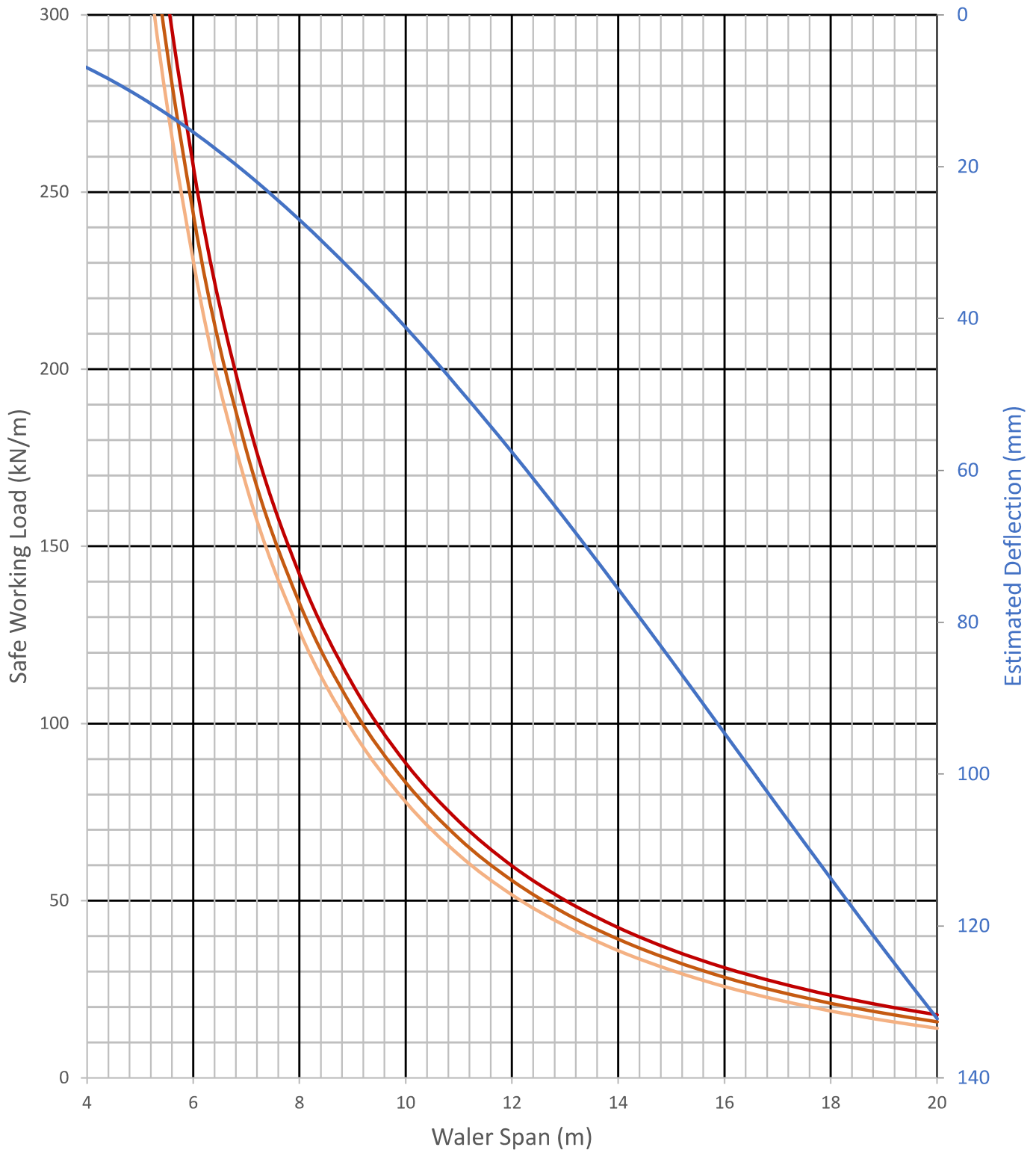
BRACE LENGTH CHART

ID	SHEET TO SHEET (m)		CLEAR INTERNAL (m)	
	MIN	MAX	MIN	MAX
1	3.77	4.69	2.61	3.53
2	5.27	6.19	4.11	5.03
3	5.55	7.05	4.39	5.89
4	6.77	7.69	5.61	6.53
5	7.05	8.55	5.89	7.39
6	8.27	9.19	7.11	8.03
7	8.55	10.05	7.39	8.89
8	9.77	10.69	8.61	9.53
9	10.05	11.55	8.89	10.39
10	11.27	12.19	10.11	11.03
11	11.55	13.05	10.39	11.89
12	12.77	13.69	11.61	12.53
13	13.05	14.55	11.89	13.39
14	14.27	15.19	13.11	14.03
15	14.55	16.05	13.39	14.89
16	15.77	16.69	14.61	15.53
17	16.05	17.55	14.89	16.39
18	17.27	18.19	16.11	17.03
19	17.55	19.05	16.39	17.89
20	18.77	19.69	17.61	18.53
21	19.05	20.55	17.89	19.39
22	20.27	21.19	19.11	20.03
23	20.55	22.05	19.39	20.89
24	20.27	21.19	19.11	20.03
25	22.05	23.55	20.89	22.39
26	23.27	24.19	22.11	23.03
27	23.55	25.05	22.39	23.89



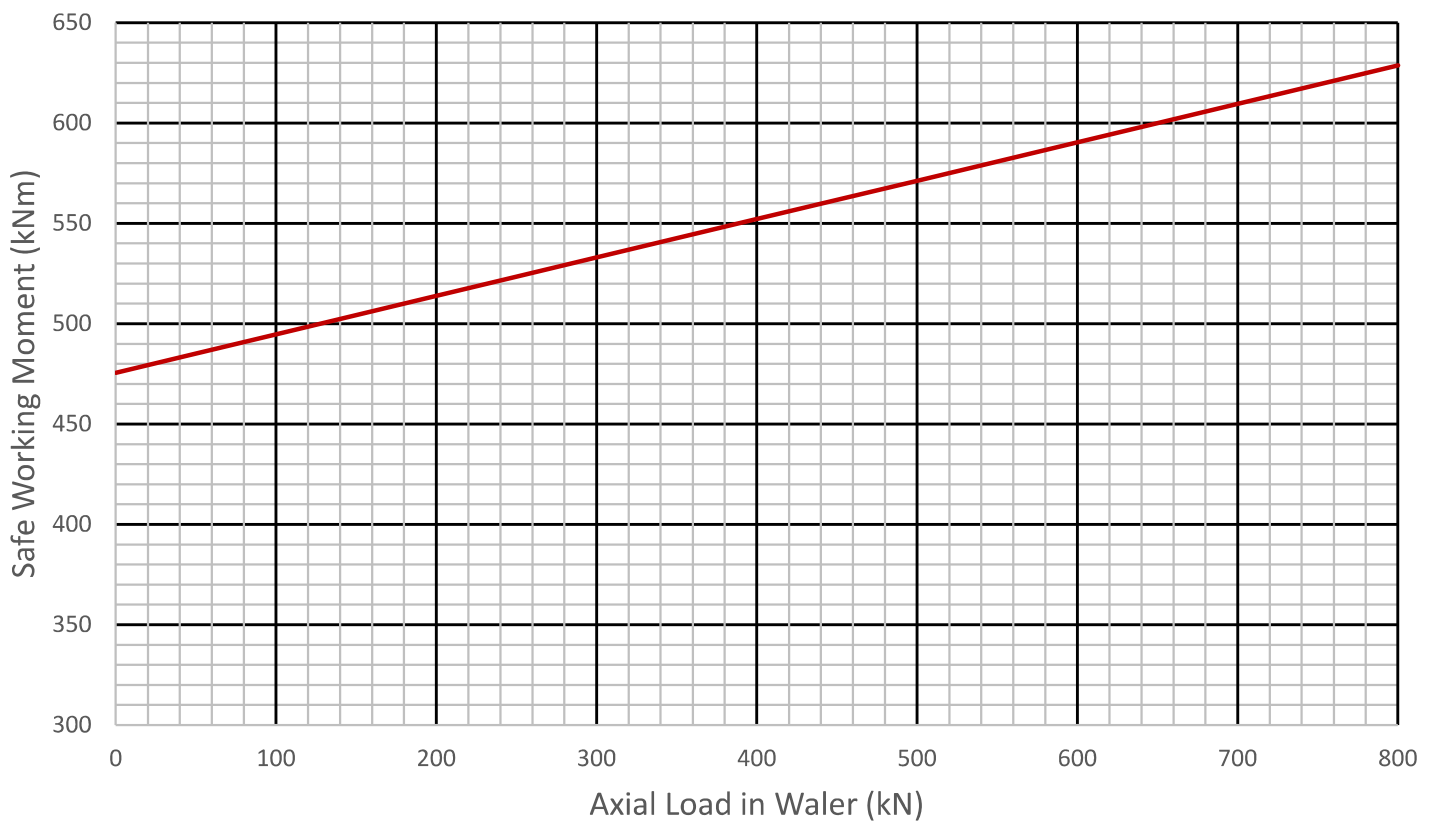
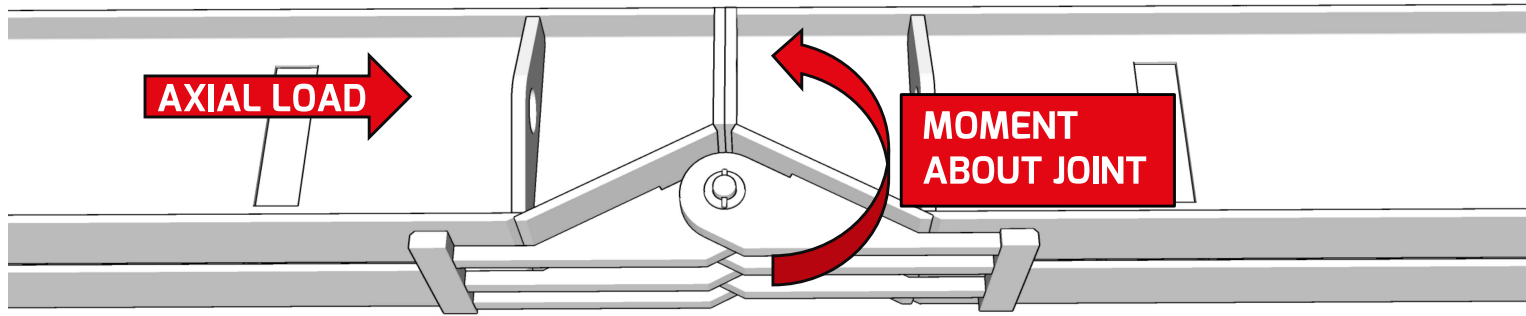
The above configurations are a guideline. Where possible it is good practice to keep joints away from high sagging and hogging moments.
Clear internal dimensions do not allow for deflections

EXTENSION UNIT LOADING CHART



Care should be taken that bending at intermediate joints does not exceed the capacities shown in this guide. See Joint Loading Chart on next page.

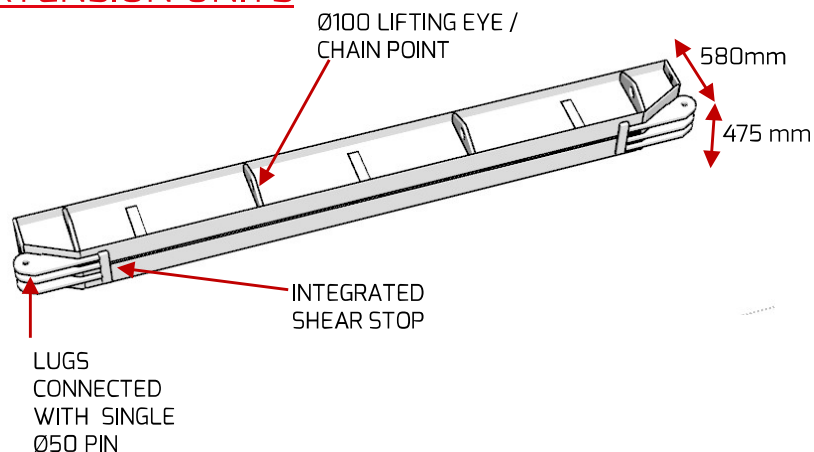
EXTENSION JOINT LOADING CHART



The above chart is for Sagging moments (Towards Excavation) only
Refer to the General Properties Table for maximum hogging moments

COMPONENT DETAILS

EXTENSION UNITS

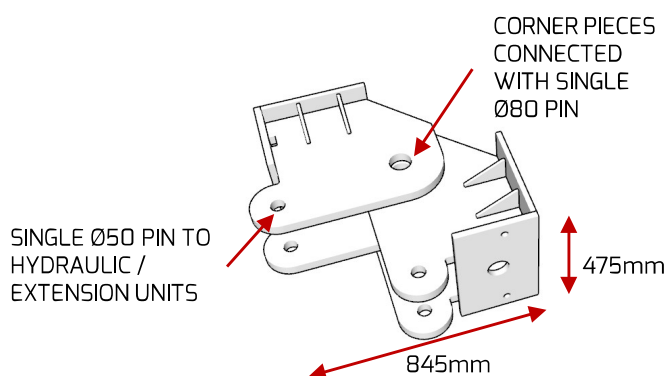


Item Code	Length – End Plate to End Plate (mm)	Weight (kg)
087210	1000	382.0
087215	1500	573.0
087230	3000	1023.4
087245	4500	1386.3
087260	6000	1778.1

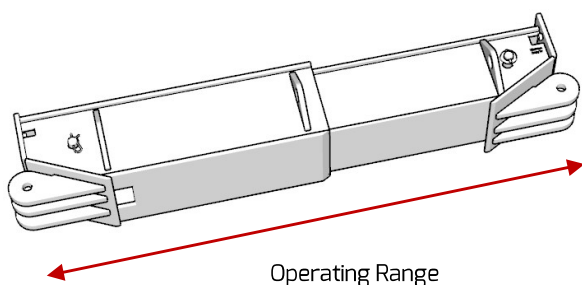
Item Code	Weight (kg)
087290	261.1

2No required for a corner

CORNER UNITS



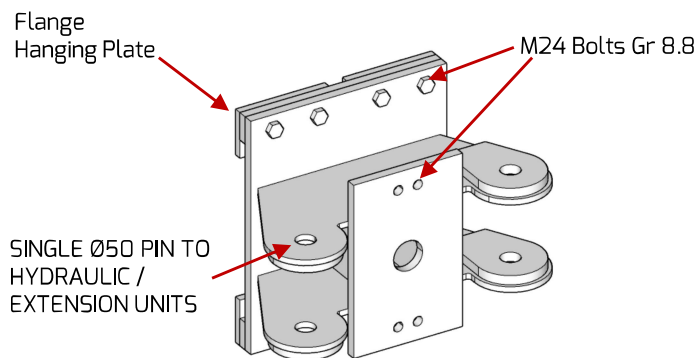
HYDRAULIC UNITS



Item Code	Description	Operating Range (mm)	Weight (kg)
087201	Short Hydraulic Unit	2080 - 3000	1384
087200	Long Hydraulic Unit	3660 - 5360	2467

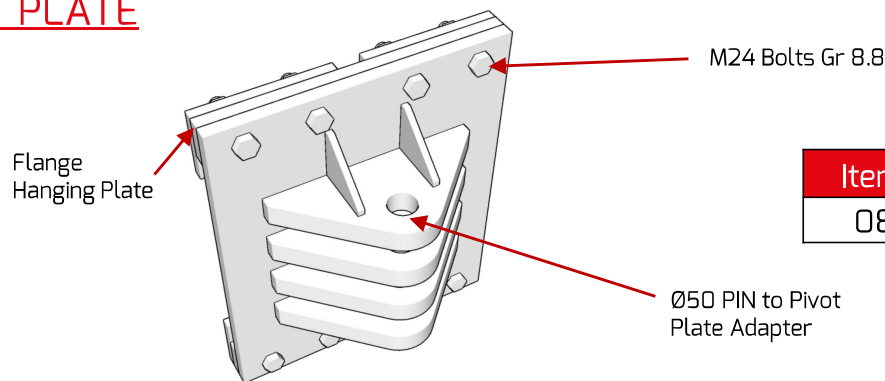
Item Code	Weight (kg)
087291	231.1

90 DEGREE CRUCIFORM



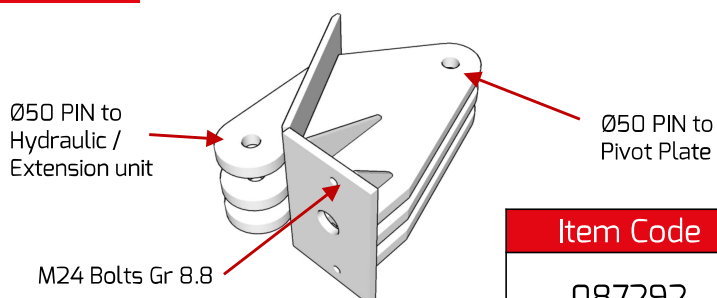
COMPONENT DETAILS

PIVOT PLATE



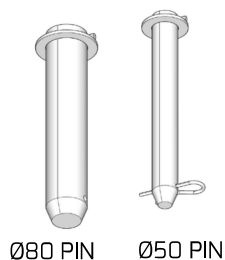
Item Code	Weight (kg)
087296	196.3

CRUCIFORM



Item Code	Description	Weight (kg)
087292	Cruciform (Male)	350.6
	Cruciform (Female)	347.4

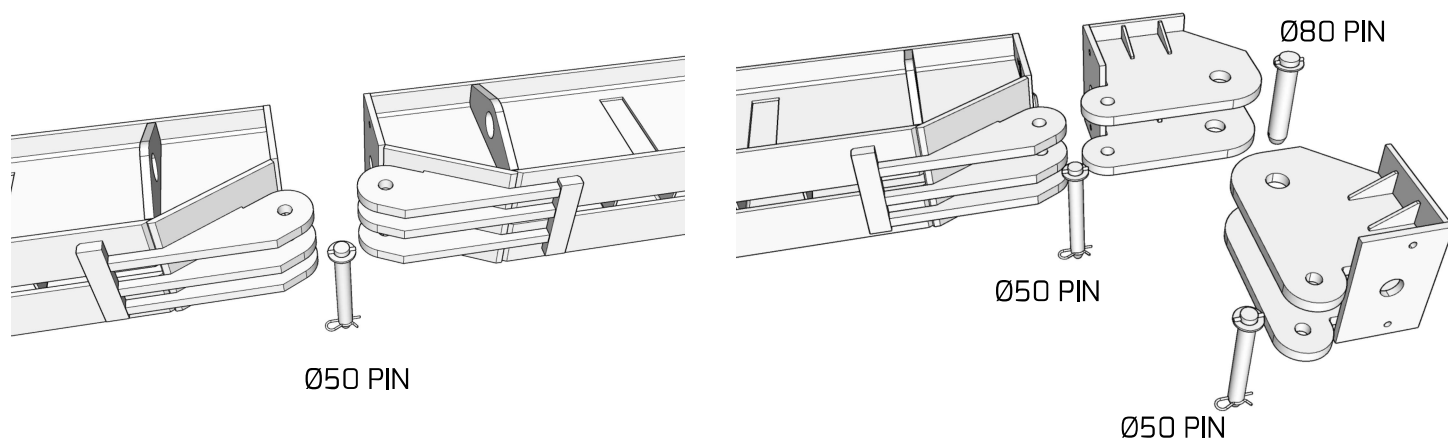
PINS



Item Code	Description	Weight (kg)
087293	Ø50 Pin	6.4
087294	Ø80 Pin	16.1

JOINT ASSEMBLY DETAILS

Full Assembly and Installation Guidance can be found separately, see the Generation website.



NON-STANDARD ARRANGEMENTS

Non-Standard arrangements should be designed by a competent engineer with an in-depth knowledge of the system

CIRCULAR EXCAVATIONS



USING AND DESIGNING WITH MAMMOTH +

Excavation supports using Mammoth + should be designed in accordance with the latest industry legislation, standards and guidance including:

- The Health and Safety at Work ACT 1974
- BS 5975:2019 Code of practice for temporary works procedures and the permissible stress design of falsework
- BS 6031:2009 Code of Practice for Earthworks
- Construction (Design and Management) Regulations 2015
- Piling Handbook (9th Ed) by Arcelor Mittal
- Ciria Reports 104, 510, 760 and Special Publication 95

Due to its weight and size, consideration should be given to the lifting and moving of assembled components along with support chain or support bracket locations.