diamond walraven

Maxx

Heavy frame modular support system







The Maxx heavy frame modular support system

A new modular steelwork support system for the construction of heavy-duty, load bearing frames which can be used for a wide range of applications.

Our Maxx system is compatible with our other installation systems. We can provide the system fully assembled or in parts allowing easy transportation to site. So we can offer a complete Walraven solution, no matter how big or small your project.

Maxx offers an alternative to welding and drilling structural steel systems to support very heavy services, saving you time and is also perfectly suited to indoor and outdoor applications. High quality components made from hot dipped galvanized steel.

As always with Walraven you can expect great service and should you need any further help our after sales support are always happy to help.

The components

Maxx Heavy Rail Profile



- Closed steel profile
- Offers support for fixings to pipe and devices
- With continued perforation on all sides
- Available in two sizes:

100 x 100 x 3mm (6501 9 610) 120 x 100 x 4mm (6501 9 612)

Maxx Wall Plates



- U-profile on wall plate
- For fixing rail to wall or floor

Part No. 658 1 800 / 658 1 801

Maxx End Caps



- For clean finishing of rail end
- Easy to fix securely

Part No. 656 6 810 / 656 6 812

Maxx Beam Clamp



- For a solid fixing to steel construction
- Always use 2 beam clamps per fixing

Part No. 658 9 100

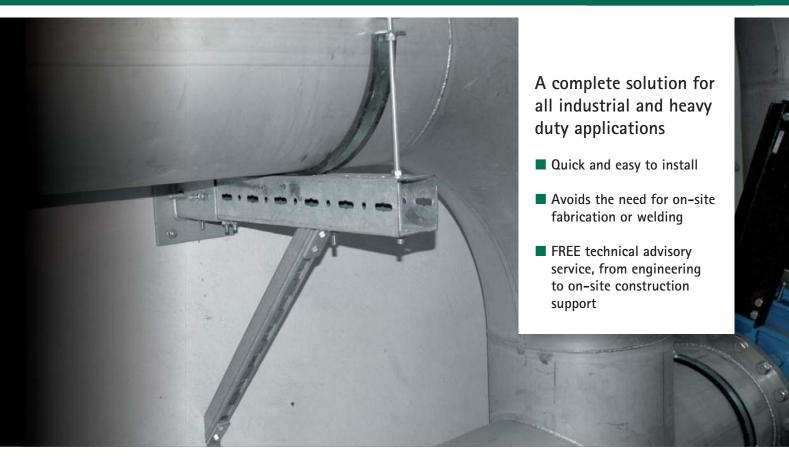
Maxx 3D Coupler



■ To aid fabrication with Heavy Rail Profiles

Part No. 658 9 900





Maxx T-Connector



- Easy fitting due to rounded edges
- For angled connection

Part No. 658 9 901

Maxx Linear Connector



■ Front connection with

Heavy Rail Profile

always use two pieces of linear connector per fixing

Part No. 658 9 335

Maxx Profile Connector 90°



- For 90° angled connection Heavy Rail Profiles
- With slotted holes for easy fixing Part No. 668 1 015

Maxx Hammerfix



- Pre-assembled and ready to use
- Available in two sizes:

M12 x 40mm (652 19 204) M12 x 70mm (652 19 207)

Maxx Cross Connector



■ To aid fabrication with Heavy Rail Profiles

Part No. 658 9 101

Maxx Bolts and Nuts



Maxx Bolts M12 x 130mm (614 591 213) M12 x 160mm (614 591 216)

M16 x 140mm (614 591 614) M16 x 160mm (614 591 616)

Maxx Nuts M12 (612 59 12)

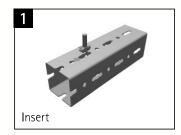
M16 (612 59 16)

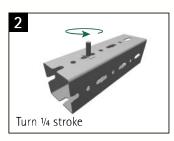


Data sheet

Maxx Heavy rail profiles and accessories

- Table of rail section properties
- Perforation pattern
- Use of rail load tables
- Rail load tables









The Maxx system consists of two rail profiles and an extensive range of accessories, including nuts, T-bolt assemblies and various rail connectors.

Insert, lock, done

T-bolts are assembled which makes them easy to install in perforation of the profile.

Your benefits:

- for all medium and heavy profile applications
- quick and easy fixing to the profile
- saves you fixing time

A fitting profile for each application

- two dimensions (100 x 100 mm | 100 x 120 mm)
- all Maxx profiles (length 6 mtr.)

Maxx accessories

Maxx offers accessories for:

■ Pipe fixing

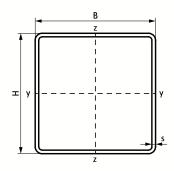


Building connectivity



Profile connection



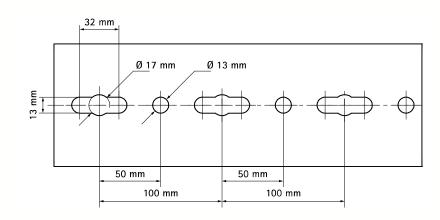


Profile size			Unit Weight	Cross Section Area	Section Modulus of Torsion	Torsion Moment of Inertia	Geometrical Moment of Inertia		Geometrical Section Modulus	
Н	В	S		Α	W _D	I _p	I,	l _z	W _v	W _z
mm	mm	mm	kg	mm²	cm ³	cm ⁴	cm ⁴	cm⁴	cm ³	cm³
100.00	100.00	3.00	8.16	974.50	55.70	85.40	155.98	155.98	31.20	31.20
120.00	100.00	4.00	11.94	1,433.06	88.20	126.10	308.30	235.65	51.38	47.13

Perforation pattern for fixing to ceiling or wall.

Distance between profile end and first hole is always equal.

Maxx IP 100, IP 120



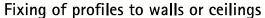


Calculation method

The published safe working loads are based on tests with perforated (slotted) profile. For non perforated profile the safe working loads can be taken as 20 % higher.

Loads are calculated taking into consideration a maximum deflection (f) of length 1/200 x L and a maximum bending stress of 160 N/mm².

1 N (Newton) = 0,102 kg 1 kg = 9,8 N (Newton)



The strength of the anchoring of the profile has not been taken into consideration. The installer must verify that the bolts and wall plugs used are suitable for the maximum permitted loading of the profile.

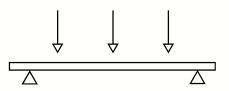
Reading the profile loading tables

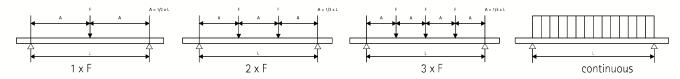
The stated values are only valid for the fixing profile. The maximum safe load of all other construction parts have to be verified. The stated maximum safe load is calculated for a static load at free bending support.

Special conditions

In case of doubt or for special conditions not stated in the loading tables, please do not hesitate to contact our technical department for their advice.



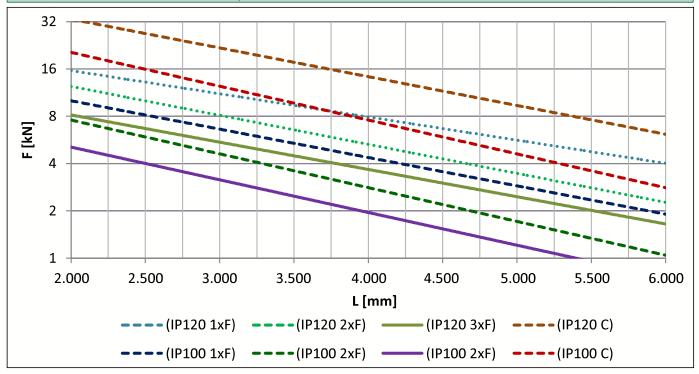




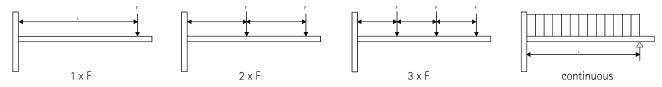
L	IP120	IP120	IP120	IP120	IP100	IP100	IP100	IP100
(mm)	1 x F	2 x F	3 x F	continuous	1 x F	2 x F	3 x F	continuous
2,000	16.30	12.20	8 . 15	32.60	9 . 90	7.40	4 . 95	19.80
2,250	14.45	10.85	7 . 20	28.91	8 . 75	6 . 55	4. 35	17.55
2,500	13.00	9.75	6.50	26.00	7.85	5.90	3.90	15.75
2,750	11.75	8.80	5 . 85	23.51	7 . 15	5.35	3.55	14.30
3,000	10.75	8.05	5 . 35	21.45	6.50	4.90	3 . 25	13.05
3,250	9.90	7 <u>.</u> 40	4 . 95	19.83	6.00	4 . 25	3.00	11.54
3,500	9 . 15	6 . 85	4.55	18.38	5 . 55	3 . 65	2.60	9.98
3,750	8 . 50	6.30	4.25	17.06	5 . 15	3 . 15	2.25	8.63
4,000	7 . 95	5 . 50	3 . 95	15.00	4.70	2 . 75	1 . 95	7.40
4,250	7.45	4.85	3.45	13.18	4.10	2.40	1.70	6.59
4,500	7.00	4.30	3 . 05	11.70	3 . 65	2.10	1.50	5 . 85
4,750	6. 50	3.80	2.75	10.45	3.20	1.90	1 . 35	4.99
5,000	5 . 80	3.40	2.45	9 . 25	2.85	1 . 65	1.20	4.50
5,250	5 . 25	3 . 05	2.20	8.40	2 . 55	1.50	1.05	3.94
5,500	4.70	2.75	1.95	7.43	2.30	1.35	0.95	3.58
5,750	4.25	2.50	1,80	6.61	2 . 05	1.20	0.85	3.16
6,000	3.85	2.25	1.60	6.00	1.85	1.10	0.75	3.00

Max. allowed load in kN. per suspension point (F).

The stated values are only valid for the fixing profile.
The maximum safe load of all other construction parts have to be verified.



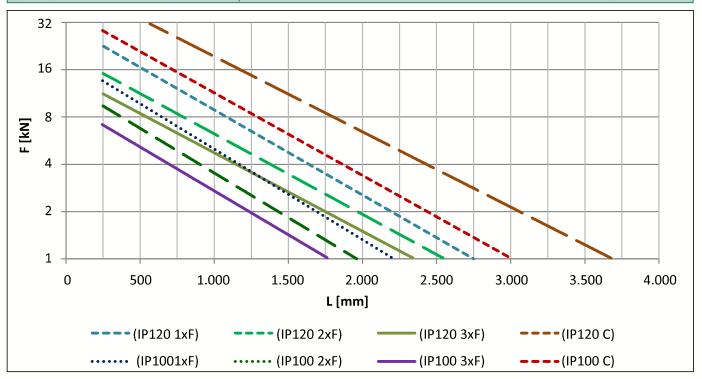




L	IP120	IP120	IP120	IP120	IP100	IP100	IP100	IP100
(mm)	1 x F	2 x F	3 x F	continuous	1 x F	2 x F	3 x F	continuous
250	32.85	21.90	16.40	65.73	19.95	13.30	9 . 95	39.91
500	16.40	10.90	8 . 20	32.80	9 . 95	6.60	4 . 95	19.93
750	10.90	7.25	5.45	21.83	6.60	4.40	3.30	13.24
1,000	8 . 15	5.40	4 . 05	16,30	4.85	3.30	2.45	9.90
1,250	6 . 15	4.30	3 . 25	13.00	3.10	2.35	1 . 85	7.87
1,500	4.25	3.20	2.55	10.73	2.10	1.60	1.25	5.70
1,750	3.05	2 . 35	1.85	8.22	1.55	1 . 15	0.90	4.11
2,000	2.30	1 . 75	1.40	6.20	1.15	0.85	0.70	3.10
2,250	1.80	1.35	1.05	4.84	0 . 90	0.65	0.50	2.36
2,500	1.40	1.10	0.85	3.75	0.70	0.50	0.40	1.88
2,750	1.15	0.85	0.65	3.03	0.55	0.40	0.30	1.38
3,000	0.90	0.70	0 . 55	2.40	0.45	0.30	0.25	1.20

Max. allowed load in kN. per suspension point (F).

The stated values are only valid for the cantilever arm.
The maximum safe load of all other construction parts have to be verified.



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Hira Walraven is dedicated to provide customers in the Construction Sector with product systems and services of the highest quality, by forging a successful partnership with them, exceeding their expectations and gaining their trust through outstanding performance by every member of our team. Our aim is to become the "Partner of Choice" within the Building Supply Industry in the "IMEA" (India Middle East and Africa) region.



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