

The following excerpt are pages from the <u>North American</u> <u>Product Technical Guide Volume 3: Modular Support Systems</u> Technical Guide, Edition 1.

Please refer to the publication in its entirety for complete details on this product including load values, approvals/listings, general suitability, finishes, quality, etc.

To consult directly with a team member regarding our modular support system products, contact Hilti's team of technical support specialists between the hours of 7:00am – 6:00pm CST.

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3.0 MODULAR SUPPORT SYSTEM 3.2.3 MT SYSTEM CONNECTORS MT-C-GSP T OC

Description

Gusset plate for T-shaped connections with MT-70 and MT-80 girders.

Material Specifications

Standard ¹	Grade ¹	F _y , ksi (MPa)	F _u , ksi (MPa)	
GB/T 1591	Q355 B	51.49 (355)	68.17 (470)	

1. Mechanical properties of GB/T 1591 Grade Q355 B meet or exceed the mechanical properties of ASTM A1011 SS Grade 50.

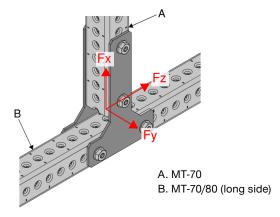
Corrosion Protection

Hot-Dipped Galvanized (HDG)

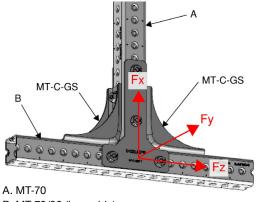
Ordering Information

Description	Weight Per Piece Ibs (kg)	Quantity Piece(s)	Item No.
MT-C-GSP T OC	0.95 (0.43)	10	2272074

Figure 48 - MT Girder Connection







B. MT-70/80 (long side)



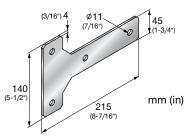


Table 153 - Allowable Strength Design (ASD) Load Data^{1,2,3,4}

F _x	F _y	F _z	M _y	M _z
Ib (kN)	lb (kN)	Ib (kN)	ft lb (kN m)	ft lb (kN m)
10,250	1,300	1,575	600	280
(45.60)	(5.80)	(7.01)	(0.82)	(0.38)

1. Minimum safety factor, Ω, for tabulated values is 2.2.

Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design 2.

(LRFD) values. Tabulated values are based on plates being installed in pairs. 3

See Figure 48. 4.

Table 154 - Limit State Design (LSD) Load Data^{1,2,3}

F _x	F _y	F _z	M _y	M _z
Ib (kN)	Ib (kN)	Ib (kN)	ft lb (kN m)	ft lb (kN m)
13,375	1,955	2,365	855	420
(59.50)	(8.71)	(10.54)	(1.16)	(0.57)

Maximum resistance factor, ϕ , for tabulated values is 0.65. 1. 2. 3.

Tabulated values are based on plates being installed in pairs. See Figure 48.

Table 155 - Allowable Strength Design (ASD) Load Data^{1,2,3,4}

F _x	F _y	F _z	M _y	M _z
Ib (kN)	Ib (kN)	Ib (kN)	ft lb (kN m)	ft lb (kN m)
9,440	1,660	3,170	905	530
(42.00)	(7.39)	(14.11)	(1.23)	(0.72)

Minimum safety factor, Q, for tabulated values is 2.0. 1.

2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values. 3. Tabulated values are based on plates being installed in pairs.

See Figure 49.

4.

3

Table 156 - Limit State Design (LSD) Load Data^{1,2,3}

5 ()				
F _x	F _y	F _z	M _y	M _z
Ib (kN)	Ib (kN)	Ib (kN)	ft lb (kN m)	ft lb (kN m)
13,400	2,495	4,415	1,280	800
(59.62)	(11.10)	(19.64)	(1.74)	(1.09)

Maximum resistance factor, ϕ , for tabulated values is 0.7.

Tabulated values are based on plates being installed in pairs. 2.

See Figure 49.