

The following excerpt are pages from the North American

Product Technical Guide Volume 3: Modular Support Systems

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.

US: 877-749-6337 or HNATechnicalServices@hilti.com

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3.0 MODULAR SUPPORT SYSTEM 3.2.2 MT BASE CONNECTORS MT-B-GS T OC

Description

Base connector for anchoring MT-70 and MT-80 girder structures to concrete and steel (X-BT/S-BT/F-BT compatible).

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)

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

Corrosion Protection

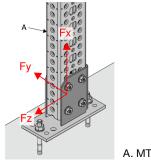
Hot-Dipped Galvanized (HDG)

MT-B-GS T OC

Ordering Information

Description Weight Per Piece Ibs (kg)		Quantity Piece(s)	Item No.
MT-B-GS T OC	4.78 (2.17)	2	2272100

Figure 13 - MT Girder Anchoring to Concrete



A. MT-70/80

A. MT-70/80 B. MT-90/100

Figure 14 - MT Girder-to-Girder Connection

Table 83 - Allowable Strength Design (ASD) Load Data^{1,2,3,4}

F _x Ib (kN)	F _y Ib (kN)	F _z Ib (kN)	M _y lb ft (kN m)
4,950	2,695	3,615	815
(22.03)	(12.00)	(16.1)	(1.11)

- . Minimum safety factor, Ω for tabulated values is 2.2.
- Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
- Load values are for base connector only. The design professional is responsible for checking concrete and fastener strength.
- 4. See Figure 13.

Table 84 - Limit State Design (LSD) Load Data^{1,2,3}



F _x	F	F _z	M _y
lb (kN)	Ib (kN)	Ib (kN)	lb ft (kN m)
7,025	3,525	5,125	1,230
(31.27)	(15.70)	(22.80)	(1.67)

- Maximum resistance factor, Φ, for tabulated values is 0.6.
- 2 Load values are for base connector only. The design professional is responsible for checking concrete and fastener strength.
- 3. See Figure 13.

Table 85 - Allowable Strength Design (ASD) Load Data^{1,2,3}

F _x	F _y	F _z	M _y
Ib (kN)	Ib (kN)	Ib (kN)	lb ft (kN m)
4,235	1,870	3,120	800
(18.84)	(8.32)	(13.89)	(1.09)

- 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 (LRFD) values.
- 3. See Figure 14.

Table 86 - Limit State Design (LSD) Load Data^{1,2}



F _x	F	F _z	M _y
Ib (kN)	Ib (kN)	Ib (kN)	lb ft (kN m)
6,010	2,810	4,360	1,205
(26.74)	(12.51)	(19.40)	(1.64)

- Maximum resistance factor, Φ, for tabulated values is 0.6.
- See Figure 1

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