



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](mailto:HNATechnicalServices@hilti.com)

CA: 1-800-363-4458, ext. 6 or [CATechnicalServices@hilti.com](mailto:CATechnicalServices@hilti.com)

## 3.0 MODULAR SUPPORT SYSTEM

### 3.2.2 MT BASE CONNECTORS

#### MT-B-O2

#### Description

2-hole base plate for channel-to-concrete or channel-to-steel (X-BT/S-BT/F-BT compatible).

#### Material Specifications

Standard <sup>1</sup>	Grade <sup>1</sup>	F <sub>y</sub> , ksi (MPa)	F <sub>u</sub> , ksi (MPa)
GB/T 700	Q235 B	34.08 (235)	53.66 (370)

1. Mechanical properties of GB/T 700 Grade Q235 B meet or exceed the mechanical properties of ASTM A1011 SS Grade 33.

#### Corrosion Protection

##### Electro-Galvanized (EG)

MT-B-O2

##### Hot-Dipped Galvanized (HDG)

MT-B-O2 OC

#### Ordering Information

Description	Weight Per Piece lbs (kg)	Quantity Piece(s)	Item No.
MT-B-O2	2.27 (1.03)	12	2272094
MT-B-O2 OC	2.27 (1.03)	12	2272096

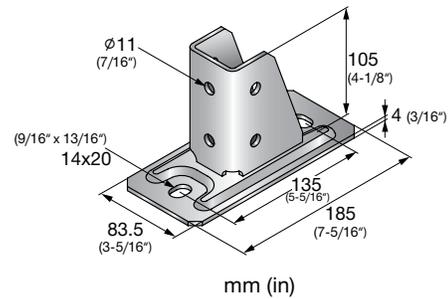
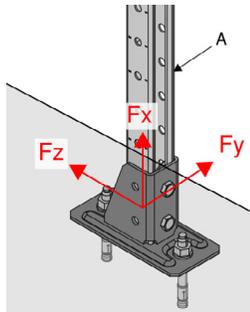
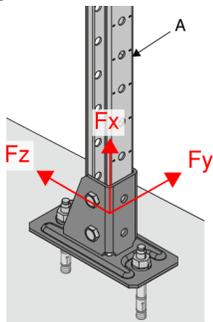


Figure 9 - MT Concentric Channel Connection



A. MT-30/50/60/40D

Figure 10 - MT Eccentric Channel Connection



A. MT-50

Table 75 - Allowable Strength Design (ASD) Load Data<sup>1,2,3,4</sup>

F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)	M <sub>y</sub> lb ft (kN m)
2,105 (9.38)	350 (1.56)	980 (4.36)	720 (0.98)

1. Minimum safety factor,  $\Omega$ , for tabulated values is 2.35.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. See Figure 9.
4. Load values are for base connector only. Design professional is responsible for checking concrete and fastener strength.

Table 76 - Limit State Design (LSD) Load Data<sup>1,2,3</sup>



F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)	M <sub>y</sub> lb ft (kN m)
2,775 (12.35)	490 (2.18)	1,250 (5.57)	925 (1.26)

1. Maximum resistance factor,  $\Phi$ , for tabulated values is 0.55.
2. See Figure 9.
3. Load values are for base connector only. Design professional is responsible for checking concrete and fastener strength.

Table 77 - Allowable Strength Design (ASD) Load Data<sup>1,2,3,4</sup>

F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)	M <sub>y</sub> lb ft (kN m)
2,105 (9.38)	350 (1.56)	240 (1.08)	255 (0.35)

1. Minimum safety factor,  $\Omega$ , for tabulated values is 2.6.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. See Figure 10.
4. Load values are for base connector only. Design professional is responsible for checking concrete and fastener strength.

Table 78 - Limit State Design (LSD) Load Data<sup>1,2,3</sup>



F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)	M <sub>y</sub> lb ft (kN m)
2,660 (11.85)	490 (2.18)	310 (1.40)	335 (0.46)

1. Maximum resistance factor,  $\Phi$ , for tabulated values is 0.5.
2. See Figure 10.
3. Load values are for base connector only. Design professional is responsible for checking concrete and fastener strength.