

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

CA: 1-800-363-4458, ext. 6 or <a href="mailto:cATechnicalServices@hilti.com">CATechnicalServices@hilti.com</a>



# 3.0 MODULAR SUPPORT SYSTEM 3.2.2 MT BASE CONNECTORS

# MT-B-T

# **Description**

2-hole 'T' 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)

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-T

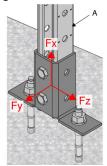
### **Hot-Dipped Galvanized (HDG)**

MT-B-T OC

#### **Ordering Information**

Description	Weight Per Piece lbs (kg)	Quantity Piece(s)	Item No.
MT-B-T	1.25 (0.57)	20	2272090
MT-B-T OC	1.25 (0.57)	20	2272092

Figure 7 - MT Concentric Channel Connection



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

(3/16") 4 (3/16" x 3/4")

(3/16") 4 (9/16" x 3/4")

Ø 11 (7/16")

mm (in)

(6-5/8")

168.7

Table 71 - Allowable Strength Design (ASD) Load Data<sup>1,2,3,4</sup>

F <sub>x</sub>	F	F <sub>z</sub>
Ib (kN)	lb (kN)	Ib (kN)
1,400	725	225
(6.24)	(3.23)	(1.01)

- 1. Minimum safety factor,  $\Omega$ , for tabulated values is 3.0.
- Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
- 3. See Figure 7.
- Load values are for base connector only. Design professional is responsible for checking concrete and fastener strength.

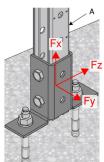
Table 72 - Limit State Design (LSD) Load Data<sup>1,2,3</sup>



F <sub>x</sub>	F	F <sub>z</sub>
Ib (kN)	lb (kN)	Ib (kN)
1,890	1,005	310
(8.42)	(4.49)	(1.40)

- Maximum resistance factor, Φ, for tabulated values is 0.45.
- 2. See Figure
- Load values are for base connector only. Design professional is responsible for checking concrete and fastener strength.

## Figure 8 - MT Eccentric Channel Connection



A. MT-50

## Table 73 - Allowable Strength Design (ASD) Load Data<sup>1,2,3,4</sup>

F <sub>x</sub>	F	F <sub>z</sub>
Ib (kN)	lb (kN)	Ib (kN)
1,450	225	725
(6.46)	(1.01)	(3.23)

- 1. Minimum safety factor,  $\Omega$ , for tabulated values is 3.0.
- Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
- 3. See Figure 8.
- Load values are for base connector only. Design professional is responsible for checking concrete and fastener strength.

#### Table 74 - 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)
1,960	310	1,005
(8.72)	(1.40)	(4.49)

- Maximum resistance factor, Φ, for tabulated values is 0.45.
- New Figure 8.
- Load values are for base connector only. Design professional is responsible for checking concrete and fastener strength.