

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 3.2.8 MT CLAMPS AND CHANNEL TIES** MT-CT-T

# **Description**

Flat plate for channel-to-channel connections.

#### **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)**

МТ-СТ-Т

#### Hot-Dipped Galvanized (HDG)

мт-ст-т ос

#### **Ordering Information**

Description	Weight Per Piece Ibs (kg)	Quantity Piece(s)	Item No.
MT-CT-T	0.59 (0.27)	12	2322407
MT-CT-T OC	0.59 (0.27)	12	2322411

#### **Figure 96 - Single Plate Connection**



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





mm (in)

#### Table 241 - Allowable Strength Design (ASD) Load Data<sup>1,2,3</sup>

F <sub>x</sub>	F <sub>y</sub>	F <sub>z</sub>
Ib (kN)	Ib (kN)	Ib (kN)
505	990	495
(2.25)	(4.42)	(2.22)

1. Minimum safety factor,  $\Omega$ , for tabulated values is 2.65.

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

з. See Figure 96.

## Table 242 - Limit State Design (LSD) Load Data<sup>1,2</sup>

F <sub>x</sub> Ib (kN)	F <sub>y</sub> Ib (kN)	F <sub>z</sub> Ib (kN)
700	1,290	640
(3.13)	(5.75)	(2.86)

1. Maximum resistance factor,  $\phi$ , for tabulated values is 0.50.

2. See Figure 96.

## Figure 97 - Double Plate Connection



## Table 243 - Allowable Strength Design (ASD) Load Data<sup>1,2,3,4</sup>

F <sub>x</sub>	F <sub>y</sub>	F <sub>z</sub>
Ib (kN)	Ib (KN)	Ib (kN)
1,010	1,845	1,615
(4.50)	(8.22)	(7.19)

1. Minimum safety factor, Ω, for tabulated values is 2.65.

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 97.

#### Table 244 - Limit State Design (LSD) Load Data<sup>1,2,3</sup>

F <sub>x</sub>	F <sub>y</sub>	F <sub>z</sub>
Ib (kN)	Ib (kN)	Ib (kN)
1,405	2,400	2,100
(6.26)	(10.69)	(9.35)

Maximum resistance factor,  $\varphi,$  for tabulated values is 0.55. 1

2. Tabulated values are based on plates being installed in pairs. 3.

See Figure 97.

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