



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.

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## 3.0 MODULAR SUPPORT SYSTEM

### 3.2.4 MT SPLICE CONNECTORS

#### MT-ES-90 OC

#### Description

Splice connector for coupling MT-90 or MT-100 girders end-to-end.

#### Material Specifications

Standard <sup>1</sup>	Grade <sup>1</sup>	F <sub>y</sub> , ksi (MPa)	F <sub>u</sub> , 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)

MT-ES-90 OC

#### Ordering Information

Description	Weight Per Piece lbs (kg)	Quantity Piece(s)	Item No.
MT-ES-90 OC	1.79 (0.81)	12	2272076

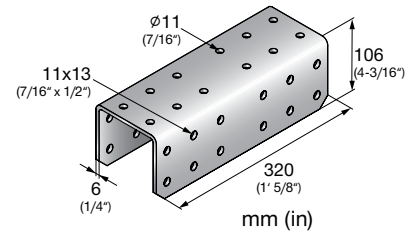
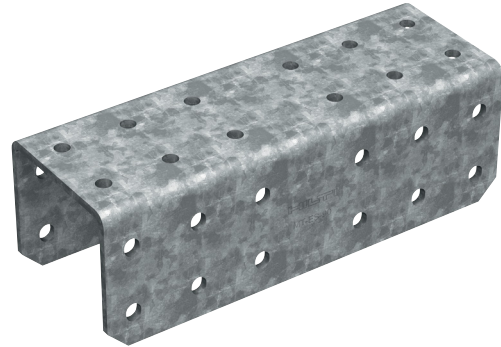


Figure 67 - MT Splice Connection

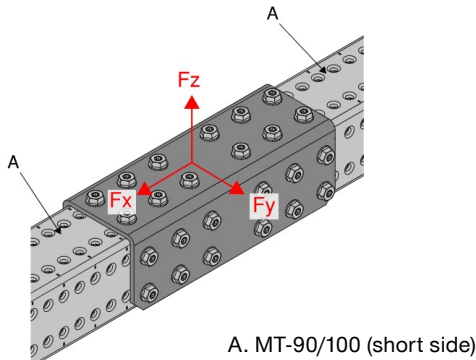


Table 191 - Allowable Strength Design (ASD) Load Data<sup>1,2,3</sup>

F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)	M <sub>y</sub> ft lb (kN m)
35,960 (160.0)	2,605 (11.60)	3,595 (16.00)	3,200 (4.34)

1. Minimum safety factor,  $\Omega$ , for tabulated values is 2.5.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. See Figure 67.

Table 192 - Limit State Design (LSD) Load Data<sup>1,2</sup>



F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)	M <sub>y</sub> ft lb (kN m)
46,760 (208.0)	3,390 (15.10)	4,675 (20.80)	3,340 (4.53)

1. Maximum resistance factor,  $\phi$ , for tabulated values is 0.55.
2. See Figure 67.