

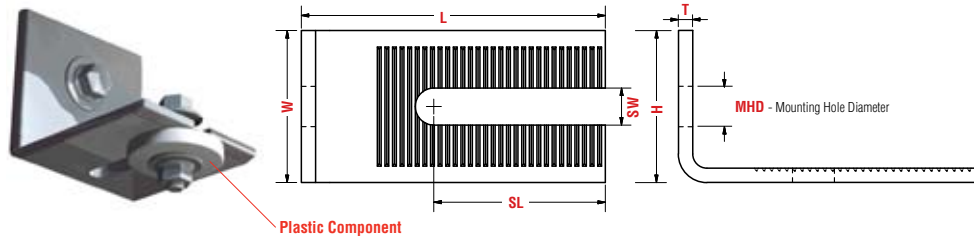
**FERO**

BREAK-AWAY FIRE-RELEASE CONNECTORS SPECIFICATIONS AND ORDERING

When ordering please forward the following specifications from the structural designer:

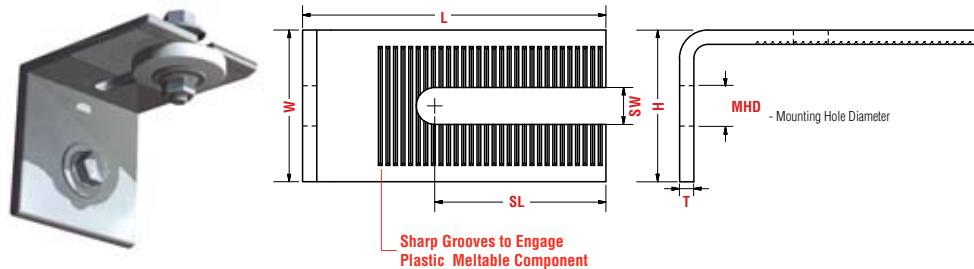
If specifying Custom Connectors - use column provided.

Standard Connector for Lateral Support



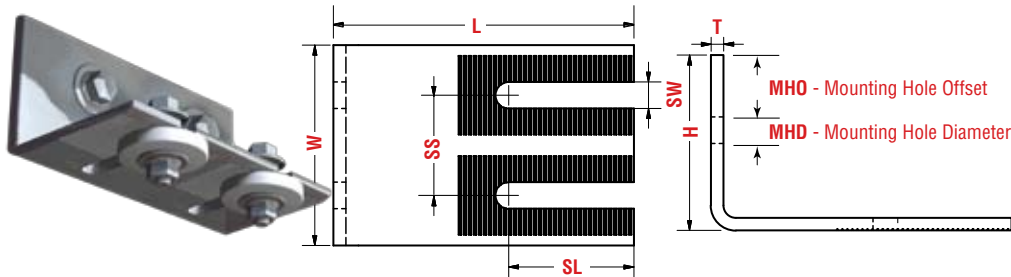
| Dimension | mm | Custom |
|------------------|------|--------|
| L - Length | | |
| W - Width | 30 | |
| H - Height | 50 | |
| T - Thickness | 6.35 | |
| SL - Slot Length | | |
| SW - Slot Width | 7.35 | |
| MHD - | 7.35 | |
| Order Quantity | | |

Inverted Connector for Lateral Support



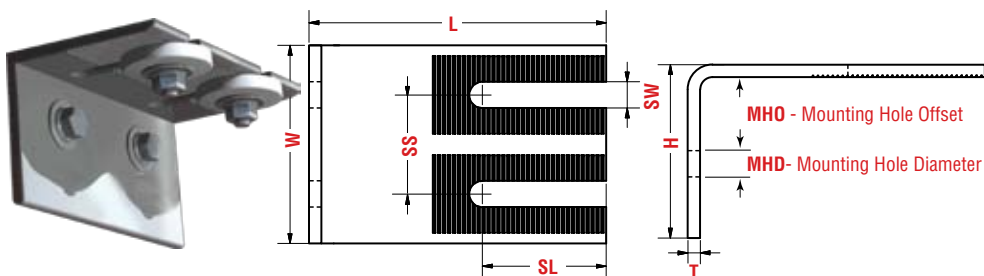
| Dimension | mm | Custom |
|------------------|------|--------|
| L - Length | | |
| W - Width | 30 | |
| H - Height | 50 | |
| T - Thickness | 6.35 | |
| SL - Slot Length | | |
| SW - Slot Width | 7.35 | |
| MHD - | 7.35 | |
| Order Quantity | | |

Dual Load Bearing Connector



| Dimension | mm |
|------------------------------|----|
| L - Length | |
| W - Width | |
| H - Height | |
| T - Thickness | |
| SL - Slot Length | |
| SW - Slot Width | |
| SS - Slot Separation | |
| MHO - Mounting Hole Offset | |
| MHD - Mounting Hole Diameter | |
| Order Quantity | |

Dual Inverted Load Bearing Connector




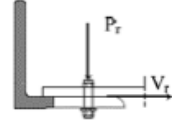
| Dimension | mm |
|------------------------------|----|
| L - Length | |
| W - Width | |
| H - Height | |
| T - Thickness | |
| SL - Slot Length | |
| SW - Slot Width | |
| SS - Slot Separation | |
| MHO - Mounting Hole Offset | |
| MHD - Mounting Hole Diameter | |
| Order Quantity | |

SEE REVERSE FOR TECHNICAL INFORMATION

TECHNICAL INFORMATION

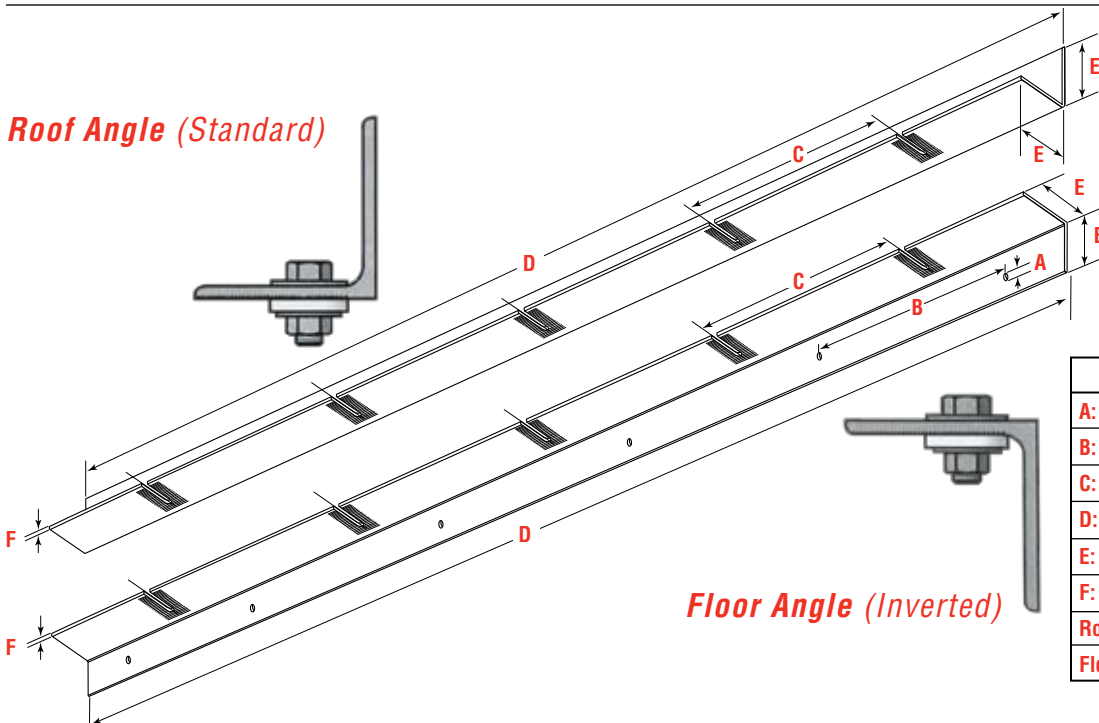
Pre-engineered 152 mm long (6 inch) **FERO Break-Away Fire-Release Connector** is able to resist ultimate/factored loads from the flooring system up to the values given in TABLE 1.

TABLE 1 – DESIGN INFORMATION ¹

| Angle Dimensions (mm) | | Vertical Resistance P_r (kN) ⁵ | Bolt Diameter (mm) | Washer ⁴ Dimensions (mm) | | | Lateral Resistance V_r (kN) ^{5,6} | Angle Configuration |
|-----------------------|---------|---|--------------------|-------------------------------------|-------------|-------|--|---|
| L^2 | t_a^3 | | | D_{outer} | D_{inner} | t_w | | |
| 127 | 7.9 | 3.5 | 19 | 38 | 19 | 10.6 | 10.0 |  |
| | 9.5 | 5.2 | | | | | | |
| | 13 | 9.9 | | | | | | |
| | 16 | 15.4 | | | | | | |
| | 19 | 21.7 | | | | | | |
| 152 | 9.5 | 4.3 | | | | | | |
| | 13 | 8.2 | | | | | | |
| | 16 | 12.6 | | | | | | |
| | 19 | 18.1 | | | | | | |
| 203 | 13 | 6.0 | | | | | |  |

1. Table values are the maximum vertical and lateral loads resisted by a support angle made of steel with a yield stress equal to 245 MPa. These values are for a discrete 150 mm (6 inch) long angle with two (2) slots and washers as shown in FIG 1. Longer and/or continuous angles with more than two slots are able to resist higher loads.
2. Dimension is for the horizontal leg of the angle.
3. Angle thickness has been reduced in calculations by 10% to account for surface roughening.
4. Washer's material has the following properties: Compressive Strength of 100 MPa, Compressive Modulus of 2.9 GPa, and a coefficient of friction with steel of 0.4.
5. The maximum vertical and lateral resistances are based on the ultimate limit states design approach assuming the bolts used secure the connection to be ¾ inch in size (19 mm) and made of grade 4.6 ($F_y = 248$ MPa and $F_u = 413$ MPa).
6. Angle size does not change the value of the lateral load as it is governed by the slip resistance between the washer and steel angle.

Roof Angle (Standard)



Floor Angle (Inverted)

| Dimension | mm |
|------------------------------------|---------|
| A: Bolt diameter | 7.35 |
| B: Mounting Hole Separation | 600 |
| C: Distance between OWSJ | 600 |
| D: Length of Angle | 3000 |
| E: Size of Angle | 90 x 90 |
| F: Thickness | 6.35 |
| Roof Angle Qty. | |
| Floor Angle Qty. | |