

**EGQ High Capacity Hanger**



This product is preferable to similar connectors because of a) easier installation, b) higher loads, c) lower installed cost, or a combination of these features.

The EGQ is a high capacity connector for use with Structural Composite Lumber beams. Utilizing the Simpson Strong-Tie® Strong Drive® wood screws makes installation fast and easy.

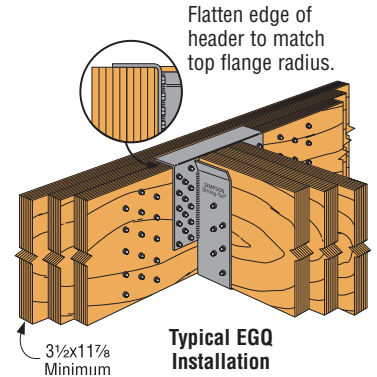
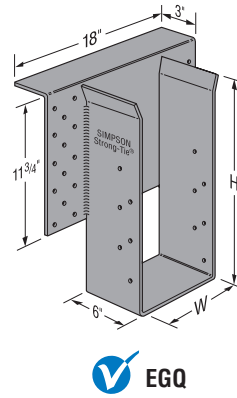
EGQ hangers are precisely fabricated to individual order requirements. The H dimension required must be specified.

**MATERIAL:** Top flange—3 gauge; Stirrups—7 gauge **FINISH:** Simpson gray paint

**INSTALLATION:** • Use all specified fasteners. See General Notes.

- Install with Simpson Strong-Tie SDS ¼"x3" wood screws, which are provided with the EGQ. (Lag screws will not achieve the same load.)
- All multiple members must be fastened together to act as a single unit.
- Multiple member headers may require additional fasteners at hanger locations. Quantity and location to be determined by designer. See SDS section for additional information and SDS screw applications.

**OPTIONS:** • No slope or skew modifications available.



Flatten edge of header to match top flange radius.

**Typical EGQ Installation**

| Joist or Purlin Size | Model No.    | Dimensions (in) |       | Fasteners    |              | Factored Resistance    |        |                  |           |
|----------------------|--------------|-----------------|-------|--------------|--------------|------------------------|--------|------------------|-----------|
|                      |              | W               | Min H | Header       | Joist        | Uplift                 | PSL    | LVL <sup>1</sup> | S-P-F LVL |
|                      |              |                 |       |              |              | (K <sub>0</sub> =1.15) | Normal | Normal           | Normal    |
|                      |              |                 |       |              |              | lbs                    | lbs    | lbs              | lbs       |
| 3½                   | EGQ3.62-SDS3 | 3½              | 11¼   | 28-SDS ¼"x3" | 12-SDS ¼"x3" | 5430                   | 25450  | 27650            | 17010     |
| 5¼                   | EGQ5.50-SDS3 | 5½              | 11¼   | 28-SDS ¼"x3" | 12-SDS ¼"x3" | 5430                   | 28025  | 30425            | 23460     |
| 7                    | EGQ7.25-SDS3 | 7¼              | 11¼   | 28-SDS ¼"x3" | 12-SDS ¼"x3" | 5430                   | 30600  | 32435            | 23930     |
|                      |              |                 |       |              |              | 24.18                  | 136.30 | 144.48           | 106.45    |

1. Applies to LVL made primarily from Douglas Fir or Southern Pine. For LVL made primarily from other species, contact the LVL manufacturer for suitability.
2. "Min H" is the minimum joist height dimension that may be specified.
3. Use S-P-F LVL values for S-P-F glulam.
4. Multiply tabulated uplift values x 0.86 for S-P-F LVL

**MSC Multiple Seat Connector**

The MSC supports the ridge and two valleys for roof construction. Ideal for dormer roof applications.

**MATERIAL:** Top Flange – 3 gauge; MSC1.81, MSC2, MSC4. Stirrups – 11 gauge; MSC5 stirrups – 7 gauge.

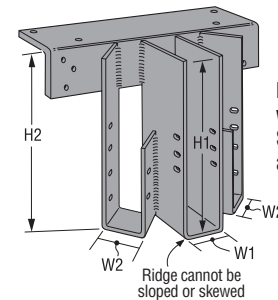
**FINISH:** Simpson gray paint.

**INSTALLATION:** • Distribute the total load evenly about the centerline to avoid eccentric loading.

- Fasten all built-up members together as one unit.
- Net height will be calculated based on specified valley member depth and slope by the factory unless noted otherwise.

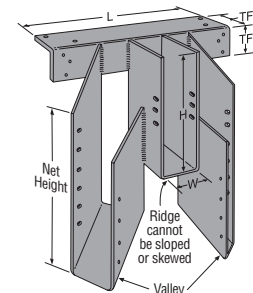
**SLOPED AND/OR SKEWED VALLEYS**

- The valley stirrups can be sloped 45° and skewed 25° to 45° (MSC5 skewed 20° to 40°).
- The total design load of the hanger is split between the ridge (20%) and each valley (40%).
- For two valley connections with no ridge member, divide the total load by two for each valley load.

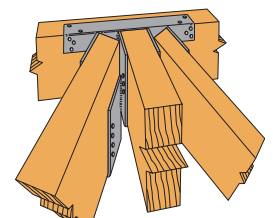


**MSC1.81 with Valley Skewed 45° and Sloped 0°**

| Model No. | Dimensions (in) |         |    |    | Fasteners |           | Valley    |            | Factored Resistance (K <sub>0</sub> =1.00) |       |        |         |       |        |        |       |       |
|-----------|-----------------|---------|----|----|-----------|-----------|-----------|------------|--------------------------------------------|-------|--------|---------|-------|--------|--------|-------|-------|
|           | W               | H (Min) | TF | L  | Header    | Joist     | Max. Skew | Max. Slope | LVL <sup>2</sup> (G = 0.50)                |       |        | D.Fir-L |       |        | S-P-F  |       |       |
|           |                 |         |    |    |           |           |           |            | Valley                                     | Ridge | Total  | Valley  | Ridge | Total  | Valley | Ridge | Total |
|           |                 |         |    |    |           |           |           |            | lbs                                        | lbs   | lbs    | lbs     | lbs   | lbs    | lbs    | lbs   | lbs   |
| MSC2      | 1½              | 5½      | 2¾ | 12 | 10-16d    | 18-10dx1½ | 45°       | 0°         | 4150                                       | 2075  | 10375  | 3175    | 1585  | 7935   | 2380   | 1190  | 5950  |
|           |                 |         |    |    |           |           |           |            | 18.49                                      | 9.24  | 46.21  | 14.14   | 7.06  | 35.35  | 10.60  | 5.30  | 26.50 |
|           |                 |         |    |    |           | 26-10dx1½ | 45°       | 45°        | 3290                                       | 1645  | 8225   | 2520    | 1260  | 6300   | 1890   | 945   | 4725  |
|           |                 |         |    |    |           |           |           |            | 14.65                                      | 7.33  | 36.64  | 11.22   | 5.61  | 28.06  | 8.42   | 4.21  | 21.05 |
| MSC1.81   | 1¾              | 5½      | 2¾ | 12 | 10-16d    | 18-10dx1½ | 45°       | 0°         | 4150                                       | 2075  | 10375  | 3175    | 1585  | 7935   | 2380   | 1190  | 5950  |
|           |                 |         |    |    |           |           |           |            | 18.49                                      | 9.24  | 46.21  | 14.14   | 7.06  | 35.35  | 10.60  | 5.30  | 26.50 |
|           |                 |         |    |    |           | 26-10dx1½ | 45°       | 45°        | 3290                                       | 1645  | 8225   | 2520    | 1260  | 6300   | 1890   | 945   | 4725  |
|           |                 |         |    |    |           |           |           |            | 14.65                                      | 7.33  | 36.64  | 11.22   | 5.61  | 28.06  | 8.42   | 4.21  | 21.05 |
| MSC4      | 3¾              | 7½      | 2¾ | 18 | 10-16d    | 18-10d    | 45°       | 0°         | 5460                                       | 2730  | 13650  | 5460    | 2730  | 13650  | 4060   | 2030  | 10150 |
|           |                 |         |    |    |           |           |           |            | 24.32                                      | 12.16 | 60.80  | 24.32   | 12.16 | 60.80  | 18.08  | 9.04  | 45.21 |
|           |                 |         |    |    |           | 26-10d    | 45°       | 45°        | 5460                                       | 2730  | 13650  | 5460    | 2730  | 13650  | 4060   | 2030  | 10150 |
|           |                 |         |    |    |           |           |           |            | 24.32                                      | 12.16 | 60.80  | 24.32   | 12.16 | 60.80  | 18.08  | 9.04  | 45.21 |
| MSC5      | 5¼              | 9½      | 2¾ | 26 | 13-16d    | 18-16d    | 45°       | 0°         | 10565                                      | 5280  | 26410  | 10565   | 5280  | 26410  | 7990   | 3995  | 19975 |
|           |                 |         |    |    |           |           |           |            | 47.06                                      | 23.52 | 117.64 | 47.06   | 23.52 | 117.64 | 35.59  | 17.80 | 88.98 |
|           |                 |         |    |    |           | 26-16d    | 45°       | 45°        | 9130                                       | 4565  | 22825  | 9130    | 4565  | 22825  | 6905   | 3450  | 17260 |
|           |                 |         |    |    |           |           |           |            | 40.67                                      | 20.33 | 101.67 | 40.67   | 20.33 | 101.67 | 30.76  | 15.37 | 76.88 |



**MSC4 with Valley Sloped and Skewed 45°**



**Typical MSC4 Installation**

1. Factored resistances shown for each valley.
2. Other valley-ridge load distributions are allowed provided the sum of all three members is distributed symmetrically about the centre of the hanger and combined do not exceed the total resistance.
3. MSC4 is also available in 3½" Glulam width.
4. MSC5 is also available in widths up to 5½".
5. MSC1.81 and MSC2 are available in saddle configurations. (e.g. MSCD1.81)
6. For the MSC5 with all three members sloped to 45° (max.) multiply the tabulated resistance x 0.64. This connection requires 30-16d joist nails.
7. Factored resistances shown for LVL assume φ<sub>FCP</sub>=1092 psi (7.53 MPa).
8. **NAILS:** 16d = 0.162" dia. x 3½" long, 10d = 0.148" dia. x 3" long, 10dx1½" = 0.148" dia. x 1½" long. See page 16-17 for other nail sizes and information.