

Joist & Beam Connections

HFFI - Heavy Face Mount Hanger

The Cullen HFFI hanger is a multi-purpose utility connector for any joist to joist or joist to header application.

The HFFI is designed to transfer increased factored resistance values and has full height side flanges.

The product code is stamped on the hanger for simple identification.

ADVANTAGES

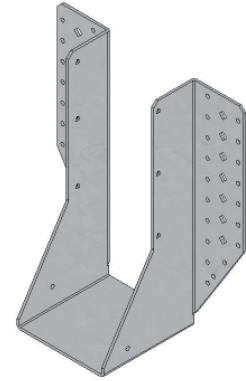
- No web stiffeners required
- Multi-fixing options - for faster installation or increased factored resistance values

MATERIAL

- 12 ga. (0.104") galvanized mild steel - G90

3 FIXING OPTIONS

- 10dx1½" nails
- **For faster installation** - FCS35 - FastenMaster Connector Screws 1⅜" (35mm)
- **For increased factored resistance values** - FCS35 - FastenMaster Connector Screws 1⅜" (35mm) combined with 10dx1½" nails for incoming joist nail holes

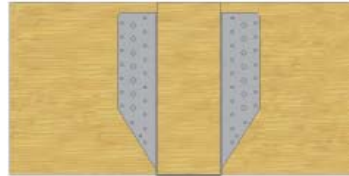


1⅜" (35mm) FastenMaster Connector Screw
(Developed for high capacity fixing details)

Installation

Stage 1

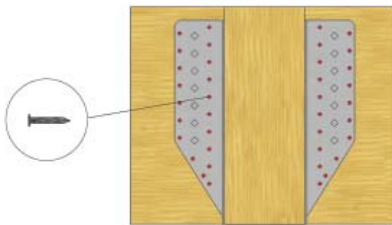
Locate hanger flush to bottom of the girder.



Stage 2

Fixing option 1 - 10dx1½"

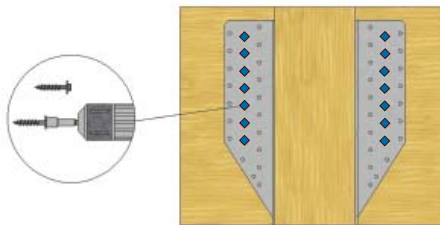
Fill all circular nail holes (indicated in red) using 10dx1½" nails.



Fixing option 2 - FCS35

For faster installation

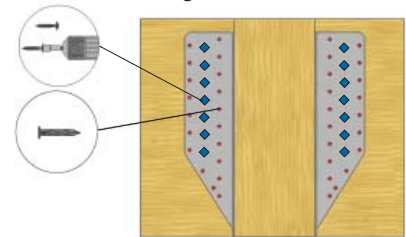
Fill all diamond holes (indicated in blue) using **FCS35**.



Fixing option 3 - 10dx1½" nails & FCS35

For increased factored resistance values

Fill
- all circular nail holes (indicated in red) using 10dx1½" nails
and
- all diamond holes (indicated in blue) using **FCS35**.



Number of fixings vary with hanger height, please refer to the tables on page 25.

Stage 3

The incoming member is then placed into position. The circular nail holes in the side flange must be filled.



Joist & Beam Connections

HFFI - Heavy Face Mount Hanger

HFFI Single/Double Joists/beams - Solid Sawn Timber

| Joist/beam Size | Product Code | Ga | Hanger Dimensions | | | Fasteners | | | Factored Resistance | | | | | |
|-----------------|--------------|----|-------------------|----|---|-----------|-------|-----------------------|---------------------|-----|-------|------|-------|------|
| | | | W | H | B | Face | | Joist/beam 10dx1½" | Uplift (Kd = 1.15) | | SPF | | DF | |
| | | | | | | 10dx1½" | FCS35 | | kN | lbs | kN | lbs | kN | lbs |
| 1½ x 9¼ | HFFI1.5/9.25 | 12 | 1⅞ | 9⅞ | 4 | 38 | 0 | 2 | 1.27 | 285 | 11.47 | 2578 | 17.21 | 3868 |
| 1½ x 9¼ | HFFI1.5/9.25 | 12 | 1⅞ | 9⅞ | 4 | 0 | 14 | 2 | 1.27 | 285 | 11.47 | 2578 | 17.21 | 3868 |
| 1½ x 9¼ | HFFI1.5/9.25 | 12 | 1⅞ | 9⅞ | 4 | 38 | 14 | 2 | 1.27 | 285 | 14.9 | 3349 | 22.35 | 5024 |
| 3 x 9¼ | HFFI3/9.25 | 12 | 3⅞ | 9⅞ | 4 | 38 | 0 | 2 | 1.27 | 285 | 17.21 | 3868 | 20.07 | 4511 |
| 3 x 9¼ | HFFI3/9.25 | 12 | 3⅞ | 9⅞ | 4 | 0 | 14 | 2 | 1.27 | 285 | 17.21 | 3868 | 20.07 | 4511 |
| 3 x 9¼ | HFFI3/9.25 | 12 | 3⅞ | 9⅞ | 4 | 38 | 14 | 2 | 1.27 | 285 | 22.35 | 5024 | 26.09 | 5865 |

HFFI - Single/Double Joist - EWP

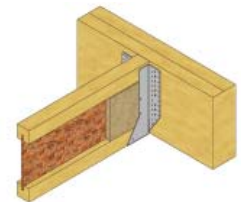
| I-Joist/beam Size | Product Code | Ga | Hanger Dimensions | | | Fasteners | | | Factored Resistance | | | | | | | |
|-------------------|----------------|----|-------------------|-----|---|-----------|-------|------------------|---------------------|-----|-------|------|-------|------|-------|------|
| | | | W | H | B | Face | | Joist 10dx1½" | Uplift (Kd = 1.15) | | LVL | | PSL | | LSL | |
| | | | | | | 10dx1½" | FCS35 | | kN | lbs | kN | lbs | kN | lbs | kN | lbs |
| 1¼ x 9½ | HFFI1.75/9.5 | 12 | 1⅞ | 9¼ | 4 | 38 | 0 | 2 | 1.27 | 285 | 15.2 | 3417 | 15.2 | 3417 | 15.2 | 3417 |
| 1¼ x 9½ | HFFI1.75/9.5 | 12 | 1⅞ | 9¼ | 4 | 0 | 14 | 2 | 1.27 | 285 | 15.2 | 3417 | 15.2 | 3417 | 15.2 | 3417 |
| 1¼ x 9½ | HFFI1.75/9.25 | 12 | 1⅞ | 9¼ | 4 | 38 | 14 | 2 | 1.27 | 285 | 22.8 | 5125 | 22.8 | 5125 | 22.8 | 5125 |
| 1¼ x 11½ | HFFI1.75/11.88 | 12 | 1⅞ | 11½ | 4 | 50 | 0 | 2 | 1.27 | 285 | 18.2 | 4091 | 18.2 | 4091 | 18.2 | 4091 |
| 1¼ x 11½ | HFFI1.75/11.88 | 12 | 1⅞ | 11½ | 4 | 0 | 20 | 2 | 1.27 | 285 | 18.2 | 4091 | 18.2 | 4091 | 18.2 | 4091 |
| 1¼ x 11½ | HFFI1.75/11.88 | 12 | 1⅞ | 11½ | 4 | 50 | 20 | 2 | 1.27 | 285 | 22.8 | 5125 | 22.8 | 5125 | 22.8 | 5125 |
| 3½ x 9½ | HFFI3.5/9.5 | 12 | 3⅞ | 9¼ | 4 | 38 | 0 | 2 | 1.27 | 285 | 20.1 | 4518 | 20.1 | 4518 | 20.1 | 4518 |
| 3½ x 9½ | HFFI3.5/9.5 | 12 | 3⅞ | 9¼ | 4 | 0 | 14 | 2 | 1.27 | 285 | 20.1 | 4518 | 20.1 | 4518 | 20.1 | 4518 |
| 3½ x 9½ | HFFI3.5/9.5 | 12 | 3⅞ | 9¼ | 4 | 38 | 14 | 2 | 1.27 | 285 | 31.01 | 6971 | 31.01 | 6971 | 31.01 | 6971 |
| 3½ x 11½ | HFFI3.5/11.88 | 12 | 3⅞ | 11½ | 4 | 50 | 0 | 2 | 1.27 | 285 | 28.2 | 6339 | 28.2 | 6339 | 28.2 | 6339 |
| 3½ x 11½ | HFFI3.5/11.88 | 12 | 3⅞ | 11½ | 4 | 0 | 20 | 2 | 1.27 | 285 | 28.2 | 6339 | 28.2 | 6339 | 28.2 | 6339 |
| 3½ x 11½ | HFFI3.5/11.88 | 12 | 3⅞ | 11½ | 4 | 50 | 20 | 2 | 1.27 | 285 | 33.85 | 7609 | 33.85 | 7609 | 33.85 | 7609 |
| 5¼ x 9½ | HFFI5.25/9.5 | 12 | 5⅞ | 9¼ | 4 | 38 | 0 | 2 | 1.27 | 285 | 20.1 | 4518 | 20.1 | 4518 | 20.1 | 4518 |
| 5¼ x 9½ | HFFI5.25/9.5 | 12 | 5⅞ | 9¼ | 4 | 0 | 14 | 2 | 1.27 | 285 | 20.1 | 4518 | 20.1 | 4518 | 20.1 | 4518 |
| 5¼ x 9½ | HFFI5.25/9.5 | 12 | 5⅞ | 9¼ | 4 | 38 | 14 | 2 | 1.27 | 285 | 31.01 | 6971 | 31.01 | 6971 | 31.01 | 6971 |
| 5¼ x 11½ | HFFI5.25/11.88 | 12 | 5⅞ | 11½ | 4 | 50 | 0 | 2 | 1.27 | 285 | 28.2 | 6339 | 28.2 | 6339 | 28.2 | 6339 |
| 5¼ x 11½ | HFFI5.25/11.88 | 12 | 5⅞ | 11½ | 4 | 0 | 20 | 2 | 1.27 | 285 | 28.2 | 6339 | 28.2 | 6339 | 28.2 | 6339 |
| 5¼ x 11½ | HFFI5.25/11.88 | 12 | 5⅞ | 11½ | 4 | 50 | 20 | 2 | 1.27 | 285 | 33.85 | 7609 | 33.85 | 7609 | 33.85 | 7609 |
| 7 x 9½ | HFFI7/9.5 | 12 | 7⅞ | 9¼ | 4 | 38 | 0 | 2 | 1.27 | 285 | 20.1 | 4518 | 20.1 | 4518 | 20.1 | 4518 |
| 7 x 9½ | HFFI7/9.5 | 12 | 7⅞ | 9¼ | 4 | 0 | 14 | 2 | 1.27 | 285 | 20.1 | 4518 | 20.1 | 4518 | 20.1 | 4518 |
| 7 x 9½ | HFFI7/9.5 | 12 | 7⅞ | 9¼ | 4 | 38 | 14 | 2 | 1.27 | 285 | 31.01 | 6971 | 31.01 | 6971 | 31.01 | 6971 |
| 7 x 11½ | HFFI7/11.88 | 12 | 7⅞ | 11½ | 4 | 50 | 0 | 2 | 1.27 | 285 | 28.2 | 6339 | 28.2 | 6339 | 28.2 | 6339 |
| 7 x 11½ | HFFI7/11.88 | 12 | 7⅞ | 11½ | 4 | 0 | 20 | 2 | 1.27 | 285 | 28.2 | 6339 | 28.2 | 6339 | 28.2 | 6339 |
| 7 x 11½ | HFFI7/11.88 | 12 | 7⅞ | 11½ | 4 | 50 | 20 | 2 | 1.27 | 285 | 33.85 | 7609 | 33.85 | 7609 | 33.85 | 7609 |

ENHANCED UPLIFT RESISTANCE

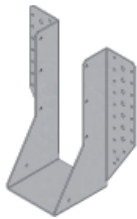
Enhanced uplift resistance can be achieved by using additional triangular nail holes in the side flanges.

Where the incoming member is an I-Joist, fix web stiffeners in accordance with I-Joist manufacturer's technical guidelines.

| ENHANCED UPLIFT RESISTANCE | | |
|---------------------------------|------------------------------------|------|
| Number of side nails 10dx1½" | Uplift (Short-term) (Kd = 1.15) | |
| | kN | lbs |
| 4 | 2.54 | 571 |
| 6 | 3.8 | 854 |
| 8 | 5 | 1124 |



I-Joist with web stiffeners



To order the HFFI

W dimension – Joist width e.g. 1½"
H dimension – Joist height e.g. 9¼"

Example - Hanger required – HFFI1.5/9.25