

# CBH

## Concealed Beam Hanger

Computer modeling and CNC manufacturing enables glulam to be delivered to the job site in precise lengths and with preinstalled concealed hangers. The CBH concealed beam hanger is specifically designed for such applications, and is installed with readily available Simpson Strong-Tie® SDS Heavy-Duty Connector screws. The CBH hanger design provides for a  $\pm 1/2$ " beam length tolerance at each connector, making it easier to crane into place than other concealed hanger designs that use machined aluminum.

**Material:** 3 gauge

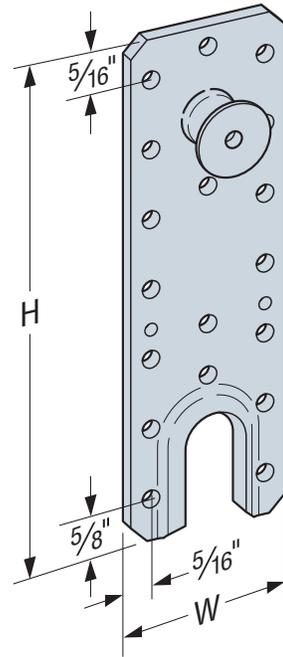
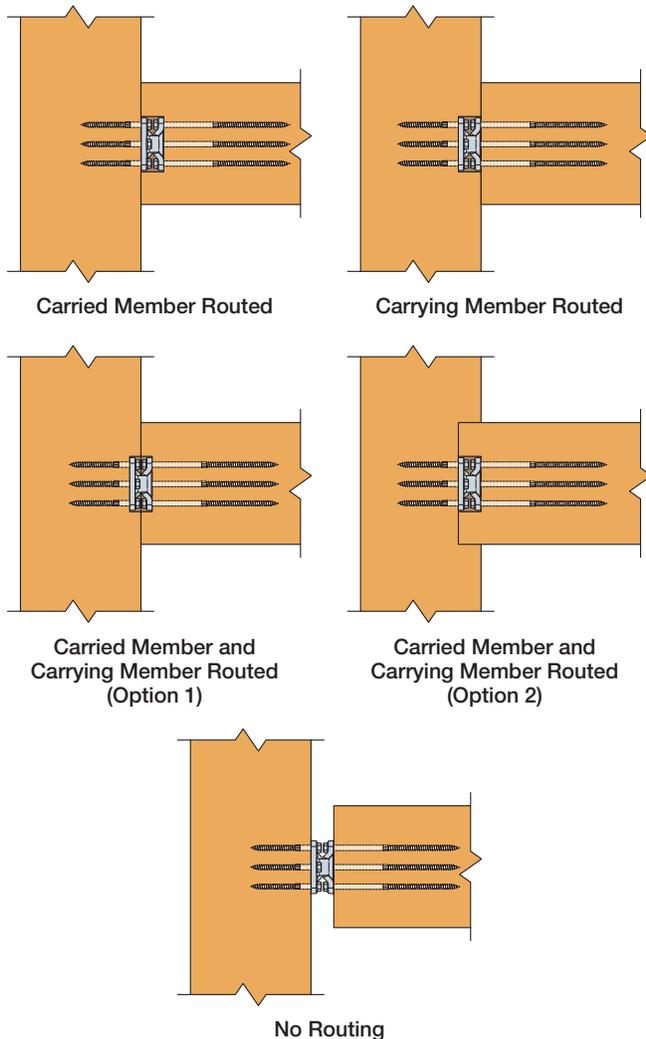
**Finish:** Galvanized

**Installation:**

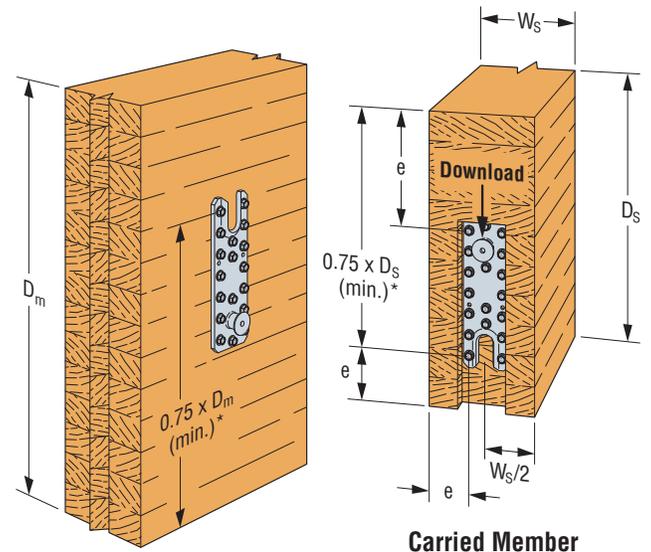
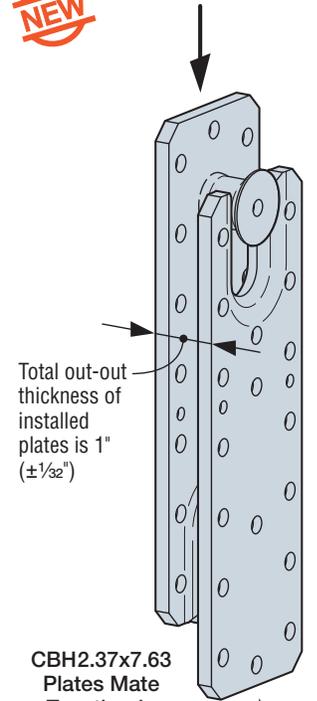
- Use all specified fasteners; see General Notes
- Rout carried and/or carrying member according to application needs
- Install CBH plates on carried and carrying members using all specified SDS fasteners
- Mate carried member to carrying member according to installation illustrations

**Codes:** Code report is pending

**Plan View**



**CBH2.37x7.63**  
(CBH2.37x5.5,  
CBH2.37x9.75 similar)



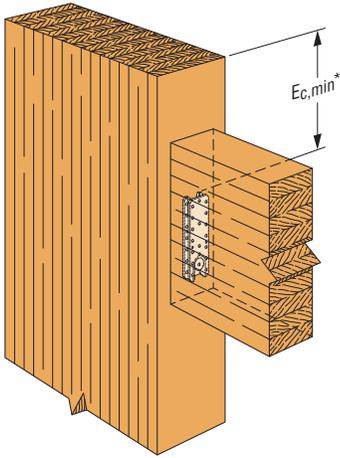
**Carrying Member**

\* Dimension line is to centerline of first row of fasteners  
 $e = 1 1/2$ " (min.)

**CBH Placement Relative to Member Depth/Width**

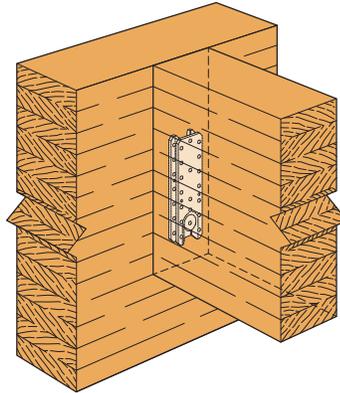
**CBH**

Concealed Beam Hanger (cont.)

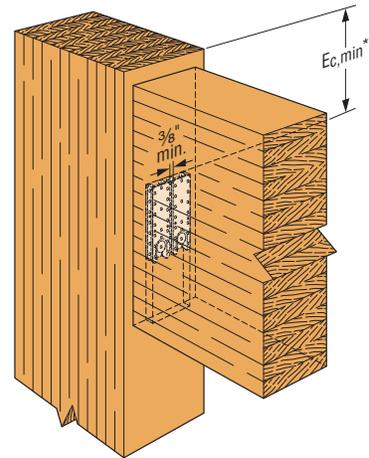


\*Reference Simpson Strong-Tie engineering letter L-C-CBHDRIFT20 for guidance on CBH drift behavior at columns and  $E_{c,min}$  requirement.

**Typical CBH2.37x7.63 Installation at Column**  
(CBH2.37x5.5 and CBH2.37x9.5 similar)



**Typical CBH2.37x7.63 Installation at Girder**  
(CBH2.37x5.5 and CBH2.37x9.5 similar)



\*Reference Simpson Strong-Tie engineering letter L-C-CBHDRIFT20 for guidance on CBH drift behavior at columns and  $E_{c,min}$  requirement.

**Typical Double CBH2.37x7.63 Installation at Column**  
(CBH2.37x5.5 and CBH2.37x9.5 and installation at girder similar)

Table 1 — CBH Joist to Beam Allowable Loads

| Model No.     | Connector Dimension (in.) |        |             | Fasteners (SDS) |              | Allowable Downloads |             |                     |              |             |                     | Code Ref. |
|---------------|---------------------------|--------|-------------|-----------------|--------------|---------------------|-------------|---------------------|--------------|-------------|---------------------|-----------|
|               | Width                     | Height | Route Depth | Joist           | Beam         | DF/SP               |             |                     | SPF/HF       |             |                     |           |
|               |                           |        |             |                 |              | Uplift (160)        | Floor (100) | Snow/Roof (115/125) | Uplift (160) | Floor (100) | Snow/Roof (115/125) |           |
| CBH2.37x5.5B  | 2½                        | 5½     | 1           | (13) ¼" x 6"    | (13) ¼" x 3" | 555                 | 4,830       | 4,830               | 485          | 3,900       | 4,135               |           |
| CBH2.37x7.63B | 2½                        | 7½     | 1           | (18) ¼" x 6"    | (18) ¼" x 3" | 555                 | 6,510       | 6,510               | 485          | 5,400       | 5,570               | —         |
| CBH2.37x9.75B | 2½                        | 9¾     | 1           | (23) ¼" x 6"    | (23) ¼" x 3" | 555                 | 8,785       | 8,785               | 485          | 6,900       | 7,525               |           |

See footnotes below.

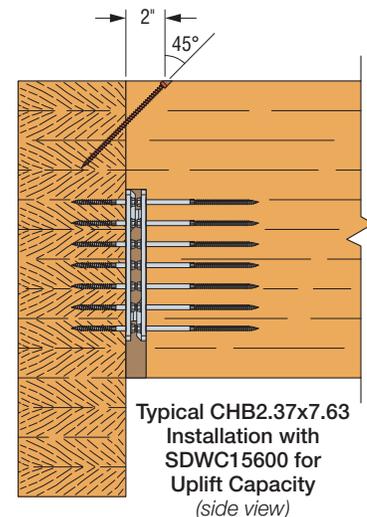
Table 2 — CBH Joist to Column Allowable Loads

| Model No.     | Connector Dimension (in.) |        |             | Fasteners (SDS) |              | Allowable Downloads |             |                     |              |             |                     | Code Ref. |
|---------------|---------------------------|--------|-------------|-----------------|--------------|---------------------|-------------|---------------------|--------------|-------------|---------------------|-----------|
|               | Width                     | Height | Route Depth | Joist           | Beam         | DF/SP               |             |                     | SPF/HF       |             |                     |           |
|               |                           |        |             |                 |              | Uplift (160)        | Floor (100) | Snow/Roof (115/125) | Uplift (160) | Floor (100) | Snow/Roof (115/125) |           |
| CBH2.37x5.5C  | 2½                        | 5½     | 1           | (13) ¼" x 6"    | (13) ¼" x 6" | 555                 | 5,455       | 5,455               | 485          | 3,900       | 4,485               |           |
| CBH2.37x7.63C | 2½                        | 7½     | 1           | (18) ¼" x 6"    | (18) ¼" x 6" | 555                 | 6,630       | 6,630               | 485          | 5,400       | 5,675               | —         |
| CBH2.37x9.75C | 2½                        | 9¾     | 1           | (23) ¼" x 6"    | (23) ¼" x 6" | 555                 | 8,940       | 8,940               | 485          | 6,900       | 7,655               |           |

1. Member sizes based on minimum fastener edge distances will achieve tabulated allowable download, but do not consider required char edge distances for desired fire ratings. Member sizes required to achieve desired fire ratings shall be determined by the Engineer of Record.
2. Use Simpson Strong-Tie® Strong-Drive® SDWC15600 (6" length) to achieve table uplift capacities. Tabulated loads are for a single fastener. Use multiple screws for additional uplift.
3. Minimum SDS edge distance 1 ½".

Ordering Information

| Model No.     | Application     | Ordering SKU     | Kit Contents   |                  |          |
|---------------|-----------------|------------------|--|------------------|----------|
|               |                 |                  | CBH Plates   | Number of Screws |          |
|               |                 |                  |  | SDS25300         | SDS25600 |
| CBH2.37x5.5B  | Joist to beam   | CBH2.37x5.5B-KT  | Each kit contains two backplates that make up one connection | 13               | 13       |
| CBH2.37x7.63B |                 | CBH2.37x7.63B-KT |  | 18               | 18       |
| CBH2.37x9.75B |                 | CBH2.37x9.75B-KT |  | 23               | 23       |
| CBH2.37x5.5C  | Joist to column | CBH2.37x5.5C-KT  |  | —                | 26       |
| CBH2.37x7.63C |                 | CBH2.37x7.63C-KT |  | —                | 36       |
| CBH2.37x9.75C |                 | CBH2.37x9.75C-KT |  | —                | 46       |



**Typical CBH2.37x7.63 Installation with SDWC15600 for Uplift Capacity**  
(side view)