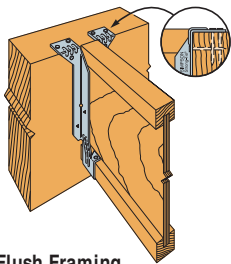


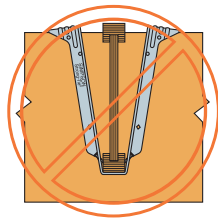
# GENERAL CONNECTOR INSTALLATION

Engineered Wood & Structural Composite Lumber Connectors

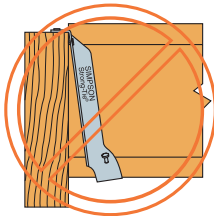
## TOP FLANGE HANGERS



**Flush Framing**  
Top flange configuration and thickness of top flange need to be considered for flush frame conditions.



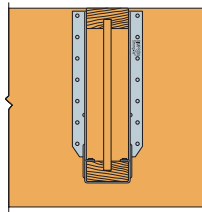
**Hanger Over-Spread**  
If the hanger is over-spread, it can raise the I-joist above the header and may cause uneven surfaces and squeaky floors.



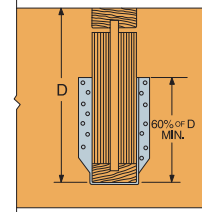
**Hanger Not Plumb**  
A hanger "kicked-out" from the header can cause uneven surfaces and squeaky floors.

## PREVENT ROTATION

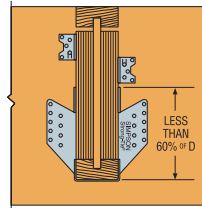
Hangers provide some joist rotation resistance; however, additional lateral restraint may be required for deep joists.



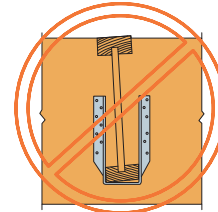
**No Web Stiffener Installed**  
Hanger side flange supports joist top flange.



**Web Stiffener Required**  
Hanger side flange should be at least 60% of joist depth or potential joist rotation must be addressed.

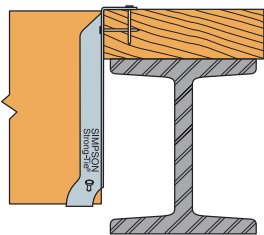


**Rotation Resistance**  
If non-skewed hanger side flange is less than 60% of joist depth, attach staggered A34 framing anchors above the hanger.

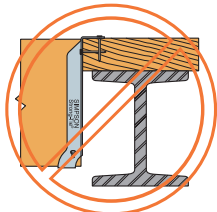


**No Web Stiffener Results in Rotation**  
Hanger side flange is below the joist top flange. No web stiffener results in rotation, unless restrained by other means.

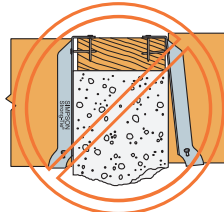
## WOOD NAILERS



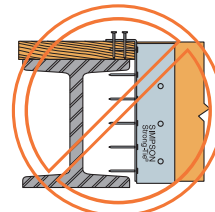
Correct Attachment



**Nailer Too Wide**  
The loading may cause cross-grain bending. As a general rule, the maximum allowable overhang is 1/4", depending on nailer thickness.

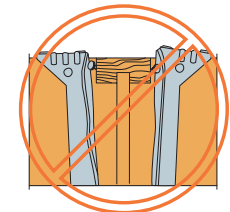


**Nailer Too Narrow**  
A maximum mismatch of 1/8" for normal installations is allowed.



**Nailer Too Thin**  
or the wrong hanger for the application.

## TOE-NAILING



Toe nailing causes squeaks and improper hanger installations. Do not toe nail I-joists before installing top flange or face mount hangers.

## WOOD I-JOISTS

### SLOPED JOISTS

For sloped joists up to 1/4:12 there is no reduction. For slopes greater than 1/4:12 see individual product pages or refer to technical bulletin T-SLOPEJST (see page 187 for details).

### MULTIPLE JOISTS

Multiple joists should be adequately connected together to act as one unit.

### FASTENERS

Use the correct nails. Wood may split if the nails are too large. Hanger nails into flanges should not exceed 10d common (0.148 dia.), no longer than 1 1/2". Nails into web stiffeners should not exceed 16d commons (0.162 dia.).

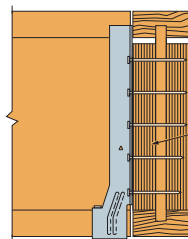
### ECCENTRICALLY-LOADED I-JOISTS

Supporting a top flange hanger may require bottom flange restraining straps, blocking or directly-applied ceiling systems to prevent rotation at the hanger location.

### SKEWED JOISTS

Joists may be skewed up to 2 1/2 degrees in a non-skewed hanger without any load reduction. Refer to individual hanger descriptions for information allowing any further skew applications.

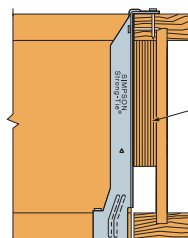
### I-JOIST AS A HEADER INSTALLATIONS



Face Mount Hanger

BACKER BLOCK EACH SIDE  
Backer block nails not shown for clarity.

When face mount hangers are attached to I-joist headers, backer blocks must be installed to provide a nailing surface for the hanger nails. The backer blocks should be installed on both sides of the web and attached together with a minimum of 10-10d nails. The hanger nails should extend through the web. Contact the I-Joist manufacture for additional design considerations.

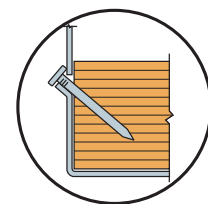


Top Flange Hanger

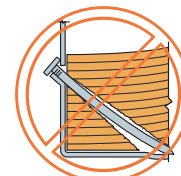
BACKER BLOCK  
Backer block nails not shown for clarity.

When top flange hangers are attached to I-joist headers, a backer block must be installed to prevent the top flange from rotating under load. The backer blocks should be installed with a minimum of 10-10d nails clinched. Check with the joist manufacture for additional design considerations.

## POSITIVE ANGLE NAILING



Correct Nailing  
Approx. 45° angle



Nail too long



Nail at wrong angle