

Important Information and General Notes

Warning

The following Warnings, Notes, Instructions and product information apply only to the specific products listed in this catalog. If you use any other Simpson Strong-Tie® products, read the Warnings, Notes, Instructions and product information in the applicable catalog and consult www.strongtie.com for the latest catalogs, bulletins and product information.

Simpson Strong-Tie® structural connectors, anchors, and other products are designed and tested to provide specified design loads. To obtain optimal performance from Simpson Strong-Tie products and achieve maximum allowable design load, the products must be properly installed and used in accordance with the installation instructions and design limits provided by Simpson Strong-Tie Company Inc. To ensure proper installation and use, designers and installers must carefully read the following General Notes, General Instructions For The Installer and General Instructions For The Designer, as well as consult the applicable catalog pages for specific product installation instructions and notes.

Proper product installation requires careful attention to all notes and instructions, including these basic rules:

- Be familiar with the application and correct use of the product.
- Install all required fasteners per installation instructions provided by Simpson Strong-Tie Company Inc.: a) use proper fastener type; b) use proper fastener quantity; c) fill all fastener holes; d) ensure screws are completely driven; and e) ensure bolts are completely tightened.

In addition to following the basic rules provided above as well as all notes, warnings and instructions provided in the catalog, installers, designers, engineers and consumers should consult the Simpson Strong-Tie® website at www.strongtie.com to obtain additional design and installation information, including:

- Instructional builder/contractor training kits containing an instructional video, an instructor guide and a student guide in both English and Spanish
- Information on workshops Simpson Strong-Tie conducts at various training centers throughout the country
- Product specific installation videos
- Specialty catalogs
- Code reports
- Technical fliers and bulletins
- Master format specifications
- Material safety data sheets
- Corrosion information
- Simpson Strong-Tie Autocad® menu
- Answers to frequently asked questions and technical topics.

Failure to follow fully all of the notes and instructions provided by Simpson Strong-Tie Company Inc. may result in improper installation of products. Improperly installed products may not perform to the specifications set forth in this catalog and may reduce a structure's ability to resist the movement, stress, and loading that occurs from gravity loads and loading from events such as earthquakes and high velocity winds.

Simpson Strong-Tie Company Inc. does not guarantee the performance or safety of products that are modified, improperly installed or not used in accordance with the design and load limits set forth in this catalog.

Autocad is a registered trademark of Autodesk®.

General Notes

These general notes are provided to ensure proper installation of Simpson Strong-Tie® products and must be followed fully.

- Simpson Strong-Tie Company Inc. reserves the right to change specifications, designs, and models without notice or liability for such changes.
- Steel used for each Simpson Strong-Tie product is individually selected based on the product's steel specifications, including strength, thickness, formability, finish, and weldability. Contact Simpson Strong-Tie for steel information on specific products.
- Unless otherwise noted, dimensions are in inches, loads are in pounds.
- 8d (0.131"x2½"), 10d (0.148"x3"), and 16d (0.162"x3½") specify common nails that meet the requirements of ASTM F1667.
- Do not overload. Do not exceed catalog allowable loads, which would jeopardize the product.
- All references to bolts or machine bolts (MBs), unless otherwise noted, are for structural quality through bolts (not lag screws or carriage bolts) equal to or better than ASTM Standard A307, Grade A. RFB is A307, Grade C; Anchor rods for OMFSL and OMFAB are ASTM F1554 Grade 36 or A36; OMFSL-HS and OMFAB-HS are ASTM A449; bolts for OMF beam to column connection are ASTM A325.
- Wood shrinks and expands as it loses or gains moisture. Dimensions given to face of wood nailers in this catalog may vary slightly due to moisture content.
- Some model configurations may differ from those shown in this catalog. Contact Simpson Strong-Tie for details.
- For field welding options contact Simpson Strong-Tie.

General Instructions for the Installer

These general instructions for the installer are provided to ensure proper selection and installation of Simpson Strong-Tie® products and must be followed carefully. These general instructions are in addition to the specific installation instructions and notes provided for each particular product, all of which should be consulted prior to and during installation of Simpson Strong-Tie products.

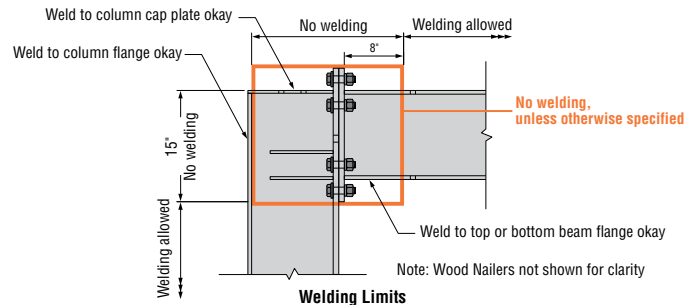
- Provide temporary diagonal bracing of Strong Frame™ ordinary moment frame as required until frame is tied in to the floor or roof framing above.
- All specified fasteners must be installed according to the instructions in this catalog. Incorrect fastener quantity, size, placement, type, material, or finish may cause the connection to fail.
- Fill all fastener holes as specified in the installation instructions for that product.
- Use the materials specified in the installation instructions. Substitution of or failure to use specified materials may cause the product to fail.
- Do not add holes or otherwise modify Simpson Strong-Tie products. The performance of modified products may be substantially weakened. Simpson Strong-Tie Company Inc. will not warrant or guarantee the performance of such modified products.
- Install products in the position specified in the catalog.
- Do not alter installation procedures from those set forth in this catalog.
- Install all specified fasteners before loading the frame.
- Use proper safety equipment.
- Nuts shall be installed such that the end of the threaded rod or bolt is at least flush with the top of the nut.
- Local and/or regional building codes may require meeting special conditions. Building codes often require special inspection of anchors installed in concrete and masonry. For compliance with these requirements, it is necessary to contact the local and/or regional building authority. Except where mandated by code, Simpson Strong-Tie products do not require special inspection.
- Standard framing and steel tolerances should be considered when determining window and door openings overall width.

Important Information and General Notes

General Instructions for the Designer

These general instructions for the Designer are provided to ensure proper selection and installation of Simpson Strong-Tie® products and must be followed carefully. These general instructions are in addition to the specific design and installation instructions and notes provided for each particular product, all of which should be consulted prior to and during the design process.

- Design for Strong Frame™ ordinary moment frame is in accordance with the following:
 - 2006 International Building Code
 - Minimum Design Loads for Buildings and Other Structures (ASCE/SEI 7-05)
 - 2005 AISC Specification for Structural Steel Buildings (ANSI/AISC 360-05)
 - 2005 AISC Seismic Provisions (ANSI/AISC 341-05)
 - 2004 RCSC Specification for Structural Joints Using ASTM A325 or A490 Bolts
 - Building Code Requirements for Structural Concrete (ACI318-05)
 Moment frames are designed using Load and Resistance Factored Design (LRFD) methodology for determining frame drift and strength limits. Allowable Stress Design Shear, $V_{ASD} = 0.7 \times V_{LRFD}$. Drift_{ASD} = 0.7 × Drift_{LRFD}.
- Building codes have specific design requirements for use of ordinary moment frames. Designer shall verify structural design meets the applicable code requirements. See design examples or contact Simpson Strong-Tie for more information.
- Strong Frame moment frames provide a key component of a structure's lateral force resisting system only when incorporated into a continuous load-transfer path. The Designer must specify the required components of the complete load transfer path including diaphragms, shear transfer, chords and collectors and foundations.
- The term "Designer" used throughout this catalog is intended to mean a licensed/certified building design professional, a licensed professional engineer, or a licensed architect.
- All connected members and related elements shall be designed by the Designer.
- All installations should be designed only in accordance with the allowable load values set forth in this catalog.
- Simpson Strong-Tie will provide upon request code testing data on all products that have been code tested.
- The allowable loads published in this catalog are for use when utilizing the traditional Allowable Stress Design methodology. When designing with LRFD, divide allowable shears and drifts by 0.7 to obtain LRFD values.
- Local and/or regional building codes may require meeting special conditions. Building codes often require special inspection of anchors installed in concrete and masonry. For compliance with these requirements, it is necessary to contact the local and/or regional building authority. Except where mandated by code, Simpson Strong-Tie products do not require special inspection.
- High-strength bolts in fully pre-tensioned Strong Frame beam to column connections may require special inspection to verify installation pre-tension. For compliance with these requirements, it is necessary to contact the local and/or regional building authority. Direct Tension Indicating (DTI) washers are included in the Strong Frame installation kits to verify installation pre-tension. Contact Simpson Strong-Tie for DTI calibration test reports.
- No welding permitted in the area in the drawing below. Welding shall be in accordance with AWS D1.1 and AWS A1.8 (as applicable for seismic). Welds shall be as specified by the Designer. Provide welding special inspection as required by local building department.



Limited Warranty

Simpson Strong-Tie Company Inc. warrants catalog products to be free from defects in material or manufacturing. Simpson Strong-Tie® products are further warranted for adequacy of design when used in accordance with design limits in this catalog and when properly specified, installed, and maintained. This warranty does not apply to uses not in compliance with specific applications and installations set forth in this catalog, or to non-catalog or modified products, or to deterioration due to environmental conditions.

Simpson Strong-Tie® connectors are designed to enable structures to resist the movement, stress, and loading that results from impact events such as earthquakes and high velocity winds. Other Simpson Strong-Tie products are designed to the load capacities and uses listed in this catalog. Properly-installed Simpson Strong-Tie products will perform in accordance with the specifications set forth in the applicable Simpson Strong-Tie catalog. Additional performance limitations for specific products may be listed on the applicable catalog pages.

Due to the particular characteristics of potential impact events, the specific design and location of the structure, the building materials used, the quality of

construction, and the condition of the soils involved, damage may nonetheless result to a structure and its contents even if the loads resulting from the impact event do not exceed Simpson Strong-Tie catalog specifications and Simpson Strong-Tie connectors are properly installed in accordance with applicable building codes.

All warranty obligations of Simpson Strong-Tie Company Inc. shall be limited, at the discretion of Simpson Strong-Tie Company Inc., to repair or replacement of the defective part. These remedies shall constitute Simpson Strong-Tie Company Inc.'s sole obligation and sole remedy of purchaser under this warranty. In no event will Simpson Strong-Tie Company Inc. be responsible for incidental, consequential, or special loss or damage, however caused.

This warranty is expressly in lieu of all other warranties, expressed or implied, including warranties of merchantability or fitness for a particular purpose, all such other warranties being hereby expressly excluded. This warranty may change periodically – consult our website www.strongtie.com for current information.

Terms and Conditions of Sale

Product Use

Products in this catalog are designed and manufactured for the specific purposes shown, and should not be used with other connectors not approved by a qualified Designer. Modifications to products or changes in installations should only be made by a qualified Designer. The performance of such modified products or altered installations is the sole responsibility of the Designer.

Indemnity

Customers or Designers modifying products or installations, or designing non-catalog products for fabrication by Simpson Strong-Tie Company Inc. shall, regardless of specific instructions to the user, indemnify, defend, and hold harmless Simpson Strong-Tie Company Inc. for any and all claimed loss or damage occasioned in whole or in part by non-catalog or modified products.

Non-Catalog and Modified Products

Consult Simpson Strong-Tie Company Inc. for applications for which there is no catalog product, or for connectors for use in hostile environments, with excessive wood shrinkage, or with abnormal loading or erection requirements.

Non-catalog products must be designed by the customer and will be fabricated by Simpson Strong-Tie Company Inc. in accordance with customer specifications.

Simpson Strong-Tie Company Inc. cannot and does not make any representations regarding the suitability of use or load-carrying capacities of non-catalog products. Simpson Strong-Tie Company Inc. provides no warranty, express or implied, on non-catalog products. F.O.B. shipping point unless otherwise specified.