



SIMPSON

Strong-Tie

®



STRONG FRAME™

MOMENT FRAME



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www.strongtie.com

Features and Benefits

For years steel moment frames have been a common method of providing high lateral-force resistance when limited wall space and large openings control the structural design. Moment frames consist of beams and columns, typically connected by a combination of bolts and welds to form rigid joints. The frames resist lateral loads primarily through bending in the beams and columns.

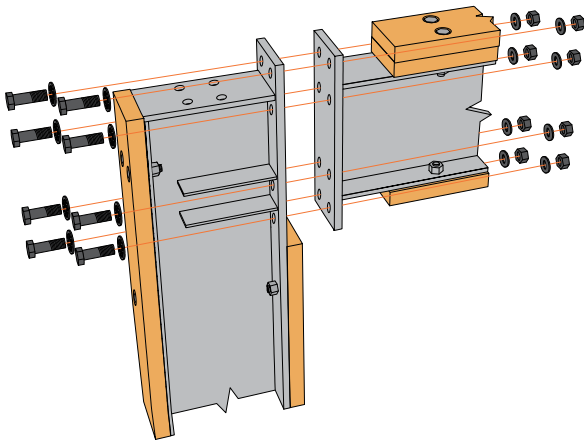
Stronger than site-built or factory-built shearwalls, moment frames allow larger openings and smaller wall sections while still providing the resistance structural designers need. Moment frames are commonly used in applications such as garage fronts, large entry ways, walls with large or numerous windows, tuck-under parking and great-rooms.

Traditionally, moment frames have been time-intensive to design and labor-intensive to install. With those factors in mind, Simpson Strong-Tie has created a cost-effective alternative to traditional frames – the Strong Frame™ moment frame.

Strong Frame moment frame is classified as “conventional construction.” It is a component of the Seismic Force Resistance System, as defined by the National Building Code of Canada (NBCC). As such, it is subject to the limitations set forth in CSA S16 “Design of Steel Structures.” Strong Frame moment frames may be combined with other lateral-force-resisting systems in accordance with NBCC.

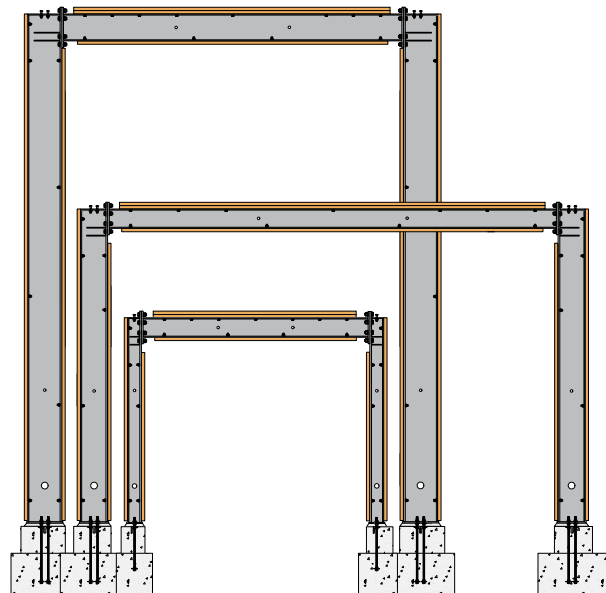


Strong Frame moment frames are the cost-effective solution for your next project



- **Frames fit in a standard 2x6 wall:** No thicker walls, no additional framing or furring required.
- **Pre-drilled holes for utilities:** 1" (25mm) diameter holes in the flanges and 3" (76mm) holes in the column webs simplify the installation of electrical and plumbing elements.
- **Greater quality control:** Frames are manufactured in a production environment with comprehensive quality-control measures. Field-bolted connections eliminate questions about the quality of field welds. Direct-tension-indicator washers included.
- **Convenient to store, ship and handle:** Unassembled frames are more compact, allowing for easier shipping and fewer deliveries. And, there are no big pre-welded frames to wrestle with on the jobsite.
- **Pre-designed anchorage solutions:** See page 3.

- **Pre-designed moment frame solutions:** The Strong Frame™ moment frame is available in 336 standard sizes with clear openings up to 20' (6096mm), configured from columns ranging from 8' to 19' (2438mm to 5791mm) high, and beams from 8' to 18' (2438mm to 5486mm) wide. Custom sizes are also available to suit almost any project. For a full list of frame dimensions, please reference www.strongtie.com/sfcanada. Canadian Strong Frame Selector software provides solutions for wind and seismic areas.
- **100% bolted connections:** Frames install faster with no field welding required. No need to have a welder on site, or a special welding inspector. A standard socket or spud wrench is all that is required to make the connection.
- **Pre-installed wood nailers:** Eliminate the need to drill and bolt nailers in the field.



Anchorage Simplified

The Strong Frame™ moment frame simplifies anchorage:

- **Streamlined footing design:** Pre-engineered anchorage solutions simplify the design process. No more tedious anchor calculations, just select the solution that fits your footing geometry and you are done.
- **Two pre-engineered anchorage options available:** The OMFSL anchorage assembly places the frame flush with the edge of concrete allowing it to fit into a standard 2x6 wall without bump-outs or furring. The OMFAB tied-anchorage assembly is designed for use where a 2x8 wall is acceptable.
- **Pre-assembled anchor-bolt assemblies:** Anchor bolts are pre-assembled on an OMF-TPL template that mounts on the form. This helps ensure correct anchor placement for trouble-free installation of columns.
- **Field flexibility to address anchor location issues:** Connections can be shimmed to provide up to ½" of adjustment when anchor bolts are misaligned.
- **Reusable layout tool for reliable anchor location:** Optional Universal Template Locator (UTL) allows precise placement of anchor-bolt assemblies for both columns, helping to ensure correct positioning.



Strong Frame™ OMFSL anchorage assemblies make design and installation faster and easier.



OMFSL
Anchorage
Assembly



Universal Template Locator

Canadian Strong Frame Selector Software

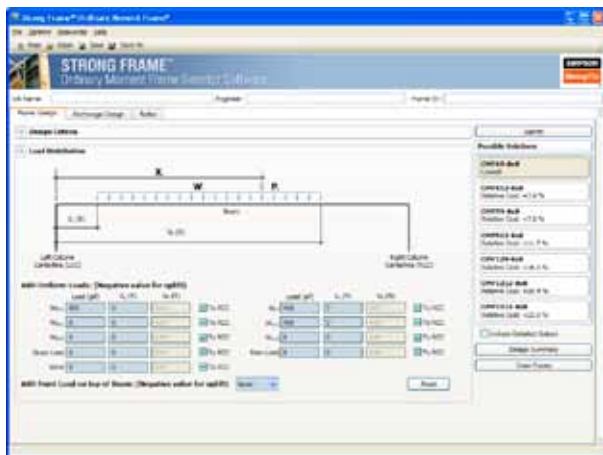
Canadian Strong Frame Selector software helps Designers quickly select the appropriate Simpson Strong-Tie® Strong Frame™ moment frame. The software enables Designers to easily design a moment frame that meets specific geometry and loading requirements.

Input Geometry:

Only minimum input geometries are required for the Canadian Strong Frame Selector software to select an appropriate frame for the available space.

Based on input geometry, the software will review the 336 available standard frames to suggest a handful of possible solutions.

If the opening dimensions are outside of standard Strong Frame moment frame sizes, the Designer can enter specific opening dimensions, and the Canadian Strong Frame Selector software will provide possible custom solutions.



Loading:

An easy-to-use input screen and drop-down buttons make it simple to key in lateral and gravity loads.

Both wind and seismic loads can be entered, and the Strong Frame Selector software will determine possible frame sizes that meet the Designer's input requirements.

Uniform, partial uniform as well as point loads can be placed anywhere along the span of the beam.

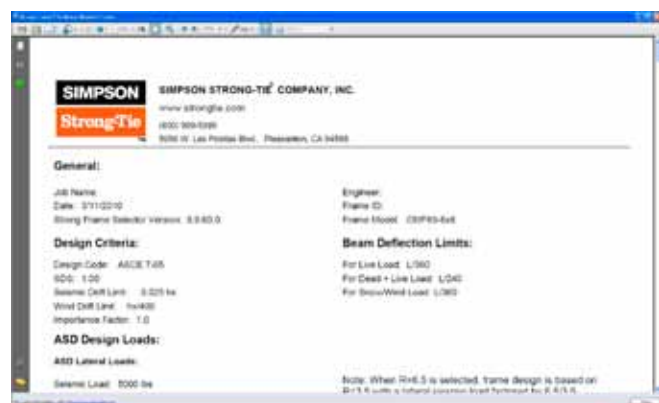
Output:

Concisely formatted output contains the information needed for moment frame design. More detailed outputs are also available if desired.

Minimal input is required for anchorage design.

Foundation forces are summarized to aid the Designer in designing foundations.

Projects can be saved, printed or emailed.



Download the Strong Frame Selector software free at www.strongtie.com/sfcanda

This flier is effective until June 30, 2013, and reflects information available as of April 1, 2011. This information is updated periodically and should not be relied upon after June 30, 2013; contact Simpson Strong-Tie for current information and limited warranty or see www.strongtie.com.