

## MIDWALL™ APPLICATION

MidWall™ is The Steel Network's latest in a long line of enhancements to the metal framing industry, providing a tested alternative in partial wall assemblies.

MidWall™ is designed to support out-of-plane loading in cantilevered partial wall systems that are unsupported at the top track. The out-of-plane loads are transferred to the floor system through a ½" thick plate nested in the flanges of the member with two 3/8" diameter fasteners used for the connection. Available in two lengths, 24" and 48", MidWall™ may be used in place of standard framing members, or in conjunction with them to frame the wall.

## MIDWALL™ MATERIAL COMPOSITION

MidWall™: ASTM A1003/A1003M, ASTM A653/A653M, Grade 50 (340), 50ksi (340MPa) minimum yield strength, 65ksi (450MPa) minimum tensile strength, G-60 (Z180) hot-dipped galvanized coating. Material Thickness = 118mil (10 gauge, 0.124" design thickness).

MidWall™ Plate: ASTM A36/A36M 08, 36ksi (250MPa) minimum yield strength, 58-80ksi (400-550MPa) tensile strength, ½" thick.

## MIDWALL™ NOMENCLATURE

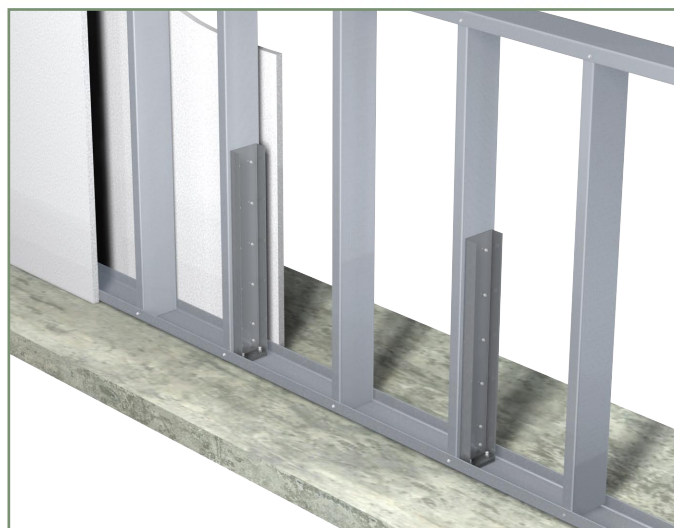
MidWall™ is currently available in two lengths (24" and 48") and one depth (3.625"). Product nomenclature lists the member depth first followed by the height in inches.

For 24" MidWall™, designate 362MW-24.

For 48" MidWall™, designate 362MW-48.

## MIDWALL™ VALUE

- Replaces labor/coordination of placing embedded angle into floor system
- Provides guide holes for attachment of MidWall™ to the stud (more efficient attachments compared with tube steel)
- Reduces the number of anchors used (2 in MidWall™ vs. 4 in other methods)
- Creates flexibility as two sizes of MidWall™ are available (24" & 48") to enable adjustable wall heights
- Meets current code requirements for handrails and partial walls

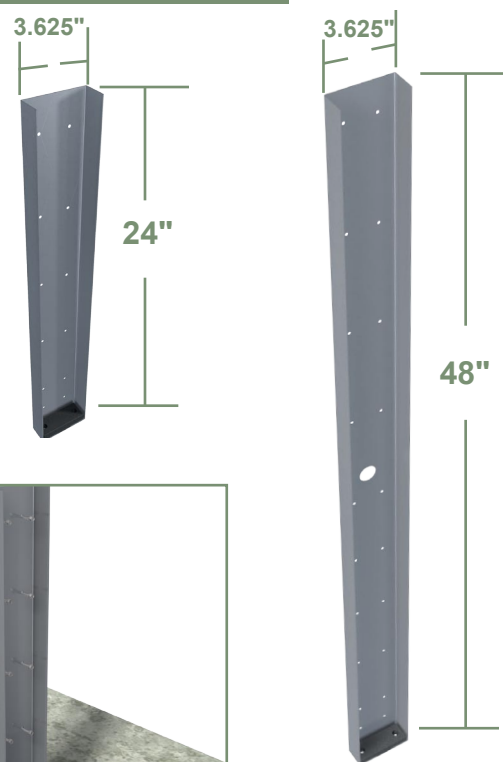


## MIDWALL™ QUANTITY/ORDER INFORMATION

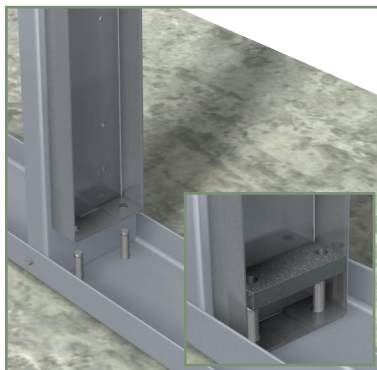
MidWall™ is available by the box or in pallet (skid) quantities through your local dealer. Each MidWall™ product will be shipped with a separate base plate.

Designation	Pcs/Box	Lbs/Pc	Pcs/Skid	Lbs/Skid
362MW-24	8	7.5	160	1200
362MW-48	4	13.5	120	1500

## MIDWALL™ DIMENSIONS



## 24" MIDWALL™ INSTALLATION PROCEDURE



Place MidWall™ 24" against stud web.  
Insert base plate.



Install nuts/washers on anchors.



Attach MidWall™ 24" to the stud web with #12 screw fasteners through guide holes (fill all holes in the vertical MidWall™ leg).

**MIDWALL™ 24" ASSEMBLY EXAMPLE**


MidWall™ 24" is generally used in interior half walls of less than 48" in height. Attach MidWall 24" to stud with #12 screws through all pre-drilled guide holes. Maximum spacing between MidWall™ connectors is 36" o.c. (see table below). Contact TSN Technical Services at (888) 474-4876 for design recommendations.

**MIDWALL™ DESIGN INFORMATION**
**CRITERIA**

IBC 2003 & 2006

Refer to Section 1607.7.1

Worst case of A or B:

A: 50 lb/ft applied in any direction at the top of wall

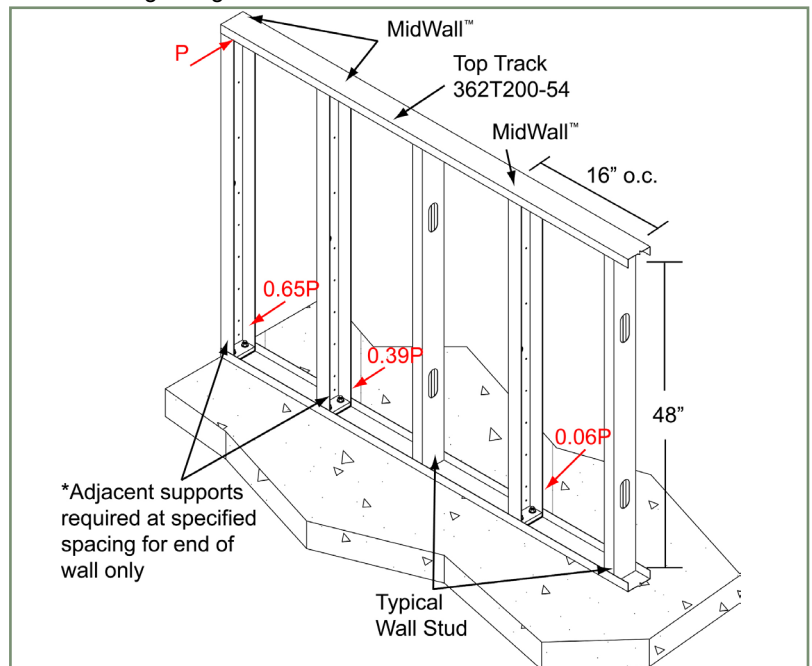
B: 200 lbs applied in any direction at any point at the top of the wall

**PROCEDURE**

A point load at a MidWall™ support is distributed to an adjacent MidWall™ support based on top track stiffness. Refer to the diagram at right for an example of the distribution of the point load, P to adjacent MidWall™ supports.

**MIDWALL™ 48" ASSEMBLY EXAMPLE**


MidWall™ 48" is used in interior half walls equal to 48" in height. Use one MidWall 48" as a substitute for a stud at the specified spacing. Maximum spacing between MidWall™ connectors is 36" o.c. (see table below). Contact TSN for technical support regarding use in exterior or 6" wide walls.



MidWall™ Spacing <sup>1</sup>	Min. Top Track	Max. Tension in Anchor <sup>2</sup> (lbs.)	Anchorage Options <sup>2</sup> (4,000 psi minimum concrete strength)
24" o.c. (End of Wall requires two MidWall spaced 12")	362T150-54	2685	3/8" HAS Super with HY-150 Max Adhesive, 3-1/2" Embed. (Hilti) 3/8" ASTM A93 GR. B7 Threaded Rod w/ A7 Adhesive, 3-3/8" Embed. (Red Head) 3/8" IXP Anchor w/ Set-XP Epoxy, 3-3/8" Embed. (Simpson)
30" o.c. (End of Wall requires two MidWall spaced 16")	362T200-54	2890	3/8" HAS Super with HY-150 Max Adhesive, 3-3/8" Embed. (Hilti) 3/8" IXP Anchor w/ Set-XP Epoxy, 3-3/8" Embed. (Simpson)
32" o.c. (End of Wall requires two MidWall spaced 16")	362T200-54	2976	3/8" HAS Super with HY-150 Max Adhesive, 3-3/8" Embed. (Hilti)
36" o.c. (End of Wall requires two MidWall spaced 16")	362T200-54	3166	3/8" HAS Super with HVA Capsule Adhesive, 5-1/4" Embed. (Hilti)

<sup>1</sup> At the end of the wall, MidWall is required at given spacing. Typical spacing begins after two adjacent end supports.

<sup>2</sup> All design data and anchorage options based on 48" maximum wall height.