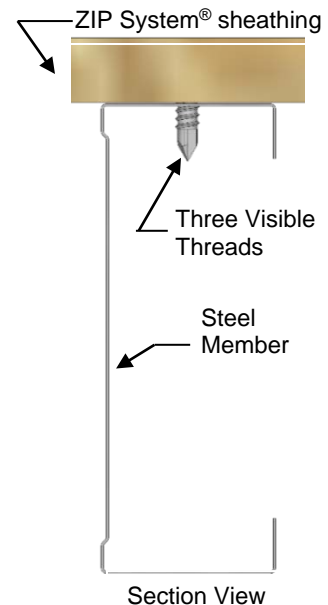


## Installing ZIP System® Sheathing over Metal Framing

Light-gauge metal framing is used in many different aspects of today’s construction industry. Though it’s more prevalent in light commercial construction, it can also be used in Type V construction. The two primary types of fasteners used to attach wood structural panels to light-gauge framing are screws and pins. The following sections outline the proper installation methods for ZIP System sheathing over metal framing.

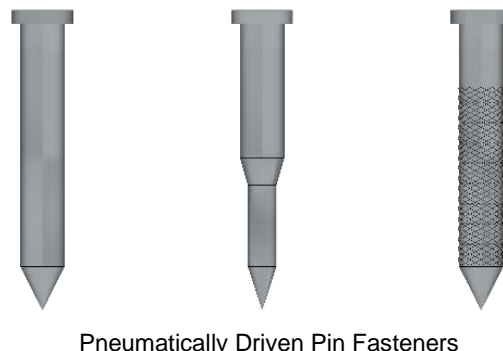
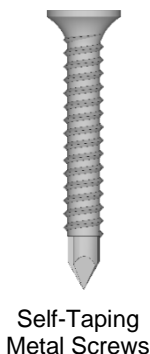
### Self-Taping Metal Screws

ZIP System® sheathing is an oriented strand board (OSB) which complies with US DOC PS2-10 requirements for wood structural panels. According to the fastening requirements specified in the International Residential Code (IRC), structural sheathing shall be attached to metal studs with minimum No. 8 self-drilling tapping screws. Screws used to attach structural sheathing to light-gauge framing shall have a minimum head diameter of 0.292 inches. For all connections, screws shall extend through the steel a minimum of 3 exposed threads. In addition, all fasteners shall have rust inhibitive coating suitable for the installation in which they are being used or be manufactured from material not susceptible to corrosion (See IRC – Chapter 6).



### Pin Fasteners

Another type of fastener that is recommended for installing ZIP System sheathing over light-gauge framing is steel pins. Steel pins contain specially designed grooves that spiral down the shaft called knurls. The knurls help to penetrate and grip the light-gauge steel framing. Steel pins are installed with pneumatic air guns like those used for typical framing nails. We recommend following the light-gauge metal manufacturers recommendations on the size, type, and length of steel pins for installing wood structural panels. For additional wood-to-steel fastener options, refer to the [2003 Hybrid Wood and Steel Details – Builder’s Guide](#).



## **ZIP System® Sheathing over Light-Gauge Metal Framing**

The following steps outline the recommended installation of ZIP System sheathing panels over light-gauge metal wall stud framing.

- Studs should be spaced a maximum 24" o.c.
- Minimum panel thickness is 7/16" for structural sheathing.
- Use the recommended size fastener by the light-gauge framing manufacturer for attaching wood structural panels. If using screws, the fastener should penetrate until at least 3 threads are visible. Steel pins should be installed as to penetrate the framing a minimum ¼".
- Screws for attachment of structural sheathing panels shall be bugle head, flat head or similar head style.
- The method of attachment of exterior wall covering materials to metal stud wall framing shall conform to the manufacturer's installation instructions.
- Panels shall be fastened a maximum spacing of 6" o.c. along all panel edges and 12" o.c. along intermediate studs.
- Provide 1/8" expansion gap at 4-foot ends.



ZIP System® over Metal Framing

As an alternative to screws and pins, another wood-to-steel fastening option for ZIP System panels is powder-actuated fasteners. Powder-actuated fasteners provide the ability to fasten into concrete, masonry, and structural steel. When considering using a proprietary fastening method, always request an Evaluation Service Report or an approved fastener design (*Hybrid Wood and Steel Details – Builders Guide, 28*).

## **ZIP System® R-Sheathing over Light-Gauge Metal Framing**

Please follow the guidance in the stand-alone Technical Tip for [ZIP System® R-sheathing over light-gauge metal framing](#).

Please visit [www.zipsystem.com](http://www.zipsystem.com) or contact our technical services department at 800-933-9220 Ext 2716 with any questions or comments.