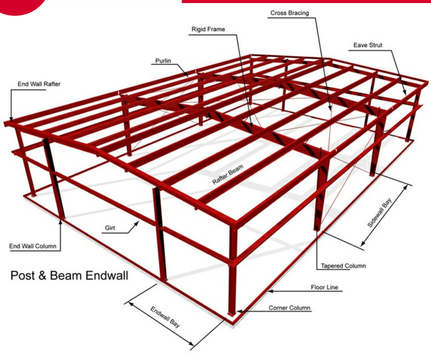
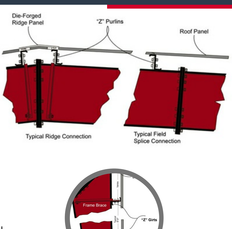
METAL BUILDING FRAMING DETAILS

1 PRIMARY FRAMING



- **Solid I-Beam Construction:** Single bead; continuous submerged arc welded by automatic welding machines (this helps ensure quality control).
- **End Wall Frames & Columns:** Are either cold formed, mill-rolled or built-up "I" sections depending on your specific steel building design requirements.

2 SECONDARY FRAMING



Purlins

Are 8", 10", or 12" to meet requirements. In General Steel buildings the purlins are top-mounted on the rafter with a varied lap of 2' to 6' for strength and cost savings

Girts

Are 8.5" or 10" to meet design requirements, cold rolled Z-section, 13 to 16 ga. ASTM A-570, 50,000 or 55,0000 p.s.i. yield material is used to provide maximum strength.

Eave Strut

Is a cold-formed C-Section that is rolled for the appropriate roof pitch to help ensure that all General Steel buildings are weather-tight at the eave.

Base Angle

Is a continuous angle, supplied for the attachment of the base of the sheeting to the concrete. It is attached to the concrete with ram-sets or equivalent anchors by others

Sheeting Angle

Is a continuous angle supplied for the attachment of the sheeting at the rake of the building for ease of installation of General Steel buildings.

3 Fasteners & Bracing

WHAT IS ASTM?

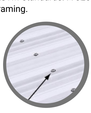
ASTM International is an international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services.

astm.org wikipedia

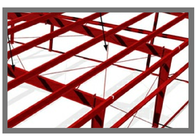
General Steel structural bolts meet requirements of ASTM standards: A-325 for primary frame connections. A-307 for secondary framing.

Self Drilling and Self Tapping Fasteners

Are pre-assembled with neoprene washers and metal caps to help ensure weather tightness of your steel building. This feature is one of many qualities that sets a steel building apart from traditional construction, steel buildings are designed not to leak which prevents potential water damage.



Bolts and Fasteners



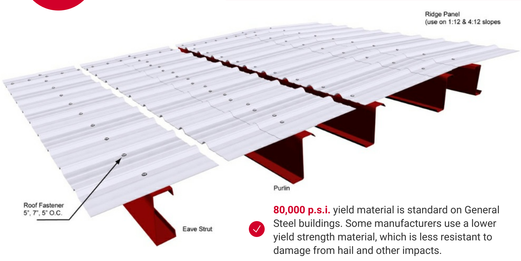
Bracing

For General Steel buildings either diagonal rod or cable bracing may be supplied for roof and walls to remove longitudinal load from the structure as needed.

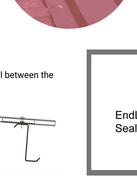
Angle Flange Bracing

Is provided for the connection of the rigid frame to the purlins and girts. This ensures that allowable compression levels are adequate for any combination of loadings.

4 SHEETING AND RIDGE CAP



- **80,000 p.s.i.** yield material is standard on General Steel buildings. Some manufacturers use a lower yield strength material, which is less resistant to damage from hail and other impacts.
- **All Coil Steel:** All Coil Steel with Galvalume coating standard (1.25oz – hot dipped) on each side helps prevent deterioration of the steel sheeting.
- **Deeper High Rib:** Deeper High-Rib with more frequent corrugations, provides extra strength for the steel building system.

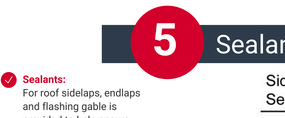


Ridge Cap Panel

Matches the slope and profile of adjoining roof panels on General Steel buildings to help ensure constant alignment and weather tightness. A long overlap is also provided to prevent water from siphoning into the building through the roof.

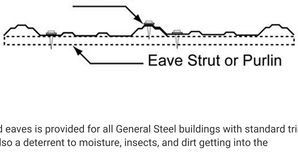
Purlin Bearing Rib

The purlin bearing rib provides a better weather tight seal between the roof sheets on your steel building.



5 Sealants, Trim, Flashing

- **Sealants:** For roof sidelaps, endlaps and flashing gable is provided to help ensure weather tightness. Nominal 3/8" x 1/8" thick pressure sensitive tape sealant for ease of installation.



- **Trimming and Flashing:** Trimming at rake (gable) corners and eaves is provided for all General Steel buildings with standard trim material for a finished look. This is also a deterrent to moisture, insects, and dirt getting into the building.

Learn More: Metal Building Framing Details