Primary Framing

1. **Solid I-Beam Construction:**
   - Single beam continuous subframes are assembled by automatic welding machines (this helps ensure quality control).
   - All Bridging & Fastener: O.D. either cold formed, threaded or built-in 1/4" diameter depending upon your specific steel building design requirements.

2. **Metal Building End Wall Frames & Columns:**
   - Are either cold formed, mill-rolled or built-up "I" sections depending on your specific steel building design requirements.

3. **Secondary Framing**
   - **Girts:** 8.5" or 10" to meet design requirements, cold rolled Z-section, 13 to 16 ga. ASTM A-570, 50,000 or 55,000 s.i. yield material is used to provide maximum strength.
   - **Purlins:** 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.
   - **Eave Strut:** 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.
   - **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.
   - **Base Angle:** Is a continuous angle, supplied for the attachment of the base of the building to the foundation. In a flashed building an equivalent angle is required as required by the local building codes or codes of the area of installation of General Steel buildings.

4. **Sheeting and Ridge Cap**
   - **80,000 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 (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.
   - **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:** In a continuous style, all wall and roof seams is provided in 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.

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**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.

www.astm.org

www.wikipedia.org