



206 Adamson Ind. Blvd., Carrollton, GA 30117 – (800) 542-5282 – Fax (678) 839-5732 – www.LitchfieldIndustries.com

## **SPECIFICATIONS** **PITTSBURGH ALL STEEL SHELTERS**

**SCOPE:** To provide components (assembly and erection not included) for a steel-framed structure, mechanically fastened at the column tops. Assembly drawings for instruction are included with product shipment

**DESIGN & SHOP DRAWING CRITERIA:** This shelter structure will be designed in accordance with local code requirements. All structural members shall be ASTM A-500 grade B steel. Welded connection plates shall be ASTM A36 hot rolled steel. Installation drawings, signed and sealed by a registered engineer can be provided along with structural calculations. After receipt of an order, the manufacturer will furnish detailed erection drawings showing design criteria.

**COLUMNS:** Shall be tubular steel (TS) welded to 5/8” base-plates. Column-to-Rafter Beam connection is established via a 1/4” steel plate cap welded at the top of the column. Each column cap shall be predrilled with hex nuts welded inside for connection to the rafter beam. Four (4) each 3/4-10x3”x16” anchor bolts, hex nuts and lock washers (per column) are provided.

**RAFTER/HIP BEAMS:** Shall be tubular steel (TS) with a pre-drilled 1/4” plate (w/welded hex nuts) at the ridge end for attachment to the compression ring. Sidewalls of the rafter/hip beams shall be pre-drilled for connecting with the purlins. The lower “eave” end of each rafter beam shall have a welded “bird-proof” cap closure.

**COMPRESSION RING(S):** Shall be a welded steel construction with 3/8” pre-drilled side plates (for mechanical connection to the rafter beams), and a 1/8” bottom cover plate to create a hidden connection. (See the “Ridge Connection”)

**PURLINS:** Shall be tubular steel (TS) with pre-drilled 1/4” plates welded to each end for mechanical connection to the rafter beams. All purlins shall have an access hole at each end, in its top surface, for applying hardware to attach it to the rafter/hip beams. The top surfaces of all purlins are in the same plane as the top of the rafter/hip beams for the roof to be attached. There shall be purlins along all eaves for structural integrity of the eave. See the “Eave Purlin”.

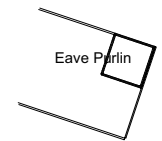
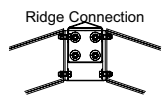
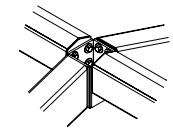
**HARDWARE:** All structural hardware shall be A325 or B7. All required fasteners are provided for construction of the shelter.

**EAVE & RAKE OVERHANG:** Eave overhang shall be 18” on shelters that are less than 40’ wide. On shelters that are 40’ wide or greater, the eave overhang shall be 24”. The rake edge overhang shall be 24” on all shelters. See “Eave/Rake Overhang”.

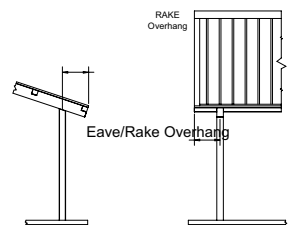
**EAVE HEIGHT:** The eave height shall be 7’-6” minimum, based on the lowest point of the rafter/hip beams.

**FINISH:** The finish on all structural steel components shall be done in steps. First, all parts are blasted to a near white condition and cleaned through a process that removes all dust. Next, 3 mils of Epoxy TGIC Powder Coating Zinc Rich Primer is applied. The final step is the application of 3 mils of our TGIC Top Powder Coat.

“**ZINC-LOC**” is a Zinc Rich Primer and Top Powder Coat corrosion resistant coating system, which is oven cured to 450 degrees.



EAVE Overhang



**ROOF:** Roof decking shall be 24ga ribbed steel panels featuring a galvalume substrate and Kynar 500 coating selected from our standard offering of 14 colors (Color Sheets Available). Roof panels shall be mechanically attached to the purlins, rafter beams and ridge beam(s) with self-drill/tapping screws. All roof trim shall be 29ga (except Panel Covers - 24ga) painted to match the roof panel color.

**NOT IN CONTRACT (NIC):** Concrete work other than and including the slab; footings; expansion joints & materials; reinforcement structures; soil condition evaluation; footing design; construction site preparation; and freight charges.

**AVAILABLE OPTIONS:**

- Cupola.
- Certified engineering for local building code loading requirements.
- Duo-Top -or- Tri-Top roof structure.
- Steel railings
- Fretwork
- Round, Stepped, or Quad steel columns.
- Custom roof pitch.
- Custom column spacing.
- Lightning Protection

**SPECIFICATIONS SUBJECT TO CHANGE FOR PRODUCT IMPROVEMENT**