

**SPARTANBURG DOWNTOWN AIRPORT HANGAR D  
METAL HANGAR ROOF BUILDING SYSTEM**

**DESCRIPTION**

**This specification describes the materials, fabrication, and the design criteria for a standard pre-engineered metal T-hangar building system of the nominal length, width, and eave height indicated on the drawings.**

**The standards, specifications, and/ or interpretations and recommendations of professionally recognized groups and agencies, such as MBMA, (Design Practices sections of the Metal Building Manufacturers Association (MBMA) 1986 “Low Rise Building Systems Manual,”) AISC, AISI, AWS, ASTW are used as the basis in establishing the design, quality criteria, standards, practices, methods, and tolerances.**

**SUBMITTALS**

**All submittals shall be submitted to the project engineer for review and comment prior to releasing the job for final steel detailing and fabrication. Each submittal shall be furnished with appropriate stamps, seals, dates, etc. clearly indicated. Four copies of each submittal shall be furnished by the Contractor, with each submittal bound and clearly labeled on the outside to indicate what that submittal includes.**

**Required submittals shall include the following:**

- A. Product Data: The contractor shall submit the manufacture’s product information, specifications, and installation instructions for building components and accessories.**

**In addition to complying with all pertinent codes and regulations, Contractor shall acquire any and all permits and/ or licenses to perform the work and shall provide coverage for this work.**

**MATERIALS**

**STANDARD MATERIALS. Standard materials furnished for metal building systems shall include primary and secondary structural framing members, bracing, metal panels for roofing and siding, flashing, fasteners, sealants, accessories, and all other miscellaneous component parts required for a complete building (except that anchor bolts and other embedded items are excluded).**

**ROOF COVERING. Roof panels shall be 26 gauge Galvalume in accordance with ASTM Specifications A-792, with an aluminum-zinc alloy coating, unpainted.**

- A. Standard roof fasteners shall be #12 self-tapping, carbon steel screws with an “extended life” hexagon head that is compatible with Galvalume or color-coated panels. A sealing washer shall be provided. Minimum length of fasteners shall be 1 ¼” for panel-to-structural and ¾” for stitch applications.**

**FLASHING AND TRIM.** Flashing and/ or trim shall be furnished at the rake, corners, and eaves; at framed openings, and as necessary to provide a weather-tight and finished appearance. Galvanized steel for flashing and trim shall conform to ASTM Specification A-525, coating class G-90, and shall be 26 gauge, 55,000 PSI yield strength. Flashing and trim shall be available in standard colors. Profiles and dimensions of all flashing/trim will be standard.

**INSTALLATION OF PANELS.** Roof panels shall be continuous from ridge to eave for buildings 70’ wide or less. Where end laps are required, they shall be a minimum of 6” and shall occur at a roof purlin. Roof panels shall sidelap one major rib. The inner panel, at the sidelaps, shall have a full major rib with a purlin bearing edge to provide bearing support of the lap. Roof panels shall overhang the building line at the sidewall to cover the doors.

**INSULATION. THE INSULATION SHALL BE MINIMUM 4” R-13 with standard facing. Facing shall meet the required IBC standards for smoke and fire development with a Class C finish rating for the facing.**

**The project will consist of replacement of approximately 17,500 square feet of roof panels and the replacement of the existing gutter and trim around the perimeter of the facility.**

**The project also includes the installation of 4 inch of vinyl coated insulation and must meet the IBC requirements for fire and smoke development. Inspections have adopted and are using the IBC 2015**

**Contractor will be responsible for the removal of the debris created by the replacement of both roof and trim.**