

# PORTLAND SYSTEMS

## STANDARD FEATURES

<b>PRIMARY FRAMING</b>	
MAIN FRAMES	<p>Portland Systems uses <b>minimum 50KSI yield strength material</b>. (MBMA guidelines require only 36KSI yield strength material). By using extra-high yield strength material, a smaller web can be utilized which means <b>increased usable space</b>.</p> <p>Main frames are <b>continuous bead submerged-arc welded</b> by automated welding machines. Automated welding of this kind minimizes the possibility for human error, resulting in uncompromised integrity.</p> <p>All <b>base plates, connection plates, flange brace plates and clips are factory welded</b> in place minimizing field labor during the erection process.</p>
END WALL FRAMES	Corner and Wind Columns are either cold formed, mill-rolled or built-up "I" sections depending on design requirements.
<b>SECONDARY FRAMING</b>	
GIRTS	<p>Girts (at sidewalls and endwalls) are <b>minimum 8" depth</b>. Members are cold-formed Z-sections, minimum 16 gauge, up to 13 gauge <b>55KSI material for superior strength</b> (MBMA guidelines require only 36KSI yield strength material).</p> <p>Girts and Purlins are typically "by-pass" with <b>laps at main frames for extra strength and ease of assembly</b>.</p>
PURLINS	Purlins (at the roof) are <b>minimum 8" depth</b> . 10" and 12" are also available depending on design requirements. Members are cold-formed Z-sections, minimum 16 gauge, <b>55KSI yield material for superior strength</b> (MBMA guidelines require only 36KSI yield strength material). Purlins are <b>lapped at main frames for up to 6'</b> for <b>added strength and labor savings</b> during the erection process. Maximum spacing is 5'-0" on center.
EAVE STRUT	Eave Struts are cold-formed unequal flange C-Sections. The top <b>flange is built to match the roof pitch</b> , to help to ensure weather tightness at the eave.
SHEETING ANGLE	A <b>continuous 14 gauge Sheeting Angle</b> is supplied for use at the gable ends (rake). The Sheeting Angle provides a place to <b>secure endwall sheets and gable trim</b> .
BASE ANGLE	A <b>continuous 14 gauge Base Angle</b> is provided for attachment of wall sheeting at the base. The Base Angle is secured to the concrete with powder actuated anchors.
PRIMER	All steel arrives at the factory "black" (unprimed). Following the fabrication process, once all welding, drilling and punching of holes is complete, a coat of <b>factory primer</b> is applied to help <b>protect members during shipment and erection</b> .
<b>BRACING</b>	
X-BRACING	<b>Diagonal rod or cable bracing</b> is supplied where required at the roof and walls to <b>absorb and redirect longitudinal loads</b> imposed by wind and seismic forces.
FLANGE BRACING	<b>Angle Flange Bracing</b> is provided for connection at the inner flange of the rigid frame and returns to the purlins and/or girts. These Flange Braces ensure <b>main frame column and rafter stability</b> under heavy loads.
ROOF AND WALL PANELS	Portland Systems uses <b>super strong 26 gauge min., 80KSI yield strength material</b> for both roof and wall panels. (MBMA guidelines require only 50KSI yield strength material). Panels produced from such superior steel offer <b>greater resistance to damage from various impacts including hail</b> . Only Galvalume® Plus steel with a standard <b>20-Year warranty</b> is used for superior resistance to the elements
COMMERCIAL PBR-PANEL (ROOF AND WALL APPLICATIONS)	PBR-Panels have a <b>deeper, 1 ¼" high rib, 12" on center for extra strength</b> . Stiffening ribs are roll-formed into every panel between the high ribs to reduce "oil canning".

ARCHITECTURAL PANEL (SEMI-CONCEALED FASTENER) (WALL APPLICATIONS)	Member fasteners are secured in the recesses (“flutes”) of this panel. Configuration includes a shallow “V” for a <b>clean, aesthetically appealing look.</b>
STANDING SEAM PANELS	Minimum 24 gauge steel is used to manufacture standing seam panels in a variety of profiles. <b>Industrial and architectural standing seam panels are available in a number of profiles.</b>
RIDGE CAP	Portland Systems includes a <b>die-formed ridge cap</b> , built to <b>match both the slope of your roof and the profile of the panel to ensure weather tightness.</b>
TRIM AND FLASHING	Portland Systems <b>standard Architectural/Commercial trim package</b> includes complete sculptured trim at the <b>rake, eave, corners, framed openings</b> (including <b>full cover trim at framed openings</b> ), <b>walk doors and base for a finished look.</b>
COLOR SELECTIONS	A <b>wide variety of colors and finishes</b> for roof, wall and trim are available. All with a <b>comprehensive 20 year warranty.</b>
<b>BOLTS AND FASTENERS</b>	
STRUCTURAL BOLTS	<b>A-325 bolts</b> are included for all primary member-to-member connections. <b>A-307 bolts</b> are included for all secondary-to-primary and secondary-to-secondary connections.
FASTENERS	<b>Self Drilling and Self-Tapping Fasteners</b> are supplied for both roof and wall panels. Fasteners come <b>pre-assembled with steel protector caps and neoprene washers.</b>
<b>WEATHER-TIGHTNESS PACKAGE</b>	
CLOSURES	<b>Closed-cell Neoprene Strips</b> , preformed to match the profile of your panel with self-adhesive backing are included with every Portland Systems building to ensure a <b>weather-tight seal against the elements.</b> Closures are provided for the roofline, eave and base.
SEALANT	<b>3/8” wide, 1/8” thick Mastic Sealant</b> for roof sidelaps, endlaps, and ridge cap is included for a cohesive, <b>weather-tight roof.</b>
SHEETING NOTCH	Designed into every building system is a <b>1-1/2” X 1-1/2” Sheeting Notch</b> at base. This Sheeting Notch provides added <b>insurance against rodents, pests and the elements.</b>
<b>DRAWINGS AND SUBMITTALS</b>	
ANCHOR BOLT SETTING PLAN	<b>Portland Systems Anchor Bolt Setting Plans</b> include <b>precise building reactions</b> for an <b>efficient foundation design, easy to read column placement</b> information and <b>clear baseplate details including anchor bolt diameter.</b>
ENGINEER CERTIFIED ERECTION DRAWINGS	<b>Sealed by a registered Professional Engineer licensed to practice where your building is to be placed</b> , erection drawings include <b>wall and roof framing diagrams, frame cross sections, sheeting and flashing details.</b> Portland Systems erection drawings <b>clearly illustrate how to properly assemble your building.</b>
LETTER OF CERTIFICATION	A <b>Letter of Certification</b> , sealed and signed by a Registered Professional Engineer, <b>specifying the building code and designs load, for which your building has been designed, will be provided.</b>
FACTORY LABELED PARTS	Building System <b>Components are clearly labeled at the factory with easy to read part numbers.</b> These same part numbers are used for your delivery parts list and your erection drawings <b>to speed and simplify inventory and erection of your Portland Systems building.</b>

Our knowledgeable team of professionals is ready to provide effective, cost-efficient, aesthetically pleasing solutions to your building needs

PORTLAND SYSTEMS, LLC  
TEL (303) 432-0778

4251 KIPLING STREET, #250

WHEAT RIDGE, COLORADO 80033  
FAX (303) 432-0759

www.PortlandSystems.net