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**A.**

<b>Accessory:</b>	An extra building component added to a building such as a door, window, vent, etc.
<b>Aluminized:</b>	Aluminum coated steel.
<b>Anchor Bolts:</b>	Bolts set in concrete, used to anchor structural members to concrete foundation.
<b>Approval Drawing:</b>	A product drawing sent to the customer to verify design and dimensions and to verify the sales contract description of materials and services the manufacturer has agreed to furnish.
<b>Astragal:</b>	A closure between the two leaves of a double swing or a double slide door used to close the joint.
<b>Auxiliary Loads:</b>	All specified dynamic live loads other than the basic design loads which the building must safely withstand - such as cranes, material handling systems and impact loads.

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**B.**

<b>Base Angle:</b>	A continuous angle secured to foundation to support wall panels.
<b>Base Plate:</b>	A shop-welded, pre-punched plate on that portion of a beam or column which rests on the supporting surface.
<b>Base Trim:</b>	Together with the base angle forms a tight seal keeping out water, dirt and critters. Also make erection easier, faster and makes the building more attractive.
<b>Batten:</b>	A broad, formed strip of metal put over a roof seam for decorative purposes and to conceal fasteners.
<b>Bay:</b>	The space between frame center lines or primary supporting members in the longitudinal direction of the building.
<b>Bay-Interior:</b>	The distance from centerline to centerline of two interior columns.
<b>Bead Mastic:</b>	Sealant furnished in a continuous roll, normally used for sealing roof panel laps.
<b>Beam:</b>	A structural member which is ordinarily subject to bending and is usually a horizontal member carrying vertical loads.
<b>Bearing Frame Endwall:</b>	Frame composed of corner columns, end columns, flush girts, and channel rafter beams, which is designed to carry one-half bay weight. Also referred to as "cold formed".
<b>Bird Screen:</b>	Wire mesh used to prevent birds from entering the building through ventilators and louvers.
<b>Blind Rivet:</b>	A small headed pin with expandable shank for joining light gage metal. Typically used to attach flashing, gutter, etc. also referred to as Pop Rivet.
<b>Brace Rods:</b>	Rods used primarily on roof and sidewalls of RF (Rigid Frame) or BC (Beam & Column) buildings for plumbing the structures and to transfer wind force to foundation.
<b>Bracket:</b>	A structural support projecting from a wall or column on which another structural member is fastened. Example: Crane runway brackets.
<b>Bridge Crane:</b>	A material handling system within a building which moves longitudinally on a runway constructed of rails and beams.
<b>Bridging:</b>	Structural member used to give weak axis stability to joist or purlins.
<b>Building Codes:</b>	Published regulations and ordinances established by a recognized agency describing design loads, procedures and construction details for structures. Building codes control design, construction and quality of materials, use and occupancy, location and maintenance of buildings and structures within the city, county, state, etc. for which the code was adopted.
<b>Built-Up Member or Section:</b>	A structural member, usually an "I" section, made from individual web, flange and base plates by welding them together.
<b>Butt Plate (or Splice Plate):</b>	The prepunched end plate of a structural member which usually rests against a matching plate of another member in forming a bolted connection.
<b>By-Pass Girts:</b>	Girts which overlap outside column flange to form a continuous member.

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**C.**

<b>"C" Section:</b>	A member cold-formed from steel coil in the shape of a "C", used primarily in bearing frame endwalls and framed openings.
<b>Canopy:</b>	Any overhanging or projecting structure with extreme end usually unsupported.
<b>Cantilever:</b>	A projecting beam that is supported and restrained at one end only.

<b>Cap Plate:</b>	A plate located at the top of a column or end of a beam for capping the exposed end of the member. Used for pinned conditions.
<b>Caulk:</b>	To seal and make weather tight joints, seams or voids by filling with waterproofing compound or material.
<b>Chalking:</b>	A process by which finishes develop a loose powdery surface resulting from decomposition of the binder, principally through the action of ultraviolet rays.
<b>Channel:</b>	An open-ended "C" shape with no return lips, which may be either cold-formed or hot-rolled.
<b>Clear Span:</b>	Building without internal columns.
<b>Clip:</b>	A small fastening device, usually of metal, designed to hold a panel or component in place.
<b>Clip-Angle:</b>	An angle used for fastening various members together.
<b>Closure Strip:</b>	Sealant material formed to match either inside or outside wall or roof panel configuration, used at base, eave, rake or accessory locations to provide closure against the elements.
<b>Cold-Formed:</b>	Various shapes such as angles, channels, girts and purlins formed from steel at room temperature.
<b>Column:</b>	A vertical structural member.
<b>Continuous Girt or Purlin:</b>	Girt or purlin that overlaps at columns or frames to form a continuous member.
<b>Continuous Ridge Vent:</b>	10' long roof ventilator located along roof peak line.
<b>Coping:</b>	The top course or cover of a wall, usually made sloping to carry off the water.
<b>Corner Column:</b>	Corner column (usually a "C" shape) located at the corner of a bearing frame endwall.
<b>Corner Trim:</b>	Preformed color sheet metal trim used to close the junction of side and endwall sheets.
<b>Corrosion:</b>	The electrochemical degradation of metals due to reaction with their environment.
<b>Crane Rail:</b>	Track upon which a top running crane moves (usually hot-rolled A.S.C.E. rails).
<b>Crane Runway Beam:</b>	Support for bridge crane.
<b>Curb:</b>	Raised flashing around a roof accessory to provide water rightness at the roof opening.
<b>Curtain Wall:</b>	Perimeter wall panels which carry only their own weight.
<b>Certification:</b>	A written declaration that a particular product or service complies with stated criteria. In specific use, it is necessary to include the scope and limitations of the certifications; usually it is provided by the manufacturer, producer or vendor.

## D.

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<b>Damper:</b>	A baffle used to open or close the throat of ventilators.
<b>Dead Load:</b>	The weight of the structure itself plus any permanent stationary loads.
<b>Deck:</b>	The structural surface to which roofing or waterproofing system (including insulation) is applied.
<b>Deflection:</b>	The transverse displacement of a structural member in the direction of load and measured from its no-load position.
<b>Diaphragm Action:</b>	The action of wall panels on flush-framed walls to act as one unit to resist longitudinal wind force.
<b>Downspout:</b>	A hollow rectangular, square or round tubular section used to carry water from a gutter to the ground.
<b>Drawing:</b>	an architectural, structural, mechanical or electrical plan, elevation or section indicating in isometric or in axonometric perspective, the detailed location, dimension, quantity or extent of material, product or member to be furnished.
<b>Driftpin:</b>	A tapered pin used to align holes in steel members to be connected. Also called "Spud Wrench".
<b>Drip Edge:</b>	A metal strip placed along the edge of a roof to divert water.

## E.

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<b>Eave:</b>	The line along the top of the sidewall, formed by the intersection of roof and wall panels.
<b>Eave Canopy:</b>	A roof extension beyond the sidewall of building. May also be cantilevered below the eave.
<b>Eave Height:</b>	The vertical dimension from finished floor to top of eave strut.

<b>Eave Strut:</b>	A cold-formed structural member at the eave to support roof and wall panels; also transmits forces due to wind on endwall from roof brace rods to wall brace rods.
<b>Eave Strut Gusset:</b>	A small gusset shop-welded to main frame on RF and BC buildings to support eave struts and afford alignment with by-framed girts.
<b>Eave Trim:</b>	Trim used to close off top of sidewall panels in lieu of eave gutter.
<b>Embossed:</b>	Depressing the metal using a patterned roll to transfer pattern to the metal.
<b>Equipment Screen:</b>	Metal panels attached horizontally to a roof to conceal air conditioning units, heating units, exhaust fans, etc.
<b>Erection:</b>	The on-site assembly of pre-engineered components to form complete structure.
<b>Expansion Joint:</b>	A break of space in construction to allow for thermal expansion and contraction.
<b>Exposure:</b>	That portion of the roofing exposed to the weather after installation.

## F.

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<b>Fabricate:</b>	To manufacture, form, construct or assemble a product or component.
<b>Fading:</b>	A color change that involves a lightening or weakening of the color which may involve a change in hue.
<b>Fascia, Facia:</b>	Decorative trim or panel projecting from the face of a wall.
<b>Fastener:</b>	Clips or screws used to attach panels to the structure and to each other.
<b>Finish:</b>	(1) The final treatment or coating of a surface or (2) the fine or decorative work required to make a building or its parts complete.
<b>Fixed base:</b>	A vertical structural member, bolted to and positioned at 90 degree to a sidewall column to provide additional base fastening and to prevent column rotation.
<b>Flange:</b>	The projecting edge of a structural member.
<b>Flange Brace:</b>	A brace from flange of column or rafter to girt or purlin to provide lateral support and stability.
<b>Flashing:</b>	The system used to seal membrane edgings at walls, expansion joints, drains, gravel stops and other places where the membrane, cap or counter flashing shields the upper edges of the base flashing.
<b>Fluoropolymer:</b>	A metal finish also known as PVF2. Trade names: Kynar 500? or Hylar 5000?.
<b>Footing:</b>	A pad or mat, usually concrete, located under a column, wall, or other structural member, used to distribute loads from the member into supporting soil.
<b>Foundation:</b>	The substructure on which a building rests.
<b>Frame:</b>	Primary structural members, made up of columns and rafters, which support the secondary framing.
<b>Framed Opening:</b>	Opening in a wall that is framed with light gage members.

## G.

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<b>G-90:</b>	A typical coating weight for galvanized steel sheet. Equates to .090 oz. of zinc per square foot, total both sides.
<b>Gable:</b>	A triangular portion of the endwall of a building, directly under the sloping roof and above the eave height line.
<b>Galvalume?:</b>	The patented trade name by Bethlehem Steel Company for the aluminum-zinc alloy applied to sheet steel for corrosion resistance.
<b>Galvanized Steel:</b>	Steel coated with zinc for corrosion resistance.
<b>Gauge/Gage:</b>	(1) In metal products, a number designating a specific thickness of metal sheet, or diameter of wire, cable or fastener shank tabulated in a standardized series, each of which represents a decimal fraction of an inch (or millimeter). (2) Distance in inches (or millimeters) between adjacent lines of holes or fasteners.
<b>Girder:</b>	A main horizontal or near horizontal structural member that supports vertical loads.
<b>Girt:</b>	A secondary horizontal structural member attached to sidewall or endwall columns to which wall covering is attached and supported horizontally; usually a cold-formed "Z" shape.
<b>Glaze or Glazing:</b>	The process of installing glass in window or door openings.
<b>Gloss:</b>	Subjective term describing the relative amount and nature of mirror-like reflection from a surface.
<b>Grout:</b>	A mixture of cement, sand and water used to fill cracks and cavities. Often used under base plates to obtain uniform bearing surfaces.

<b>Guideline:</b>	A written statement or outline of a policy, practice or conduct. Guidelines may propose options to enable a user to satisfy provisions of a code, standard, regulation or recommendation.
<b>Gusset Plate:</b>	A steel plate used to connect two or more structural members in the same plane.
<b>Gutter:</b>	The trough that channels water from the eaves to the downspouts.

## H.

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<b>Hair-Pin:</b>	Reinforcing bar used to help transfer anchor bolt shear (due to column thrust) to concrete floor mass. The "U" shaped hair-pin wraps around the anchor bolts inside the slab.
<b>Haunch:</b>	Also Knee. The deepened portion of a column or rafter, designed to accommodate the high stress where column and rafter intersect and connect.
<b>Header:</b>	A horizontal member over a wall opening.
<b>Header Trim:</b>	Trim used above a wall opening.
<b>High Strength Bolts:</b>	Any bolt made from steel having a tensile strength in excess of 100,000 pounds per square inch (p.s.i.). Some examples are ASTM A-325, A-354, A-449.
<b>High Tensile Steel:</b>	Structural steel having a yield stress in excess of 36,000 pounds per square inch.
<b>Hip Roof:</b>	A roof which rises by incline planes from all four sides.
<b>Hot-rolled Shapes:</b>	Steel sections (angles, channels, I-beams, etc.) which are formed by rolling mills while the steel is in a semi-molten state.

## I.

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<b>Impact:</b>	Shock loads caused by dynamic application.
<b>Inner Liner:</b>	Liner paneling on the inside of walls.
<b>Inside Corner Trim:</b>	Trim which flashes inside corners.
<b>Insulation:</b>	Any material used in building construction to reduce heat transfer.
<b>Intermediate Bay:</b>	A distance between two main frames within a building, other than end frames.

## J.

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<b>Jack Beam:</b>	A beam used to support another beam or rafter to eliminate a column support.
<b>Jack Truss:</b>	Truss used to support another beam, truss or rafter to eliminate a column support.
<b>Jamb:</b>	A side column of a doorway or opening.
<b>Jib Crane:</b>	A cantilevered boom or horizontal beam with hoist and trolley. This lifting machine may pick up loads in all or part of a circle around the column to which it is attached.
<b>Joist:</b>	Beam for supporting the floor or roof.

## K.

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<b>KIP:</b>	Kilo-pound (1000#)
<b>Knee (or Haunch):</b>	The connecting area of a column and rafter of a structural frame.

## L.

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<b>Lean-To:</b>	A structure having only one slope or pitch and depending on another structure for partial support.
<b>Liner Panel:</b>	Sheeting on inside of building; may be either full or partial height.
<b>Lip:</b>	A flange stiffener.
<b>Live Load:</b>	Any moving or variable load which the structure must support; roof live load is usually snow load.
<b>Louver:</b>	An opening provided with fixed or adjustable blades to allow air flow.

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**M.**

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<b>Mansard:</b>	A tilted fascia system mounted to the roof, outside the steel line, and above the roof line to form a decorative fascia appearance and hide the roof line.
<b>Main or Primary Framing:</b>	Steel frames which support secondary framing members such as girts, purlins or eave struts.
<b>Masking:</b>	The plastic covering on metal panels used to protect pieces during transit. Masking must be removed immediately after installation.
<b>Mastic:</b>	Caulking or sealant furnished in rolls, normally used in sealing roof panel laps.
<b>Moment:</b>	Force times distance (torque).
<b>Moment Connection:</b>	A joint capable of transmitting moment to another member of the system.
<b>Mullions:</b>	Vertical member connecting two windows located side by side.
<b>MS-Multi-Span:</b>	More than one building tied together; multiple gable buildings.

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**N.**

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<b>Nibbler:</b>	An electric hand tool used to cut steel roof or wall sheet openings.
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**O.**

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<b>Oilcanning:</b>	A wavy appearance in a metal panel that is aggravated by expansion of the metal.
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**P.**

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<b>Panel:</b>	In a building, (1) a portion of a surface flush with or recessed from, or sunk below the surrounding area, sometimes set off by distinct molding or other decorative measure. (2) a usually flat and rectangular piece of construction material made to form part of a surface.
<b>Panel Clip:</b>	Independent clip used to attach roof panels to substructure.
<b>Parapet:</b>	That portion of the wall which extends vertically above the roof line to form a fascia-type appearance to hide roof slope.
<b>Partition:</b>	An interior dividing wall.
<b>Peak Panel:</b>	Rib panel located along building ridge; conforms to roof slope and configuration.
<b>Pier:</b>	A concrete structure designed to transfer vertical load from the base of a column to a footing.
<b>Pilaster:</b>	A masonry column built into a wall and projecting.
<b>Pitch:</b>	An inclination or slope measured in degrees, or percent, or by the ratio of rise and run.
<b>Pop Rivet:</b>	A small headed pin with expandable shank for joining light gage metal. Typically used for flashing trim, etc.
<b>Primer Paint:</b>	Initial coat of a paint applied at factory to structural framing for protection against elements during erection and shipping only.
<b>Purlin:</b>	A secondary, cold formed horizontal structural member located in the roof to support sheeting, that is itself supported by the primary structure framing.
<b>Purlin Extension Canopy:</b>	Cantilevered continuation of roof at rake line.

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**R.**

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<b>Rafter:</b>	A fabricated primary structural member with parallel flanges that extends from haunch to apex. Any beam used in a primary frame to support purlins.
<b>Rake:</b>	The intersection of roof and endwall.
<b>Rake Angle:</b>	Angle attached to purlins at rake for attachment of end-wall sheets.

<b>Reactions:</b>	Forces required to resist loads from a structure.
<b>Reinforcing Steel:</b>	Steel rods placed in concrete to take tension, compression and shear stresses.
<b>Rib:</b>	A raised line in the flat portion of a metal panel that gives added strength and minimizes the appearance of oilcanning.
<b>Rib Panel:</b>	Standard panel used on roof, liner and soffits.
<b>Ridge:</b>	The highest point on the roof of the building which describes a horizontal line running the length of the building.
<b>(RF) Rigid Frame:</b>	A clearspan structure, characterized by tapered columns, tapered haunches and rafter beams.
<b>Rollform:</b>	Forming metal shapes by applying pressure through rollers.
<b>Roofing system:</b>	Assembly or interacting components designed to weatherproof, and sometimes to insulate, the roof surface of a building.
<b>Roof Slope or Pitch:</b>	Slope of a roof plane expressed as a ratio of vertical rise per unit of horizontal run.

## S.

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<b>Sag Rod or Sag Angle:</b>	Tie rods or angles to support bottom purlin flanges against compression buckling due to special wind force.
<b>Sag Strap:</b>	A metal strap used to align purlins during erection.
<b>Sealant:</b>	Any material which is used to close up cracks or joints to protect against leaks.
<b>Secondary Framing:</b>	Framing consisting of minor load bearing members of a structure, such as purlins, girts, eave struts, etc.
<b>Seismic Forces:</b>	Forces due to earth movement or earthquake.
<b>Self-Tapping Screw:</b>	A fastener which taps it's own threads in a predrilled hole. It is for attaching panels to purlins and girts and for connecting trim and flashing.
<b>Service Door:</b>	Swinging hinged door.
<b>Sheet:</b>	A thin, flat rolled metal product having mill or cut edges.
<b>Shims:</b>	A piece of steel used to level or square canopy beams or base plates.
<b>Shop Drawing:</b>	A drawing prepared by the fabricator based on a working drawing and used in a shop or on a site for assembly.
<b>Shop Weld:</b>	Weld that is made in plants.
<b>Skylight:</b>	Translucent panel formed like rib panel used on roof or walls in place of certain rib panel sheets to supply natural light to building.
<b>Slide Door:</b>	A single or double leaf door which opens horizontally by means of overhead trolleys.
<b>Slope:</b>	The tangent of the angle between the roof surface and the horizontal plane, expressed as a percentage, or in inches of rise per foot of horizontal distance.
<b>Soffit:</b>	The underpart of an overhanging eave, mansard, cornice, etc.
<b>Specification:</b>	A precise statement of a set of requirements, to be satisfied by a material, product, system or service. It is desirable that the requirements, together with their limits, should be expressed numerically in appropriate units.
<b>Standing Seam:</b>	Seam type that consists of an upturned rib, that may also be structural, with a watertight seam. It is made by turning up the edges of two adjacent metal panels and then folding them over in one of a variety of ways.
<b>Step Flashing:</b>	Flashing method used where a vertical surface meets a sloping roof plane.
<b>Stitch Screw:</b>	A fastener used to connect panels at the side lap.
<b>Structural Steel Members:</b>	Load carrying members, may be hot rolled sections, cold formed shapes, or built-up shapes.
<b>Substrate:</b>	The surface upon which the roofing or waterproofing membrane is placed (structural deck or insulation).

## T.

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<b>Tolerance:</b>	The allowable deviation from a value or standard; the total range of variation permitted in maintaining a specified dimension in machining, fabricating or construction of a member or assembly.
<b>Trim:</b>	The light gage metal used in the finish of a building, especially around openings and at intersections of

surfaces, often referred to as flashing.

**Turn of Nut Method:**

A method of tightening structural bolts in a connection. A rotation of the nut through 1/2 to 1 turn from "snug" position will produce at least the desired minimum tension on the bolt. ("Snug" is defined as the point at which the material between the bolt head and nut is rigid. If power tools are used, "snug" would be the point at which the wrench began to impact.)"

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**U.**

**UH Crane:**

A multi-rail, underhung, material handling system, manually or electrically operated.

**Uniform Load:**

Loads that cover all or part of a beam and throughout the portion covered, the amount of load per unit of length is the same.

**Uplift:**

Wind load on a building which causes a load in the upward direction.

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**V.**

**Valley:**

The internal angle formed by the intersection of two sloping roof planes.

**Valley Gutter:**

A channel used to carry off water from the "V" of roofs of multi-gabled buildings.

**Vapor Barrier:**

Material used to retard the flow of vapor or moisture into walls and thus prevent condensation within them.

**Vented:**

Perforated panels used as soffit to allow air circulation for prevention of moisture buildup.

**Ventilation:**

The process of supplying outside fresh air to, or removing air from an enclosure.

**Ventilator:**

An accessory usually used on the roof that allows air to pass through.

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**W.**

**Wall Covering:**

The exterior wall skin consisting of panels or sheets and their attachments, trim fascia and weather sealants.

**Wash Coat:**

A coating applied to the back or unexposed side of the strip. Its purpose is to protect the top coat during transit and prevent corrosion of the reverse side. It also provides lubrication for roll forming. It is not closely controlled for color, gloss or applied dry film thickness. Not to be confused with back coat.

**Web:**

That portion of a structural member between the flanges.

**Weep Holes:**

Openings in flashings, etc., to permit drainage and reduce pressures. (Usually field drilled holes)

**Wind Load:**

A loading representing the pressure exerted on a structure by a given wind velocity. A load caused by the wind blowing from any horizontal direction.

**Work Point:**

An intersection of planes from which dimensions are located.

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**X.**

**X-Bracing:**

X-Bracing is used in buildings to provide additional bracing and strength. This can be done with steel cables, rods or even angle in severe cases.

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**Y.**

**Yield Stress:**

The stress at which the strain ceases to be directly proportional to the stress. The stress by which steel is identified such as A-36 indicated 36,000 psi yield.

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**Z.**

**"Z" Section:**

A member of cold-formed from steel sheet in the shape of a block "Z".