

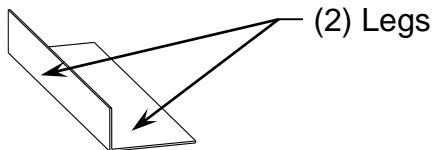


## Appendix D – Glossary

Last updated 9/30/2014

### Angle

A piece of material that, in profile view, is L-shaped and is made of galvanized steel. Angles consist of two legs that can be the same or differing size.



### Apex

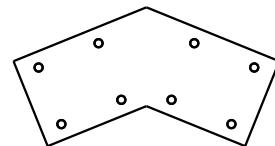
The peak, or highest point, of the building. The apex height is measured from the inside of the intersection of the roof sheets.

### Apex Brace

One or two CEE sections that are installed just under the apex of interior portal frames, connected to the rafter. Note that apex braces will need to be coped before installing. The exact size of apex brace can be found on the building order.

### Apex Bracket

A plate used to connect both rafters to form the apex of the building. It is roughly  $\frac{1}{8}$ " thick and is made of galvanized steel. The size of the plate varies depending on the size of the column. A typical apex bracket is illustrated to the right.



### Base Angle

A piece of framing material that is installed on the edge of the slab. Typically this piece is a 4" x 2" angle, and comes in 20' stock lengths.

### Base Trim

A piece of trim that is installed at the bottom of the wall sheeting.

### Bay

A term used to describe the space between two portal frames.

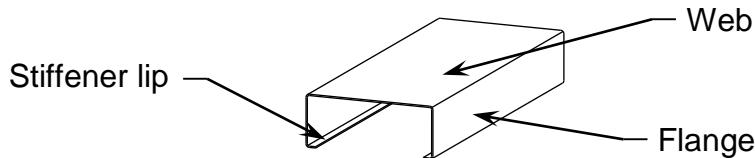
### Bolt Assembly

A connection that consists of a bolt, two washers and a nut.



### CEE Section

A framing component that is shaped like a “C”. Most framing components are made of CEE sections of various shapes and sizes. A CEE section consists of a web, two flanges and two stiffener lips, as illustrated below.



### Channel Material

Framing material that is similar to a CEE section, except without the stiffener lip. Channel material is made of galvanized steel.

### Closure Strips

Foam strips that fit on or under roof sheets to seal building. Closure strips will either be “universal” or “formed.” Universal closure strips come in lengths of 50’ and will fit any sheeting type while formed strips will fit a single sheet and be sheeting specific. Note that there are formed closure strips for both the inside and outside of the sheeting. Inside closure strips fit behind/under roof and wall sheeting, while outside closure strips fit on top of roof and wall sheeting. Formed closure strips are illustrated to the right.



Formed Inside Closure Strip



Formed Outside Closure Strip

### Column

One or two CEE sections which are installed vertically and provide the basis for the walls of the building.

### Column Anchor Bracket

An angle that is used to connect the columns to the concrete slab. Column anchor brackets have various length and leg size, depending on the size of the column.

### Column Stiffener

Channel material that is installed over a column.

### Cope

To cut or remove a portion of framing material so as to make the material easy to install.

### Corner Angle

An angle, typically 4” x 2,” that is installed on the corner of the building at the end of sidewall girts to ease the installation of endwall sheets.



### **Corner Column**

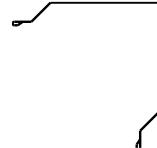
A column that is installed at the corner of the main building or leanto. This consists of a single CEE section. Note that if a leanto is installed, the main building will have a corner column even though this column will not be at the corner of the slab. There will also be a leanto corner column.

### **Corner Column Stiffener**

A CEE section that is attached to a corner column to add stiffness to the column.

### **Corner Trim**

A piece of trim that is installed on the corner of the building, to cover the gap between sidewall and endwall sheets. Each leg of corner trim is roughly 5" long. The profile of corner trim is illustrated to the right.



### **Diagonally Square**

A rectangular area is said to be diagonally square if the lengths of each diagonal leg are exactly the same. If an area is diagonally square, it is guaranteed that all corners are 90 degree angles.

### **Door/Window Jamb**

A CEE section that composes the vertical framing around a door or window.

### **Door/Window Header**

A CEE section that composes the framing above a door or window. This piece fits between the jambs.

### **Double Column/Rafter**

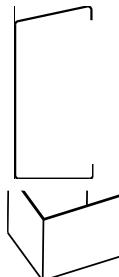
A column or rafter that consists of two CEE sections back to back.

### **Eave Height**

The nominal height of your building, measured from the top of the concrete slab to the intersection of the inside of the roof sheets and wall sheets.

### **Eave Purlin**

A CEE section or Eave Strut that runs the length of the sidewall at the top of the sidewall columns.



### **Eave Purlin Bracket**

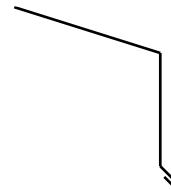
A bracket that connects to the top of sidewall columns and is used to install the eave purlin. An eave purlin bracket attached to a single column will be 4" wide, while an eave purlin bracket attached to a double column will be 8" wide. A typical eave purlin bracket is illustrated to the right.

**Eave Strut**

This item is shaped like a CEE Section. However, it will have one or two sloped flanges, often to match the roof pitch of a building.

**Eave Trim**

Trim that runs along the top of sidewall sheets, the entire length of the sidewall. Each leg of eave trim is roughly 3" long. The profile of eave trim is illustrated to the right.

**Endwall Column**

A column that is installed on the endwall and connects perpendicular to rafters either directly or using an endwall column bracket. This consists of one or two CEE sections.

**Endwall Column Bracket**

An angle that is used to attach an endwall column to a rafter.

**Flange**

An element of CEE, LGSI, and ZEE sections.

**Flybracing**

A section of strapping or a two-legged member that braces the endwall columns to the girts on the endwall.

**Framing Tek Screw**

A self-drilling screw used to install framing components. These screws are the same color as galvanized steel.

**Framing**

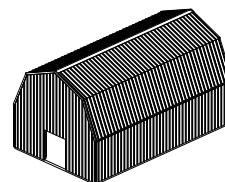
The components of the building that make up the structural frame of the building. Framing members are made of galvanized steel.

**Galvanized Steel**

Steel that is coated with rust-resistant zinc and has a shiny silver appearance. All of the framing material is composed of galvanized steel.

**Gambrel**

A type of roof style that has two different roof pitches. A typical building with a gambrel roof is illustrated to the right. A single-portal frame for a gambrel roof will consist of four rafters instead of the normal two.

**GB4 Clip**

A 2" x 2" x 4" angle that is used to install endwall girts and door framing.

**GB6 Clip**

A 2" x 2" x 6" angle that is used to install endwall girts and door framing.

**Girt**

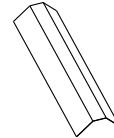
An LGSI or ZEE section that is installed from one column to an adjacent column horizontally to help create the wall of the building.

**Girt Flange Bracing**

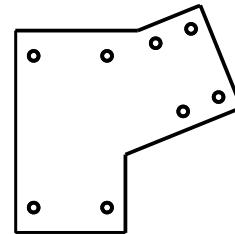
Strapping that runs vertically on the inside of wall girts to prevent the shifting of the wall girts.

**Gutter Hanger**

A piece of trim used to secure gutters. A typical gutter hanger is 12" long and is illustrated to the right.

**Haunch Bracket**

A plate used to connect columns and rafters. This is roughly  $\frac{1}{8}$ " thick and is made of galvanized steel. Exact size and shape of the plate varies depending on the size of the column and pitch of the roof. Note that for gambrel-style roofs, due to the steep roof slope, an apex bracket is used as a haunch bracket. A typical haunch bracket is illustrated to the right.

**Header Girt**

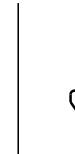
The girt to which a door jamb connects. This consists of an LGSI or ZEE section.

**Head/Jamb Cover**

Trim that wraps around door jambs of drive doors to cover the galvanized steel jambs. The profile of head/jamb cover is illustrated to the right. The width of the head/jamb cover will be the same width as the door or window jambs.

**Head/Jamb Trim**

Trim that is shaped like a "J," installed on the front of door and window jambs and headers to give the transition from sheeting to opening a clean look. Head/jamb trim is typically 3" tall and 1-1/2" wide. The profile of head/jamb trim is illustrated to the right.

**Interior Bay**

A bay which is between two other bays.

**Knee Brace**

One or two CEE sections that are installed between the column and the rafter. Note that knee braces will need to be coped before installing.

### **Leanto**

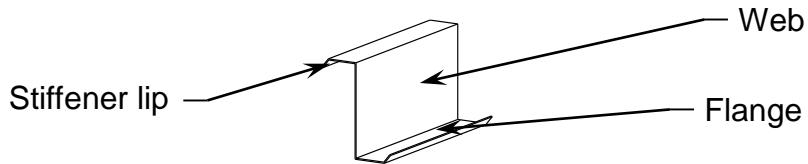
A structure connected to the main building that has its own framing, which connects to the framing of the main building. Note that leantos can be enclosed like the main building or they can be open, making it more of an awning than a building. Also, the space between the main building and leanto can be open, or have wall sheeting as a barrier.

### **Level**

The same height at all places; parallel to the ground.

### **LGSI Section**

A framing component that is shaped like a “Z.” An LGSI section consists of a web, two flanges and two stiffener lips, as illustrated below. Note that this component is very similar to a ZEE section, however, for LGSI sections, one flange will be roughly  $\frac{1}{4}$ ” wider than the other. This will allow the material to easily interlock, for ease of installation of girts and purlins. Note that there may be a small triangle-shaped hole in the web of the LGSI, which points toward the wider flange.

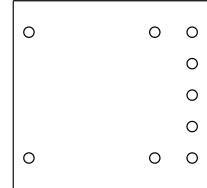


### **Mezzanine**

A second floor that can span the length of the building or only specific bays.

### **Mezzanine Bracket**

A plate used to connect columns and mezzanine girders. This is roughly  $\frac{1}{8}$ ” thick and is made of galvanized steel. Exact size and shape of the plate varies depending on the size of the column. A typical mezzanine bracket is illustrated to the right.



### **Mezzanine Girder**

One or two CEE sections installed between sidewall columns which provide the main support for the mezzanine.

### **Mezzanine Joist**

LGSI or ZEE sections installed on the mezzanine girders that make up the floor of the mezzanine.

### **Mezzanine Post**

Two CEE sections connected together into posts that are installed under the mezzanine girders to provide further support for the mezzanine.



### **Mushroom Head Spikes**

Spikes used to attach base angle to the concrete slab.

### **Nibbler**

A tool used for trimming wall and roof sheets that can be found at your local hardware store.

### **Open Bay**

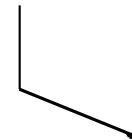
A bay which has no girts or siding installed.

### **Pan Head Self-Drilling Screw**

A self-drilling screw which has a non-obtrusive head once installed. These screws are the same color as galvanized steel.

### **Pitch Break Trim**

Trim that connects to the pelmet sheeting and leanto roof sheeting to cover the gap between these sheets. Each leg of pitch break trim is roughly 3-5" long. The profile of pitch break trim is illustrated to the right.



### **Pelmet**

The area on the sidewall of a main building that is above the leanto while still being below the eave of the building. This area will only exist on buildings that have a leanto that has a drop from the eave of the main building to the roof of the leanto.

### **Plumb**

Truly vertical.

### **Portal Frame**

A section of framing consisting of columns, rafters and any knee and apex braces.

### **Powers “Wedge-Bolt” Anchor**

An anchor bolt which is installed into a pre-drilled hole in the concrete slab.

### **Powers “Wedge-Bit”**

A special drill bit that drills correct hole sizes for the insertion of Powers “wedge-bolt” anchors in concrete.

### **Purlin**

An LGSI or ZEE section that is installed from one rafter to an adjacent rafter horizontally to help create the roof of the building.

### **Purlin Flange Bracing**

Strapping that runs on the inside of roof purlins to prevent excess movement.

**Rafter**

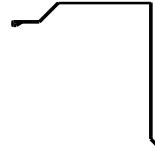
One or two CEE sections which are installed to provide the basis for the roof of the building. A rafter will connect to the column on its lower end and an opposite rafter on its upper end, which creates the apex of the building.

**Rake Angle**

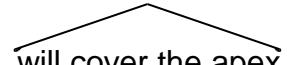
An angle, typically 4" x 2," that is installed on the endwall edges of the roof purlins, to ease the installation of endwall sheets.

**Rake Trim**

Trim that runs along the top of endwall sheets the entire length of the endwall. The profile of typical rake trim is illustrated to the right. Note that some buildings will have sculptured rake trim, which will have a slightly different profile.

**Ridge Cap**

Trim that is installed at the apex of the building on top of the roof sheets. The profile of typical ridge cap is illustrated to the right. Note that the exact shape of the ridge cap may vary, but in all cases, will cover the apex of the building.

**Roof Sheet**

Sheeting material that makes up the roof of the building.

**Roof Sheet Screw**

A self-drilling screw which is made to drill through the high ribs of the roof sheets and into the roof purlins. It is painted on its head to match the roof sheet color.

**Sawzall**

A tool used for cutting wall or roof sheets that can be found at your local hardware store.

**Sheeting**

Components that make up the walls or roof of the building. Sheeting will be painted on one side.

**Sidewall Column**

A column that is installed on the sidewall, is part of a portal frame and connects to rafters with haunch bracket(s). This consists of one or two CEE sections.

**Single Column/Rafter**

A column or rafter that consists of a single CEE section.

**Skylight**

A roof sheet that is made of fiberglass or polycarbonate.



### **Stiffener Lip**

An element of CEE, LGSI, and ZEE sections.

### **Strapping**

Material that comes 1-½" to 2" wide and in 100' long coils. This is usually less than  $\frac{1}{8}$ " thick and is made of galvanized steel. Strapping is used in x-bracing and girt and purlin flange bracing.

### **Trim**

Material that covers the edges of the building, effectively finishing it out. This is made of a similar material as the sheeting. Typically all pieces have the same color though this can vary by building.

### **Trim Screw**

A short self-drilling screw that is made to attach trim pieces to sheeting material. Note that these screws will not be able to drill through framing components. Trim screws are painted on the head to match the color of the trim pieces.

### **Two-Legged member**

A framing component with only two legs. An example of this would be a 2" x 2" angle bracket.

### **Wall Sheet**

Sheeting material that makes up the wall of the building.

### **Wall Sheet Screw**

A self-drilling screw which is made to drill through the trough of the wall sheets and into the wall girts. It is painted on its head to match the wall sheet color.

### **Web**

An element of CEE, LGSI, and ZEE sections.

### **Window Sill**

A CEE section that composes the framing below a window. This piece fits between the jambs.

### **X-Bracing**

Strapping that connects rafters and columns to provide stiffness to bays.



### ZEE Section

A framing component that is shaped like a “Z.” A ZEE section consists of a web, two flanges and two stiffener lips, as illustrated below. Note that for LGSI sections, which are very similar to ZEE sections, one flange will be wider than the other, to allow the material to easily interlock.

