



ULTRA-SPAN[®] TRUSS FABRICATION GUIDE

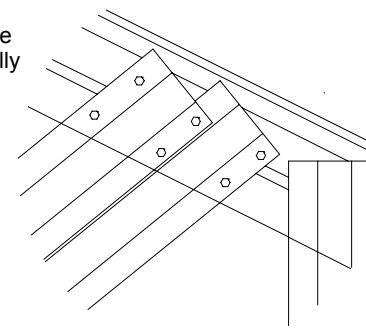
FASTENERS

Screw counts are provided for connector to chord, and for web to connector or chord. For connector to chord connections, the screw must pass through the connector into the chord. For web connections the screw must pass through the web into the connector or chord. If the screw passes through the web, connector, and chord, the screw may be counted for both the web to chord and connector to chord connections.

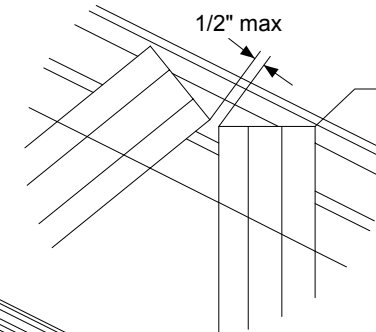
Screws shall be installed a minimum of 1/2 inch center to center. End distance shall be limited to 1/2 inch. Screws can be positioned adjacent to formed areas without risk of tear-out.

Stripped-out screws must be replaced by a new screw installed at a new location.

For DOUBLE WEB, 3.0(D), overlap one bend. Distribute screws into each area equally

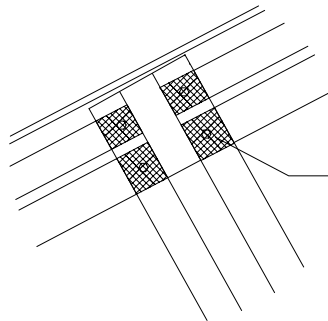


Webs should be assembled as shown. The spacing between the webs should not exceed 1/2 inch.



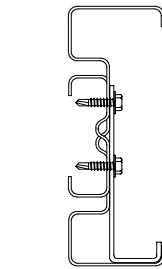
Webs should be positioned to the edge of the chord flange lip

Distribute screws evenly in overlapping area.

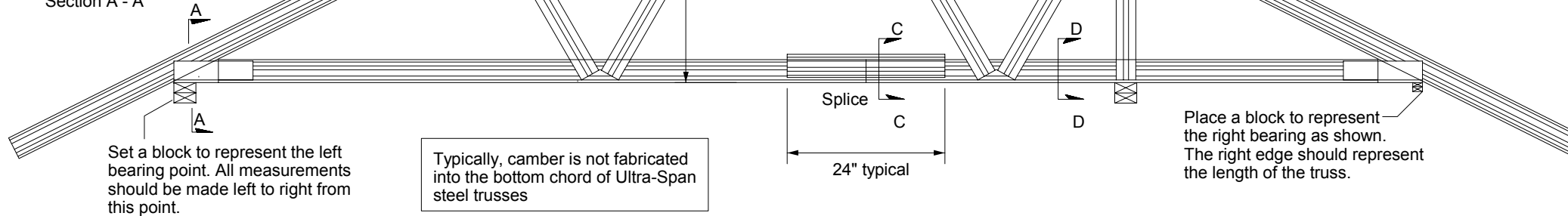


Place first screws near inside edge of chord

Height shown on Cutting



Section A - A



Set a block to represent the left bearing point. All measurements should be made left to right from this point.

Typically, camber is not fabricated into the bottom chord of Ultra-Span steel trusses

Place a block to represent the right bearing as shown. The right edge should represent the length of the truss.

HANDLING AND PACKAGING

Carry trusses by their chords, preferably at the chord breaks (peak, heel, or splice). Never carry or lift a truss by the webs.

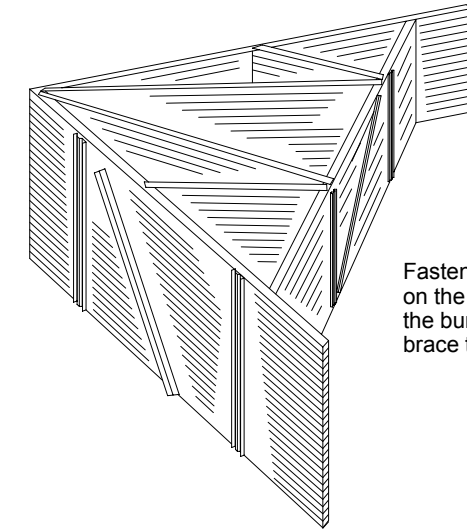
Trusses stacked flat should be limited to bundles of 20 or less. Attach USW material vertically to sides of the bundle with screws into at least every other truss. Attach USW material diagonally with screws into at least every other truss to restrain trusses from sliding. Locate banding at the vertical side members to prevent crushing of the chord flanges.

Lifting of longer trusses (20 feet or more) should be done by using two forklifts. Never lift at the center only. Always use fork extensions to ensure lifting chord to chord. A spreader bar, coupled with nylon straps, is preferred when lifting trusses into place. The straps must be located at panel points. Make sure to locate straps so they toe in from spreader bar.

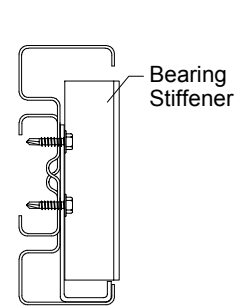
Do not use chains to secure the trusses on a truck bed. Do not overtighten the tie-down straps.

Always stack the larger trusses on the bottom and the smaller trusses above.

Store truss bundles on flat level terrain.

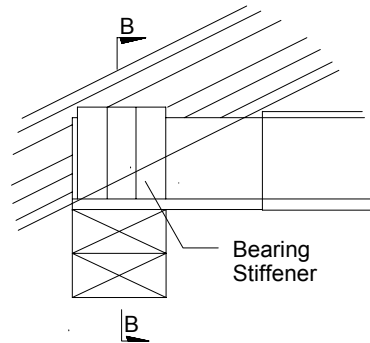


Fasten web material vertically on the chord flanges to secure the bundles. Use a diagonal brace to prevent sliding.

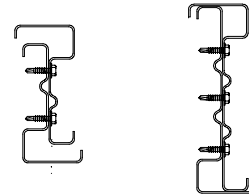


Section B - B

Some heels require a BEARING STIFFENER, 3.0USW20ga. This member must be attached with a minimum of 4 screws. The screws that run through the stiffener, connector and top chord may be counted for the connector to top chord connection.



SPLICING

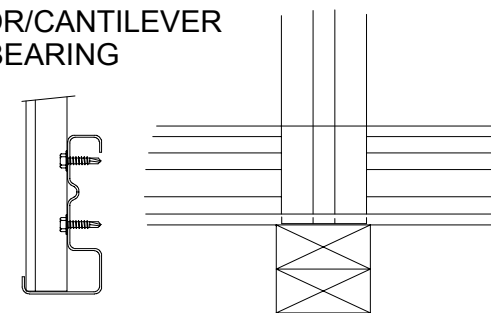


Section C - C

Splice chord members by using a 24 inch (typical) piece of chord material the same size and gauge of the chord material being spliced. Attach splice with a minimum of 4 screws each side of the splice. The screw count for each side of the splice is calculated by dividing the forces in the member (see engineering drawing), by the appropriate screw shear value.

20 ga. - 243 lbs/screw	18 ga. - 419 lbs/screw
16 ga. - 513 lbs/screw	14 ga. - 519 lbs/screw

INTERIOR/CANTILEVER BEARING

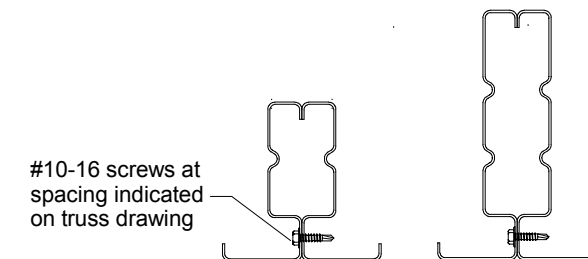


Section D - D

Webs that are positioned over bearings must extend the full width of the chord and have full contact with the bottom flange as shown. It is recommended that a vertical web be placed over all interior/cantilever bearings.

TWO PLY CONNECTION

Two ply trusses are assembled by fastening the chords together as shown, before laying them in the fixture. The fasteners are positioned as shown. The number of fasteners required can be found in the "Notes" section of the engineering drawing. Lay the assembled chords in the fixture using small pieces of web material to level the chords. Install the webs and connector plates on the top side as would be done normally. Flip the truss over to install the webs and plates on the back side to complete the truss.



#10-16 screws at spacing indicated on truss drawing