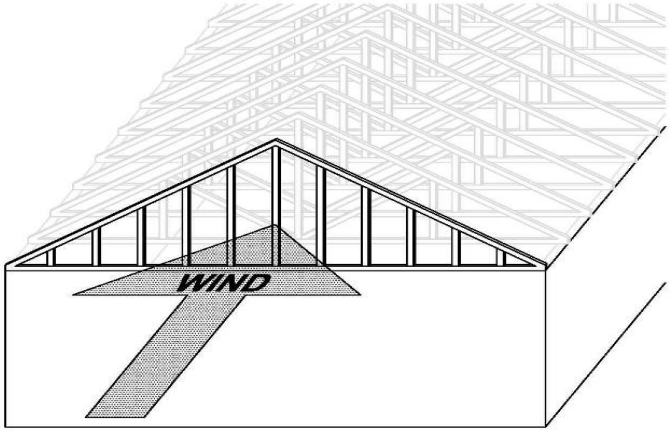
Technical Tip

Bracing Gable End Wall Trusses



Gable end wall trusses are fabricated with parallel vertical web members that provide a series of wide nailing surfaces for sheathing and finish wall coverings. These gable end trusses typically have the same overall shape as the triangulated trusses in-field of the building, but require continuous bottom chord support.

The outside face of the gable end trusses are typically sheathed with wood structural panels, like AdvanTech® and ZIP System® Wall sheathing. This sheathing transfers wind loads to the roof and ceiling diaphragms as well as to the top of the exterior wall below. Since gable end trusses are fabricated using the same pressing equipment as standard trusses, the gable end trusses are only 1 ½" thick. The 2x vertical web members are oriented flat within the truss assembly and, without adequate bracing, can be very unstable in and out of the face of the gable. It is for this reason that the truss industry requires adequate lateral bracing of gable end wall trusses.

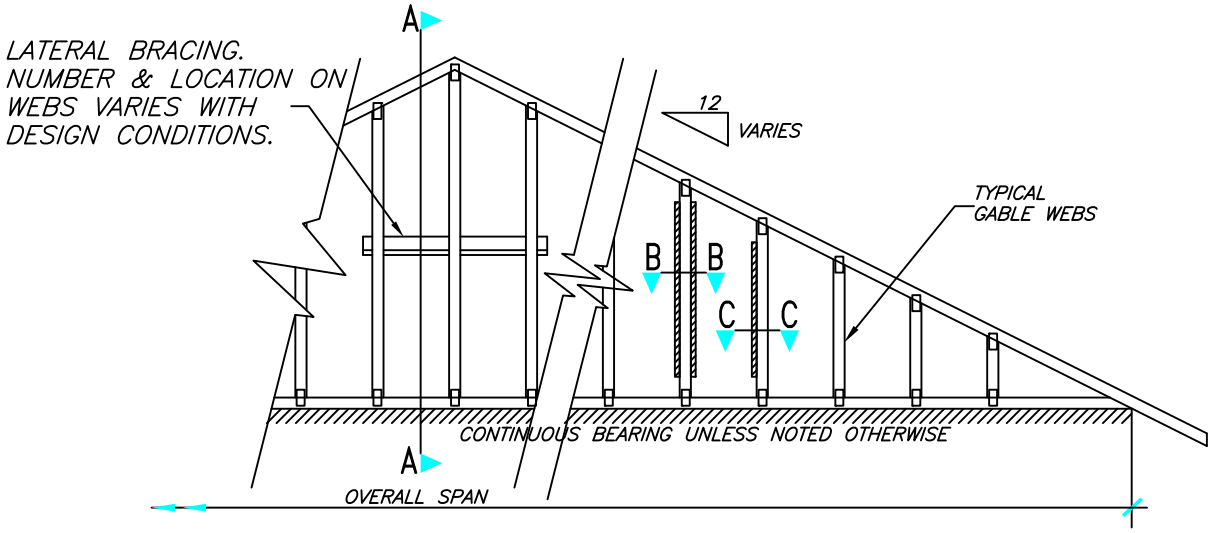
Improper bracing of the gable end truss can lead to serviceability problems like cracked ceilings and bowed siding. We recommend all gable end wall trusses be braced in accordance with the Building Component Safety Information (BCSI) handbook and the WTCA Standard Gable End Bracing Details (WTCAGBL) on the following page courtesy of the Structural Building Components Association (SBCA). For more information, visit www.sbcindustry.com.

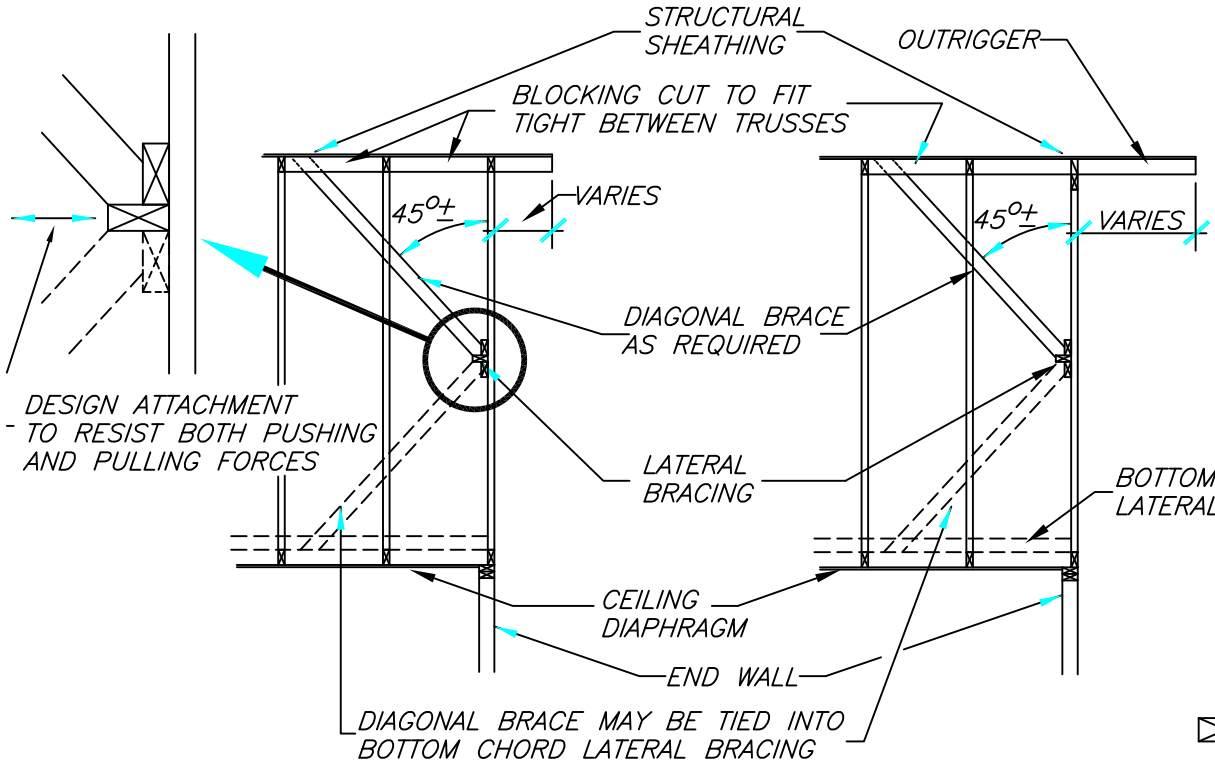
The truss designer will specify necessary bracing requirements. It is the responsibility of the General Contractor to ensure that all bracing is installed in strict accordance with Construction Documents and the Truss Submittal Package.

Please visit zipsystem.com or contact our technical services department at 800-933-9220 with any questions or comments.

STANDARD GABLE END BRACING DETAILS

WTCAGBL

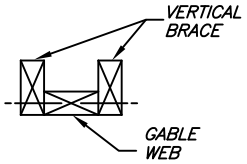




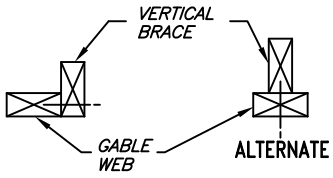
STANDARD END

DROPPED TOP CHORD END

SECTION A–A



SECTION B–B



SECTION C–C

NOTES:

1) ACTUAL BRACING REQUIREMENTS WILL VARY DUE TO WIND LOAD, CODE CRITERIA, BUILDING HEIGHT, TRUSS SPAN, WEB LUMBER GRADE/SPECIES/ON CENTER SPACING AND OTHER VARIABLES. BRACING (AND ATTACHMENT) REQUIREMENTS SHOULD BE DESIGNED FOR EACH SPECIFIC JOB.

2) CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL, AS WELL AS THE DESIGN AND SPECIFICATION OF TEMPORARY AND PERMANENT BRACING OF THE ROOF SYSTEM IS THE RESPONSIBILITY OF THE BUILDING DESIGNER.