SEPTEMBER 1, 2021

Structural Gable End Detail - 1

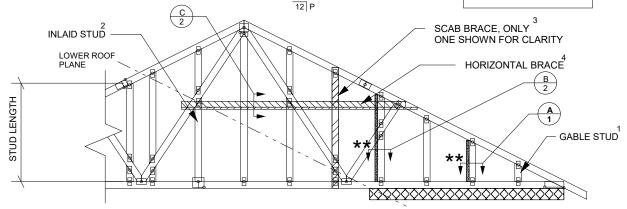
MII-SGE1-150-SP

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THIS DETAIL REQUIRES THAT A ROOF DIAPHRAGM IS PRESENT ALONG THE LINE OF THE LOWER ROOF PLANE ADEQUATE TO RESIST THE OUT OF PLANE LOADS FROM THIS TRUSS ALONG THAT LINE IN ADDITION TO THE LOADS FROM THE LOWER ROOF PLANE. THIS IS OUTSIDE THE SCOPE OF THIS DETAIL

TRUSS PROFILE SHOWN IS FOR ILLUSTRATION ONLY.



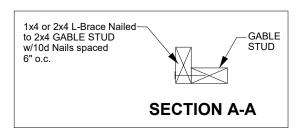
- 1. GABLE STUD IS CONTINUOUS FROM CHORD TO CHORD AND THE LENGTH IS MEASURED FROM INTERIOR CHORD TO INTERIOR CHORD
- INLAID STUD IS INTERRUPTED BY A STRUCTURAL WEB AND REQUIRES A CONTINUOUS FULL HEIGHT SCAB BRACE, LENGTH IS MEASURED FROM INTERIOR CHORD TO INTERIOR CHORD
- SCAB BRACE IS A MEMBER MATCHING THE SIZE AND GRADE OF THE INLAID STUD EXTENDING FROM CHORD TO CHORD AND CONNECTED
- WITH 10d NAILS IN 2 ROWS AT 6" O.C. THIS MEMBER MAY BE PART OF A COMMON GABLE TRUSS WITH STUDS ALIGNING AT ALL LOCATIONS. HORIZONTAL BRACE MADE FROM A BUILT UP SECTION CONSISTING OF A MINIMUM OF ONE 2X4 ORIENTED VERTICALLY AND ONE ORIENTED HORIZONTALLY, LOCATED AT THE MIDSPAN OF THE LONGEST STUD. REFER TO SECTION C-C. BRACE TO EXTEND FROM ROOF PLANE TO PLANE, INTERIOR ROOF PLANE REQUIRES DIAGONAL BRACE.

GABLE AND INLAID STUD LENGTHS

Minimum Size Species and Grade	Stud O.C. Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
2x4 SP No. 3 / Stud	12"	4-3-2	4-9-13	6-9-13	8-11-4	13-7-5
2x4 SP No. 3 / Stud	16"	3-10-7	4-2-1	5-10-13	8-1-14	12-5-5
2x4 SP No. 3 / Stud	24"	3-3-11	3-4-14	4-9-13	7-0-7	10-9-12

GENERAL NOTES:

- 1. REFER TO MITEK/TRENCO ENGINEERING FOR TRUSS SPECIFICATIONS. WHICH WILL INCLUDE THE BRACING REQUIRED TO RESIST THE IN PLANE LOADS.
- 2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY THE BUILDING DESIGNER, ENGINEER OR ARCHITECT
- 3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS MEMBERS ONLY. BUILDING DESIGNER OR OTHER REGISTERED DESIGN PROFESSIONAL FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
- 4. DESIGN CRITERIA, 150 MPH PER ASCE 7-10, ASCE 7-16, CATEGORY II, EXPOSURE C, H = 30 FEET, DURATION OF LOAD INCREASE- 1.60
- 5. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C. 6. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO FACE OF GABLE AT 4'-0" O.C..
- 7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
- 8. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
- 9. NAILS DESIGNATED 8d (0.131"x 2.5"), 10d (0.131" x 3") AND 16d (0.131" x 3.5")



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