

## GABLE STUD REINFORCEMENT DETAIL

ASCE 7-05: 100 MPH WIND SPEED, 15' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C, Kzt = 1.00

MAX GABLE VERTICAL LENGTH	2X4 GABLE VERTICAL BRACE		BRACE NO BRACES	(1) 1X4 "L" BRACE *		(1) 2X4 "L" BRACE *		(2) 2X4 "L" BRACE **		(1) 2X6 "L" BRACE *		(2) 2X6 "L" BRACE ***	
	SPACING	SPECIES		GRADE	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A
	24" O.C.	SPF HF	#1 / #2	4' 2"	7' 3"	7' 5"	8' 7"	8' 9"	10' 2"	10' 6"	13' 5"	13' 10"	14' 0"
#3			4' 1"	6' 9"	6' 9"	8' 7"	8' 7"	10' 2"	10' 2"	13' 5"	13' 5"	14' 0"	14' 0"
STUD			4' 1"	6' 9"	6' 9"	8' 7"	8' 7"	10' 2"	10' 2"	13' 5"	13' 5"	14' 0"	14' 0"
STANDARD			4' 1"	5' 9"	5' 9"	7' 8"	7' 8"	10' 2"	10' 2"	11' 11"	11' 11"	14' 0"	14' 0"
#1			4' 7"	7' 3"	7' 9"	8' 7"	9' 3"	10' 2"	11' 0"	13' 5"	14' 0"	14' 0"	14' 0"
#2			4' 6"	7' 3"	7' 9"	8' 7"	9' 3"	10' 2"	11' 0"	13' 5"	14' 0"	14' 0"	14' 0"
16" O.C.	SP DFL	#3	4' 3"	6' 11"	6' 11"	8' 7"	9' 0"	10' 2"	10' 9"	13' 5"	14' 0"	14' 0"	14' 0"
		STUD	4' 3"	6' 10"	6' 10"	8' 7"	9' 0"	10' 2"	10' 9"	13' 5"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 2"	5' 11"	5' 11"	7' 10"	7' 10"	10' 2"	10' 6"	12' 2"	12' 2"	14' 0"	14' 0"
		#1 / #2	4' 10"	8' 3"	8' 6"	9' 9"	10' 1"	11' 8"	12' 0"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 8"	8' 3"	8' 3"	9' 9"	9' 9"	11' 8"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	4' 8"	8' 3"	8' 3"	9' 9"	9' 9"	11' 8"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"
12" O.C.	SP HF	STANDARD	4' 8"	7' 1"	7' 1"	9' 4"	9' 4"	11' 8"	11' 8"	14' 0"	14' 0"	14' 0"	14' 0"
		#1	5' 3"	8' 3"	8' 11"	9' 9"	10' 7"	11' 8"	12' 7"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	5' 2"	8' 3"	8' 11"	9' 9"	10' 7"	11' 8"	12' 7"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	4' 11"	8' 3"	8' 6"	9' 9"	10' 4"	11' 8"	12' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	4' 11"	8' 3"	8' 5"	9' 9"	10' 4"	11' 8"	12' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		STANDARD	4' 10"	7' 3"	7' 3"	9' 7"	9' 7"	11' 8"	12' 0"	14' 0"	14' 0"	14' 0"	14' 0"
12" O.C.	SP DFL	#1 / #2	5' 3"	9' 1"	9' 4"	10' 9"	11' 1"	12' 10"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		#3	5' 2"	9' 1"	9' 1"	10' 9"	10' 9"	12' 10"	12' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	5' 2"	9' 1"	9' 1"	10' 9"	10' 9"	12' 10"	12' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		STANDARD	5' 2"	8' 2"	8' 2"	10' 9"	10' 9"	12' 10"	12' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		#1	5' 9"	9' 1"	9' 10"	10' 9"	11' 7"	12' 10"	13' 10"	14' 0"	14' 0"	14' 0"	14' 0"
		#2	5' 8"	9' 1"	9' 10"	10' 9"	11' 7"	12' 10"	13' 10"	14' 0"	14' 0"	14' 0"	14' 0"
12" O.C.	SP HF	#3	5' 5"	9' 1"	9' 7"	10' 9"	11' 4"	12' 10"	13' 6"	14' 0"	14' 0"	14' 0"	14' 0"
		STUD	5' 5"	9' 1"	9' 7"	10' 9"	11' 4"	12' 10"	13' 6"	14' 0"	14' 0"	14' 0"	14' 0"
		STANDARD	5' 3"	8' 5"	8' 5"	10' 9"	11' 1"	12' 10"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"

BRACING GROUP SPECIES AND GRADES:			
<b>GROUP A:</b>			
SPRUCE-PINE-FIR		HEM-FIR	
#1 / #2	STANDARD	#2	STUD
#3	STUD	#3	STANDARD
DOUGLAS FIR-LARCH		SOUTHERN PINE	
#3		#3	
STUD		STUD	
STANDARD		STANDARD	
<b>GROUP B:</b>			
HEM-FIR			
#1 & BTR			
#1			
SOUTHERN PINE		DOUGLAS FIR-LARCH	
#1		#1	
#2		#2	

**GABLE TRUSS DETAIL NOTES:**

LIVE LOAD DEFLECTION CRITERIA IS L/240.

PROVIDE UPLIFT CONNECTIONS FOR 60 PLF OVER CONTINUOUS BEARING (5 PSF TC DEAD LOAD).

GABLE END SUPPORTS LOAD FROM 4' 0" OUTLOOKERS WITH 2' 0" OVERHANG, OR 12" PLYWOOD OVERHANG.

ATTACH EACH "L" BRACE WITH 10d NAILS. (0.128"x3" min)

\* FOR (1) "L" BRACE: SPACE NAILS AT 2" O.C. IN 18" END ZONES AND 4" O.C. BETWEEN ZONES.

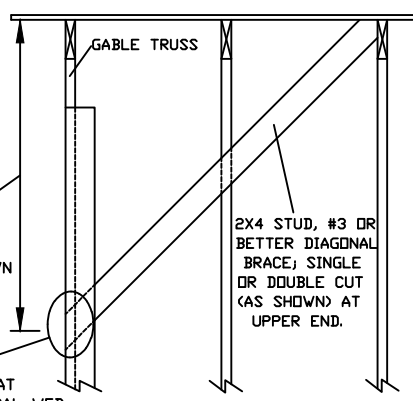
\*\*FOR (2) "L" BRACES: SPACE NAILS AT 3" O.C. IN 18" END ZONES AND 6" O.C. BETWEEN ZONES.

"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.

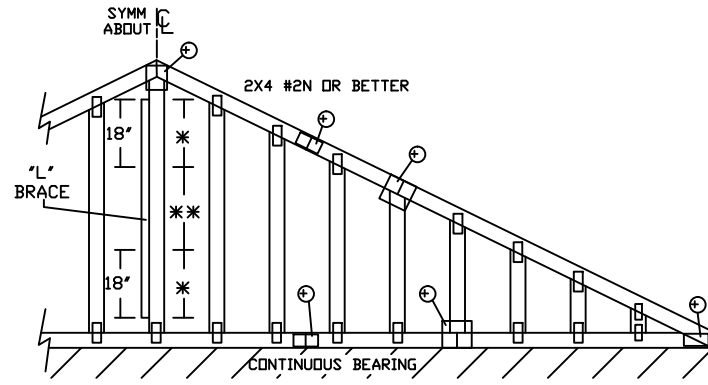
DIAGONAL BRACE OPTION: VERTICAL LENGTH MAY BE DOUBLED WHEN DIAGONAL BRACE IS USED. CONNECT DIAGONAL BRACE FOR 480# AT EACH END. MAX WEB TOTAL LENGTH IS 14'.

VERTICAL LENGTH SHOWN IN TABLE ABOVE.

CONNECT DIAGONAL AT MIDPOINT OF VERTICAL WEB.



2X4 STUD, #3 OR BETTER DIAGONAL BRACE, SINGLE OR DOUBLE CUT (AS SHOWN) AT UPPER END.



REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

GABLE VERTICAL PLATE SIZES	
VERTICAL LENGTH	NO SPLICE
LESS THAN 4' 0"	1X4 OR 2X3
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4
GREATER THAN 11' 6"	2.5X4

+ REFER TO COMMON TRUSS DESIGN FOR PEAK, SPLICE, AND HEEL PLATES.

155 Harlem Ave  
North Building, 4th Floor  
Glenview, IL 60025

**WARNING: READ AND FOLLOW ALL NOTES ON THIS DRAWING. IMPORTANT: FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.**

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7 or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses.

A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see this Job's general notes page and these web sites:  
ALPINE: [www.alpineitw.com](http://www.alpineitw.com); TPI: [www.tpinet.org](http://www.tpinet.org); SBCA: [www.sbca-components.com](http://www.sbca-components.com); ICC: [www.iccsafe.org](http://www.iccsafe.org)

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

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