

TYPICAL PANEL EDGE -SHEATHING MATERIAL METAL STUD AT LIGHTGAGE SEE SCHEDULE DESIGNATED STRAPPING/BLOCKING ARCH. DWGS. SPACING (TYP.) SCREWS (TYP.)

## TYPICAL METAL STUD SHEAR WALL PANEL ELEVATION

METAL STUD SHEAR WALL SCHEDULE FOR MAXIMUM STUD SPACING OF 24"								
SW MARK	SHEATHING MATERIAL (ONE SIDE ONLY)	BLOCKED/ UNBLOCKED	EDGE SCREWS (INCLUDING EDGES OF OPENINGS)	FIELD SCREWING	TIEDOWN ANCHOR			
SMI	7/16" APA RATED SHEATHING	BLOCKED	6"	12"	SEE DETAILS			

1) WOOD STRUCTURAL PANELS SHALL BE ATTACHED TO STEEL FRAMING WITH A MINIMUM NO. 8 FLAT HEAD SELF-DRILLING TAPPING SCREWS WITH A MINIMUM HEAD DIAMETER OF 0.285 INCHES OR NO. 10 FLAT HEAD SELF-DRILLING TAPPING SCREWS WITH A MINIMUM HEAD DIAMETER OF 0.333 INCHES.

2) STEEL SHEETS SHALL BE ASTM A1003, GRADE 33, TYPE 'H'. 3) STEEL SHEETS SHALL BE ATTACHED TO STEEL FRAMING WITH MINIMUM NO. 8 SELF-DRILLING

TAPPING SCREWS, U.N.O.

4) WOOD STRUCTURAL PANELS AND STEEL SHEETS ARE PERMITTED TO BE APPLIED EITHER PARALLEL TO OR PERPENDICULAR TO FRAMING.

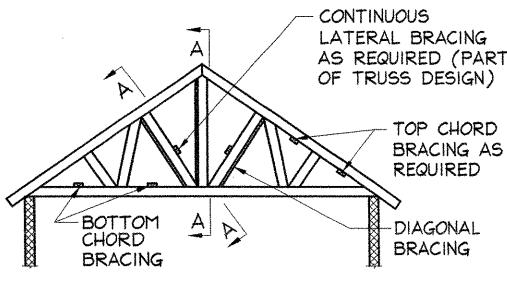
5) GYPSUM WALLBOARD SHALL BE ATTACHED TO STEEL FRAMING WITH MINIMUM NO. 6 SELF-DRILLING TAPPING SCREWS.

SIMPSON STRONG-TIE TIEDOWN CONNECTORS FOR ROOF TRUSSES

NOTE: G.C. TO PROVIDE A MINIMUM OF (2) WALL STUDS FOR UPLIFT LOADS ( 3000#, (3) WALL STUDS FOR UPLIFT LOADS BETWEEN 3000# \$ 7000# \$ (4) WALL STUDS FOR UPLIFT LOAD BETWEEN 7000# AND 11000# UNLESS GREATER/LARGER POST/STUDS ARE SHOWN ON DOCUMENTS.

ALLOWABLE UPLIFT LOAD - LBS.	NO. OF PLIES	NON WRAP-OVER CONNECTOR	WRAP-OVER CONNECTOR	VERTICAL HEIGHT OF TRUSS REQ'D. BY CONNECTOR ABOVE PLATE	POST/WALL STUD(S) FOUNDATION TIE-DOWN	MULTI-STORY FLOOR-FLOOR TIES
150	ANY	(3) 10d NAILS		NONE	NONE	NONE
200	ANY	(4) 10d NAILS		NONE	NONE	NONE
535	1	H2.5A		3"	NONE	NONE
1,070	ANY	(2) H2.5A DIAGONALLY OPPOSITE		3"	(1) LTT20B, (1) 5/8"φ BOLT, 12" EMBED.	CS16-R OR FSC ABOVE \$ BELOW WITH 3/8"\$ ALL-THREAD
1,120	1		H15	3"	(1) LTT20B, (1) 5/8"¢ BOLT, 12" EMBED.	CS16-R OR FSC ABOVE \$ BELOW WITH 3/8"\$ ALL-THREAD
1,120	.2		H15-2	3"	(1) LTT20B, (1) 5/8"φ BOLT, 12" EMBED.	CSIG-R OR FSC ABOVE \$ BELOW WITH 3/8"\$ ALL-THREAD
1,245	ANY	HTS30C		.16 <sup>n</sup>	(1) LTT20B, (1) 5/8"φ BOLT, 12" EMBED.	CS16-R OR FSC ABOVE \$ BELOW WITH 3/8"\$ ALL-THREAD
1,750	2	LGT2		3 <sup>ll</sup>	(1) LTT20B, (1) 5/8"φ BOLT, 12" EMBED.	CSI4 OR HTTI6 ABOVE \$ BELOW WITH 5/8"\$ ALL-THREAD
2,140	AT LEAST 2	(4) H2.5A		3"	(1) HTT16, (1) 5/8"φ BOLT, 12" EMBED.	CMSTC16 OR HTT16 ABOVE # BELOW WITH 5/8" Ø ALL-THREAD
3,170	3	LGT3-SDS2.5	-	3 <sup>ll</sup>	(1) HTT16, (1) 5/8"φ BOLT, 12" EMBED.	CMSTC16 OR HTT16 ABOVE \$ BELOW WITH 5/8"\$ ALL-THREAD
3,330	AT LEAST 2		MGT, (1) HTT16, (1) 5/8"Φ BOLT	3"	(1) HTT16, (1) 5/8"φ BOLT, 12" EMBED.	CMSTC16 OR HTT16 ABOVE \$ BELOW WITH 5/8"\$ ALL-THREAD
5,250	ANY	(1) HTT22 ON TRUSS \$ (1) HTT22 ON POST WITH (1) 5/8"\$ BOLT		24"	(1) HTT22, (1) 5/8"Φ BOLT, 12" EMBED.	CMST14 OR HTT22 ABOVE \$ BELOW WITH 5/8"\$ ALL-THREAD
6,485	2		HGT-2, (2) HTT16, (2) 5/8"Φ BOLTS	3"	(1) HTT16 \$ (1) 5/8"φ BOLT EA. SIDE , 12" EMBED.	CMST14 OR HTT16 EA. SIDE ABOVE & BELOW WITH 5/8"¢ ALL-THREAD
9,035	3	<b>-</b>	HGT-3, (2) HTT22, (2) 5/8"Φ BOLTS	3"	(1) HTT22 \$ (1) 5/8"φ  BOLT EA. SIDE , 12"  EMBED.	CMST12 OR HTT22 EA. SIDE ABOVE & BELOW WITH 5/8"¢ ALL-THREAD
10,500	ANY	(1) HTT22 ON EA. SIDE OF TRUSS \$ (1) HTT22 ON EA. SIDE OF POST WITH (1) 5/8"\$		24 <sup>11</sup>	(1) HTT22 \$ (1) 5/8"φ BOLT EA. SIDE , 12" EMBED.	HTT22 EA. SIDE ABOVE \$ BELOW WITH 5/8"\$ ALL-THREAD

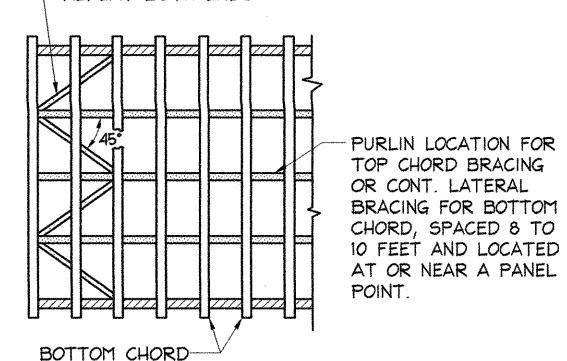
NOTE: CONTRACTOR TO SELECT TIE-DOWN CONNECTOR FOR ALL ROOF TRUSSES WITH STATED UPLIFT CAPACITY THAT MEETS OR EXCEEDS ACTUAL NET UPLIFT VALUES STATED ON TRUSS PIECE DRAWINGS.



WITH (1) 5/8"¢ BOLT EA. SIDE

## . TRUSS ELEVATION

-DIAGONALS FORM BRACED BAY @ 20'-0" (MAX.) INTERVALS: REPEAT BOTH ENDS



OF TRUSS (TYP.) TOP/BOTTOM CHORD BRACING

## GENERAL NOTES

1) WOOD TRUSSES SHALL BE BRACED AND ERECTED IN ACCORDANCE WITH THE "TRUSS PLATE INSTITUTE" STANDARDS. SEE GENERAL NOTE

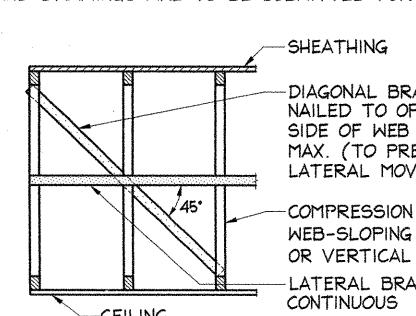
a. THE TRUSS FABRICATOR SHALL PROVIDE AND LOCATE CONTINUOUS LATERAL BRACING FOR EACH TRUSS WEB MEMBER AS REQUIRED b. LATERAL BRACING SHALL BE RESTRAINED BY DIAGONAL BRACING (MIN. 2" THICK NOMINAL LUMBER). THIS BRACING IS TO BE CONTINUOUS c. A MINIMUM OF TWO ROWS OF DIAGONAL BRACING IS REQUIRED. ONE

AT EACH VERTICAL WEB MEMBER CLOSES TO BEARING LOCATIONS 3) THE BOTTOM CHORDS SHALL BE BRACED BY CONTINUOUS LATERAL BRACING SPACED AT 8 TO 10 FEET NAILED TO TOP OF THE BOTTOM CHORD. DIAGONALS PLACED AT 45° TO THE LATERAL BRACES SHALL BE LOCATED AT EACH END, IF BUILDING EXCEEDS 60 FEET IN LENGTH, DIAGONAL BRACING SHOULD BE REPEATED AT 20 FOOT INTERVALS

4) TOP CHORD BRACING a. IF PLYWOOD DECKING IS APPLIED DIRECTLY TO TOP CHORD, PROPERLY LAPPED AND NAILED TO DEVELOP DIAPHRAGM ACTION,

BRACING IS NOT REQUIRED. b. IF PURLINS ARE USED, DIAGONAL TOP CHORD BRACING IS REQUIRED AT EACH END. IF BUILDING EXCEEDS 60 FEET IN LENGTH, DIAGONAL BRACING SHOULD BE REPEATED AT 20 FOOT INTERVALS

5) WOOD ROOF TRUSSES ARE TO BE DESIGNED FOR THE WOOD FABRICATOR BY A PROFESSIONAL ENGINEER AND SEALED CALCULATIONS AND DRAWINGS ARE TO BE SUBMITTED FOR REVIEW.



SECTION A-A

-DIAGONAL BRACE NAILED TO OPPOSITE SIDE OF WEB AT 20'-0" MAX. (TO PREVENT LATERAL MOVEMENT) -COMPRESSION

> OR VERTICAL LATERAL BRACE CONTINUOUS

PERMIT SET 10-13-10 O'DONNELL & NACCARATO, INC. STRUCTURAL ENGINEERS 9900 MAIN STREET SUITE 502 FAIRFAX, VIRGINIA 22031 TELEPHONE: (703) 451-5222 FAX: (703) 451-0522 Project No. 2270.0010



MIRACLE

Date: 5-9-06 Scale: AS NOTED

Drawn: Checked:

File No.

Drawing No.