

**TABLE S601.7 - UPLIFT CONNECTIONS - 150 MPH WINDS EXP "B"**  
 AFCM 2015 TABLE 3.2

CONNECTION	FRAMING SPACING (INCHES)	ROOF SPAN (FEET)	UPLIFT	LATERAL	SHEAR	NUMBER OF 8d COMMON NAILS OR 10d BOX NAILS IN EACH END OF 1-1/4"x20 GAGE STRAP
ROOF ASSEMBLY TO WALL ASSEMBLY	16" OC	20	215	191	102R	4
WALL ASSEMBLY TO FOUNDATION	16" OC	16	224	219	436	4

**TABLE S601.8 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING UPLIFT LOADS - 150 MPH WIND EXP "B"**  
 AFCM 2015 TABLE 3.2C

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	
		8' END ZONES	INTERIOR ZONES
UPLIFT LOADS	1 - 3 STORIES	25 INCHES ON CENTER	30 INCHES ON CENTER

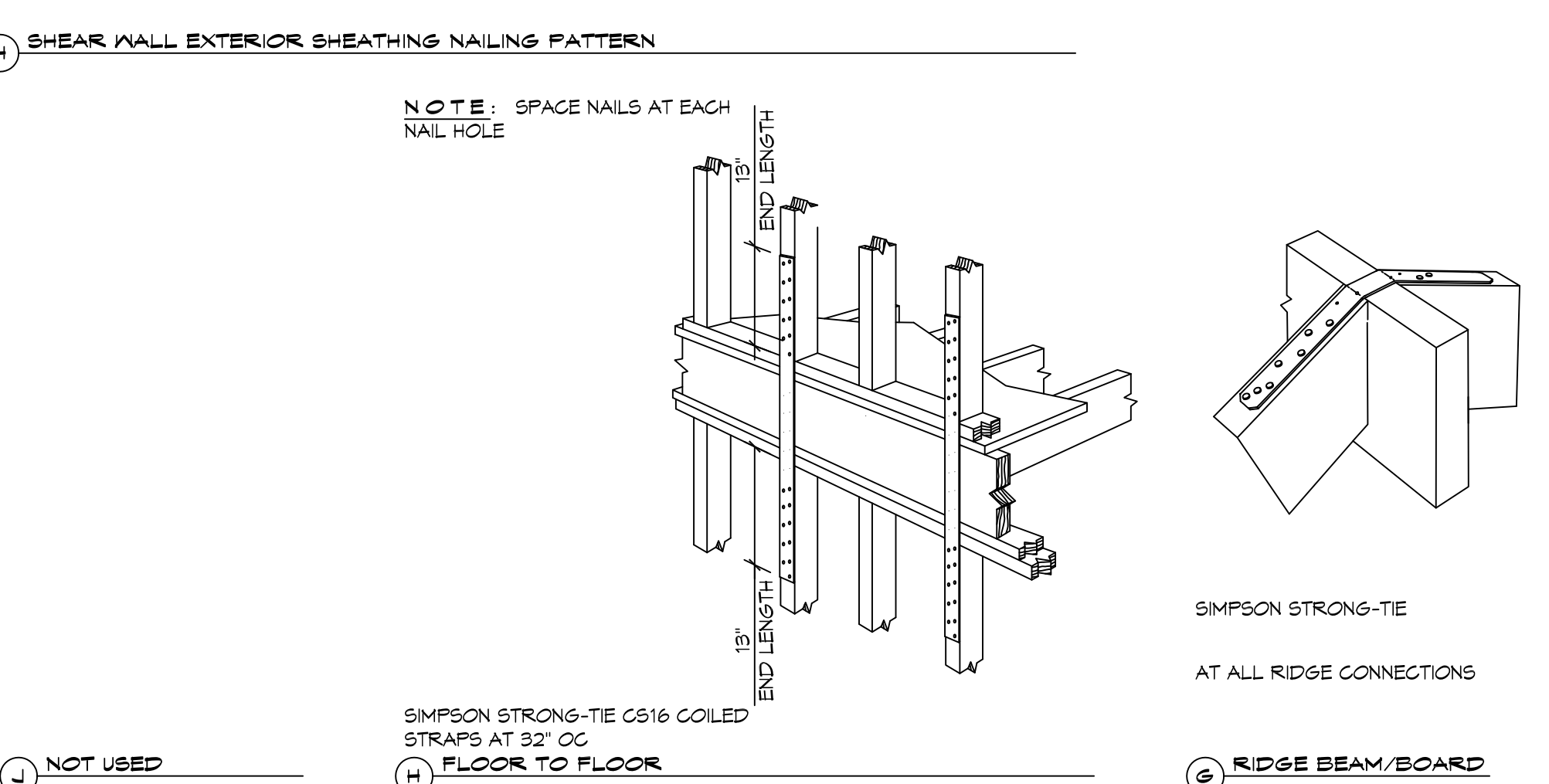
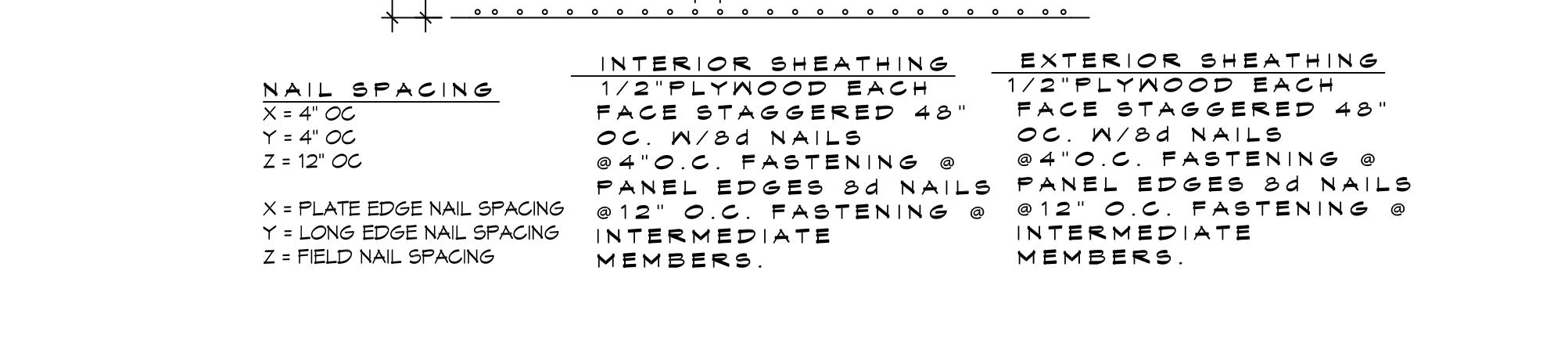
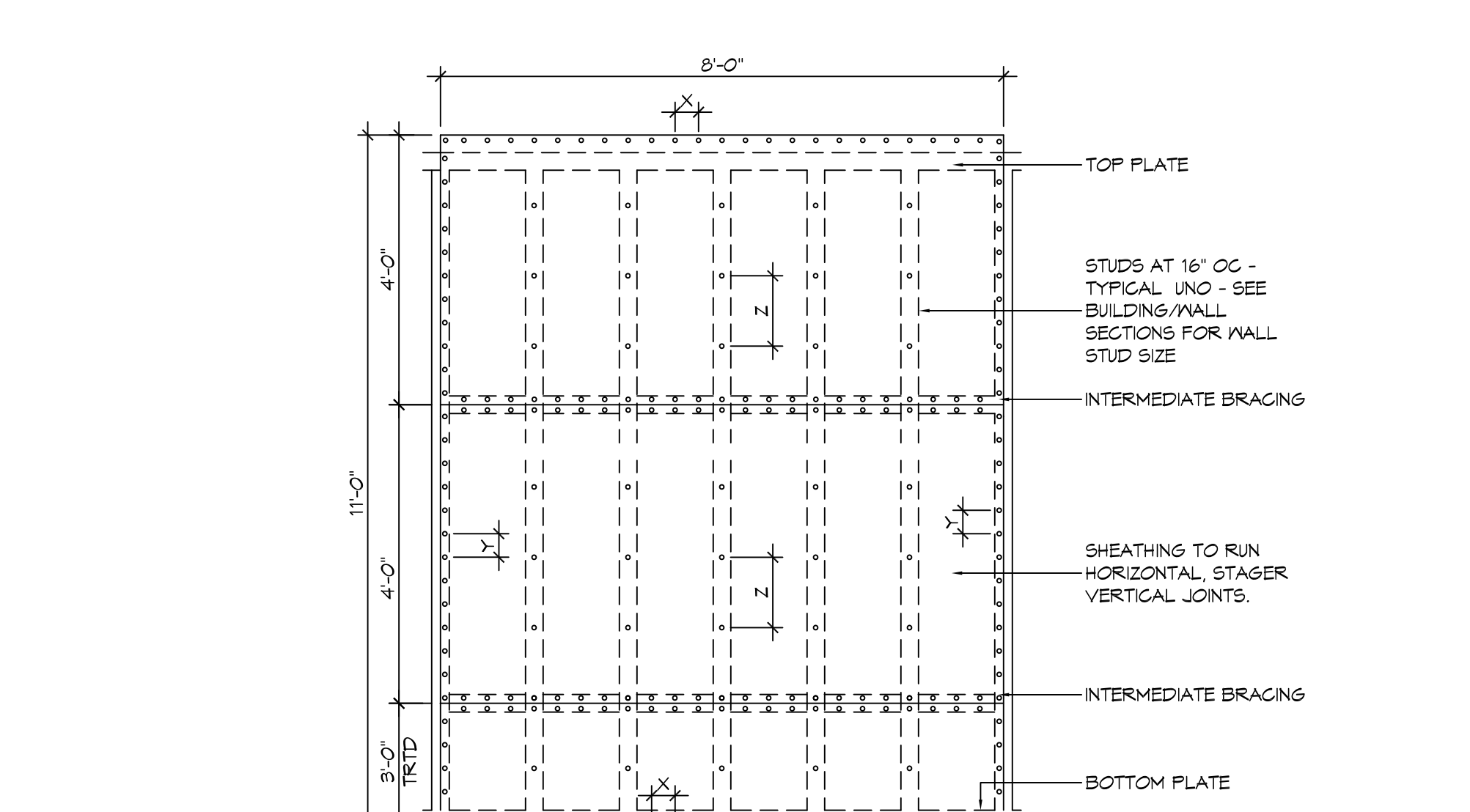
NOTE: A MINIMUM OF ONE ANCHOR BOLT SHALL BE PROVIDED WITHIN 6 TO 12 INCHES OF EACH END OF EACH PLATE

**TABLE S601.9 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING SHEAR LOADS - 150 MPH WIND EXP "B"**  
 AFCM 2015 TABLE 3.2B

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	
		5/8" Ø ANCHOR BOLTS	48 INCHES ON CENTER W/3"x3"x1/4" WASHER
UPLIFT LOADS	4 STORY		

**TABLE S601.10 - FULL HEIGHT STUD REQUIREMENT FOR HEADERS OR WINDOW SILL PLATES IN EXTERIOR WALLS EXPOSURE "C"**  
 AFCM 2015 TABLE 3.23C

HEADER SPAN (FEET)	WALL SPACING (INCHES)		
	12" O.C.	16" O.C.	24" O.C.
2	1	1	1
4	2	2	1
6	3	3	2
8	4	3	2



**1 TYPICAL CONNECTION DETAILS**  
 SCALE: NTS

**TABLE S601.5 - JACK STUD REQ - INT LOADBEARING WALLS**  
 AFCM 2015 TABLE 3.22F

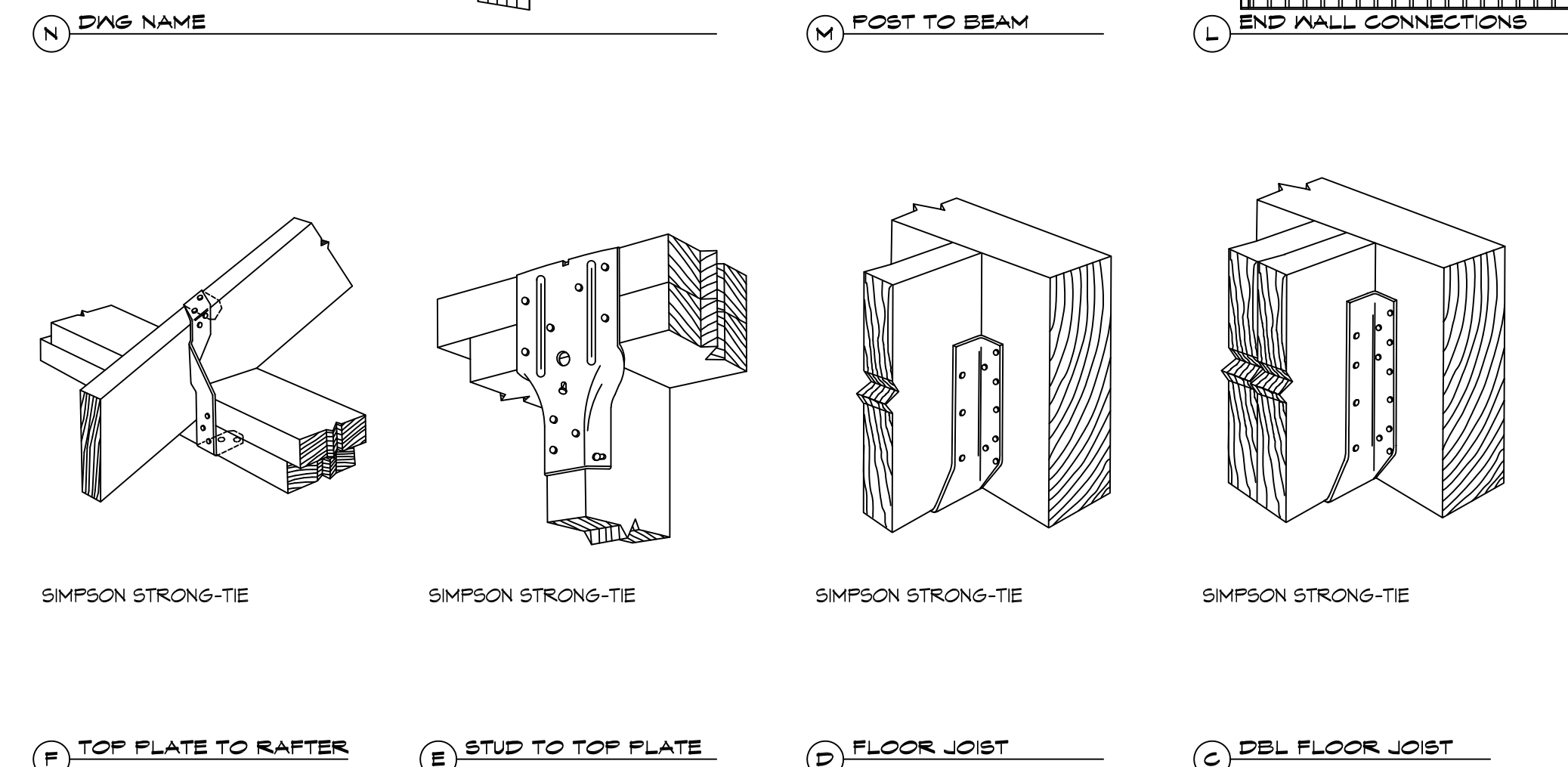
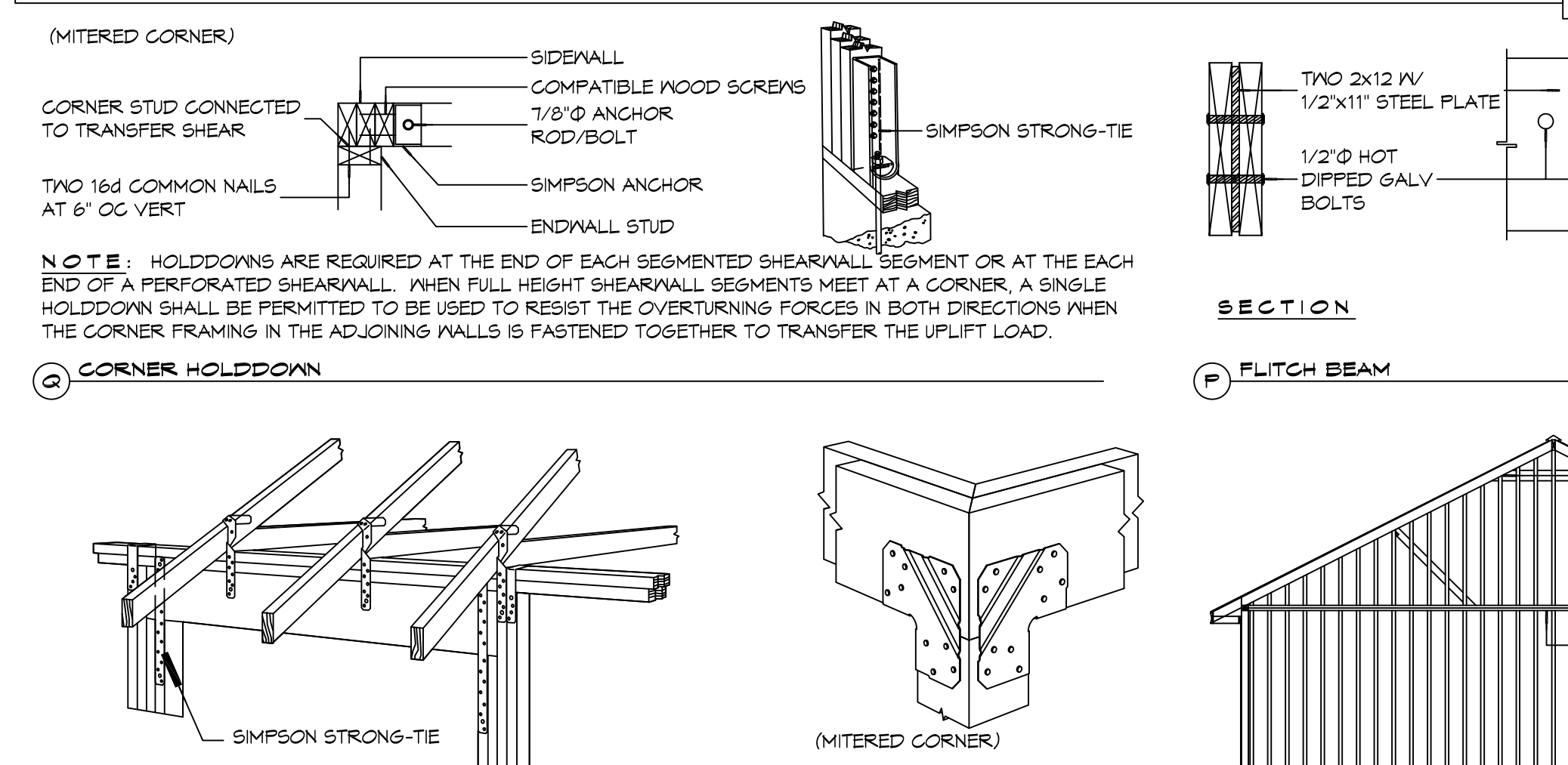
HEADER SUPPORTING	HEADER SPAN (FT)	ROOF SPAN (FEET)											
		12 FEET			24 FEET			36 FEET					
		3"	4.5"	5"	6.5"	3"	4.5"	5"	6.5"	3"	4.5"	5"	6"
ONE FLOOR ONLY (CENTER BEARING)	2	1	1	1	1	1	1	1	1	1	1	1	1
	4	1	1	1	1	1	1	1	1	1	1	1	1
	6	1	1	1	1	1	1	1	1	2	1	1	1
	8	1	1	1	1	2	1	1	1	2	2	2	1
	10	1	1	1	1	2	2	1	1	3	2	2	2
	12	1	1	1	1	2	2	2	1	3	2	2	2
	14	2	1	1	1	3	2	2	2	4	3	3	2
	16	2	2	1	1	3	2	2	2	4	3	3	2
TWO FLOORS (CENTER BEARING)	2	1	1	1	1	1	1	1	1	2	1	1	1
	4	1	1	1	1	2	1	1	1	3	2	2	2
	6	2	1	1	1	3	2	2	2	4	3	2	2
	8	2	2	1	1	3	2	2	2	5	3	3	3
	10	2	2	2	1	4	3	3	2	6	4	4	3
	12	3	2	2	2	5	3	3	3	7	5	4	4
	14	3	2	2	2	6	4	4	3	8	5	5	4
	16	4	3	2	2	6	4	4	3	9	6	6	5

**TABLE S601.6 - JACK STUD REQ - EXTERIOR LOADBEARING WALLS**  
 AFCM 2015 TABLE 3.22F

ROOF AND CEILING	HEADER WIDTH - 3" (2-2x), 4.5" (3-2x), 5" (4-2x) EACH W/ 1/2" PLYWOOD SPACER BETWEEN	ROOF LIVE LOAD 20 PSF				ROOF LIVE LOAD 30 PSF			
		3"	4.5"	5"	6.5"	3"	4.5"	5"	6.5"
		NUMBER OF JACK STUDS REQUIRED							
2		1	1	1	1	1	1	1	1
4		1	1	1	1	1	1	1	1
6		2	1	1	1	2	1	1	1
8		2	2	2	2	2	2	2	1
10		3	2	2	2	3	2	2	2
12		3	2	2	2	3	2	2	2
14		4	3	2	2	4	3	2	2
16		4	3	3	2	4	3	3	2
2		1	1	1	1	1	1	1	1
4		2	1	1	1	2	1	1	1
6		2	2	2	1	3	2	2	2
8		3	2	2	2	3	2	2	2
10		4	3	2	2	4	3	3	2
12		4	3	3	2	5	3	3	3
14		5	4	3	3	5	4	3	3
16		6	4	4	3	6	4	4	3

**TABLE S601.4 - BUILDING ENVELOPE REQUIREMENTS**

ROOFS	OPAQUE ELEMENTS		INSULATION MIN. R-VALUE
	INSULATION ENTIRELY ABOVE DECK	ASSEMBLY MAXIMUM	
METAL BUILDING	U-0.048	R-20.0 c.i.	
METAL BUILDING	U-0.065	R-19	
METAL BUILDING	U-0.021	R-38	
MASS	U-0.151	R-5.1 c.i.	
METAL BUILDING	U-0.113	R-13.0	
STEEL-FRAMED	U-0.124	R-13.0	
WOOD-FRAMED AND OTHER	U-0.084	R-13.0	
MASS	U-0.107	R-6.3 c.i.	
STEEL JOIST	U-0.052	R-14.0	
WOOD FRAMED AND OTHER	U-0.051	R-19.0	
SLAB-ON-GRADE	UN-HEATED	F-0.130	NR
OPAQUE DOORS	SWINGING	U-0.100	NR
	NON-SWINGING	U-1.450	NR



**NOT USED** **1 TYPICAL CONNECTION DETAILS**  
 SCALE: NTS

**TABLE S601.3 - NAILING SCHEDULE**

DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	SPACING
TOP PLATE TO TOP PLATE (FACE NAILED)	2-16d	2-16d	PER FOOT
TOP PLATE AT INTERSECTION (FACE)	4-16d	5-16d	JOINTS - EACH SIDE
STUD TO STUD (FACE-NAILED)	2-16d	2-16d	24" O.C.
HEADER TO HEADER (FACE NAILED)	16d	16d	16" O.C. EDGES
TOP OR BOTTOM PLATE TO STUD (END)	SEE TABLE	SEE TABLE	PER STUD
BOTTOM PLATE TO FLOOR JOIST BANDJOIST, END JOIST OR BLOCKING	2-16d	2-16d	PER FOOT
ROOF SHEATHING			
WOOD STRUCTURAL PANELS	8d	10d	SEE TABLE S601.1
DIAGONAL BOARD SHEATHING (1'x6' OR 1'x8')	2-8d	2-10d	PER SUPPORT
1'x10' OR WIDER	3-8d	3-10d	PER SUPPORT

**TABLE S601.2 - WALL SHEATHING AND CLADDING REQUIREMENT - WIND LOAD EXP "B"**

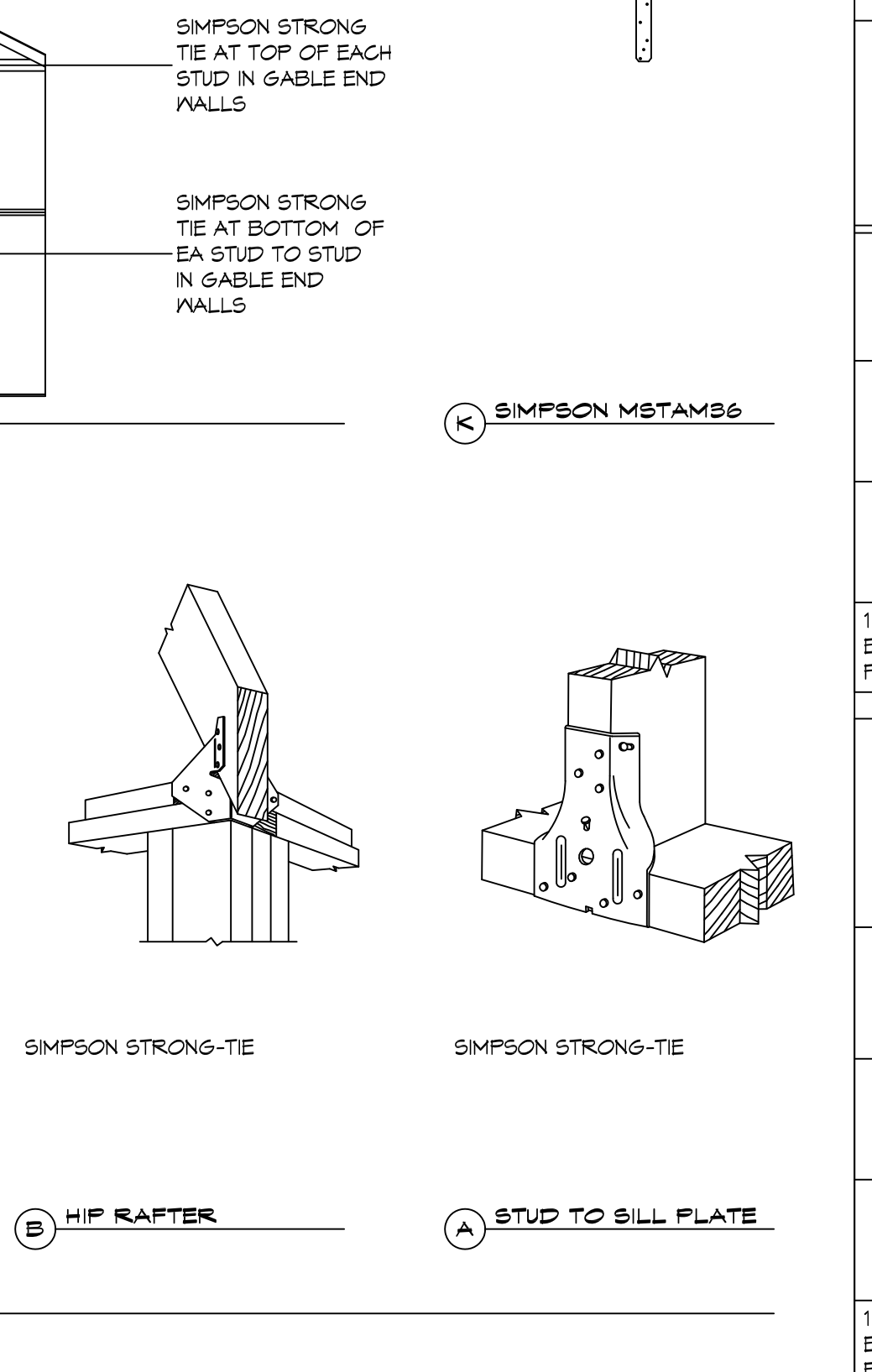
SHEATHING LOCATION	RAFTER / TRUSS SPACING	MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	
		E	F
INTERIOR ZONE	12" OC	6	12
	16" OC	6	12
	24" OC	6	12
PERIMETER EDGE ZONE	12" OC	6	6
	16" OC	4	4
	24" OC	3	3

**TABLE S601.1 - ROOF SHEATHING ATTACHMENT REQUIREMENT - WIND LOAD EXP "B"**

SHEATHING LOCATION	RAFTER / TRUSS SPACING	MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	
		E	F
INTERIOR ZONE	12" OC	6	12
	16" OC	6	12
	24" OC	6	12
PERIMETER EDGE ZONE	12" OC	6	6
	16" OC	4	4
	24" OC	3	3

**TABLE S601.2 - WALL SHEATHING AND CLADDING REQUIREMENT - WIND LOAD EXP "B"**

SHEATHING LOCATION	RAFTER / TRUSS SPACING	MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	
		E	F
INTERIOR ZONE	12" OC	6	12
	16" OC	6	12
	24" OC	6	12
PERIMETER EDGE ZONE	12" OC	6	6
	16" OC	4	4
	24" OC	3	3



**ROOF UNDERLAYMENT NOTES**

- FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (17-PERCENT SLOPE), UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33-PERCENT SLOPE), UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER:
  - APPLY A 19 INCH STRIP OF UNDERLAYMENT FELT PARALLEL WITH AND STARTING AT THE EAVE, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36 INCH WIDE SHEETS OF UNDERLAYMENT OVERLAPPING SUCCESSIVE SHEETS 19 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE.
- FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33-PERCENT SLOPE) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER:
  - UNDERLAYMENT SHALL BE APPLIED SINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS SHALL BE OFFSET BY 6 FEET.

**SHINGLE APPLICATION & FASTENING NOTES**

- ASPHALT STRIP SHINGLES SHALL HAVE A MINIMUM OF SIX FASTENERS PER SHINGLE WHERE THE ROOF IS IN ONE OF THE FOLLOWING CATEGORIES:
  - THE BASIC WIND SPEED IS 110 MPH OR GREATER AND THE EAVE IS 20 FEET OR HIGHER ABOVE GRADE.
  - THE BASIC WIND SPEED IS 120 MPH OR GREATER.
  - SPECIAL WIND ZONES.

**METAL ROOF APPLICATION & FASTENING NOTES**

- INSTALL METAL ROOF PER MANUFACTURER'S RECOMMENDATIONS FOR 150MPH WIND SPEED.

**GENERAL UPLIFT CONNECTION NOTES**

**ROOF ASSEMBLY TO WALL ASSEMBLY:**  
 UPLIFT CONNECTIONS SHALL BE FROM RAFTER OR TRUSS TO WALL STUD. WHEN RAFTERS OR TRUSSES ARE NOT LOCATED DIRECTLY ABOVE STUDS, RAFTERS SHALL BE ATTACHED TO THE WALL PLATE AND THE WALL TOP PLATE SHALL BE ATTACHED TO THE WALL STUD WITH UPLIFT CONNECTIONS. UPLIFT CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S601.10.

**WALL ASSEMBLY TO WALL ASSEMBLY:**  
 STORY TO STORY UPLIFT CONNECTIONS FROM UPPER STORY WALL STUD TO LOWER STORY WALL STUD. WHEN UPPER STORY WALL STUDS ARE NOT LOCATED DIRECTLY ABOVE LOWER WALL STUDS, THE STUDS SHALL BE ATTACHED TO A COMMON MEMBER IN THE FLOOR ASSEMBLY BY UPLIFT CONNECTIONS. UPLIFT CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S601.11.

**WALL ASSEMBLY TO FOUNDATION:**  
 FIRST FLOOR WALL STUDS SHALL BE CONNECTED TO THE FOUNDATION, SILL, PLATE, OR BOTTOM PLATE. A MINIMUM OF A 1-1/4" x 20 GA. ASTM A653 GRADE 33 STEEL STRAP SHALL BE NAILED TO THE WALL STUDS AND HAVE A MINIMUM EMBEDMENT OF 7 INCHES IN CONCRETE FOUNDATIONS AND SLABS-ON-GRADE, 15 INCHES IN MASONRY BLOCK FOUNDATIONS, OR BE LAPPED UNDER THE BOTTOM PLATE. 3 INCH SQUARE WASHERS SHALL BE USED ON THE ANCHOR BOLTS AND ANCHOR BOLT SPACINGS SHALL NOT EXCEED THE REQUIREMENTS. STEEL STRAPS EMBEDDED IN OR IN CONTACT WITH SLAB-ON-GRADE OR MASONRY BLOCK FOUNDATIONS SHALL BE HOT-DIPPED GALV. AFTER FABRICATION, OR MANUF. FROM G105 OR Z450 GALV. STL. CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S601.12.

**TABLE S601.1 - ROOF SHEATHING ATTACHMENT REQUIREMENT - WIND LOAD EXP "B"**

SHEATHING LOCATION	RAFTER / TRUSS SPACING	MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	
		E	F
INTERIOR ZONE	12" OC	6	12
	16" OC	6	12
	24" OC	6	12
PERIMETER EDGE ZONE	12" OC	6	6
	16" OC	4	4
	24" OC	3	3

150 MPH WIND - EXPOSURE 'C' TYPICAL  
 E = NAIL SPACING AT PANEL EDGES, INCHES.  
 F = NAIL SPACING AT INTERMEDIATE SUPPORTS IN THE PANEL FIELD, INCHES.

**TABLE S601.2 - WALL SHEATHING AND CLADDING REQUIREMENT - WIND LOAD EXP "B"**

SHEATHING LOCATION	RAFTER / TRUSS SPACING	MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	
		E	F
INTERIOR ZONE	12" OC	6	12
	16" OC	6	12
	24" OC	6	12
PERIMETER EDGE ZONE	12" OC	6	6
	16" OC	4	4
	24" OC	3	3

150 MPH WIND - EXPOSURE 'C' TYPICAL  
 E = NAIL SPACING AT PANEL EDGES, INCHES.  
 F = NAIL SPACING AT INTERMEDIATE SUPPORTS IN THE PANEL FIELD, INCHES.

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DATE: \_\_\_\_\_  
 REVISIONS: \_\_\_\_\_  
 # DESCRIPTION: \_\_\_\_\_  
 SEAL: \_\_\_\_\_

NEW OFFICE BUILDING  
 MCMATH  
 LOT 2C PHILLIPS BUSINESS PARK  
 2092 GAUSE BLVD, EAST, SLIDELL, LA 70461  
 JOB NO: 2416 DATE: 4/17/2020  
 DRAWN BY: DD/KJK CHECKED BY: CKD

SHEET TITLE:  
 TYPICAL CONNECTION  
 DETAILS, SCHEDULES, AND  
 NOTES

DRAWING NUMBER:  
**S601**

SHEET NO: \_\_\_\_\_ OF \_\_\_\_\_