

TABLE S601.7 - UPLIFT CONNECTIONS - 140 MPH WINDS EXP "B"
NFCM 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" X 20 GAGE STRAP
ROOF ASSEMBLY TO WALL ASSEMBLY	16" OC	16	401	292	152R	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 - 140 MPH WIND EXP "B"
NFCM 2015 TABLE 3.2C

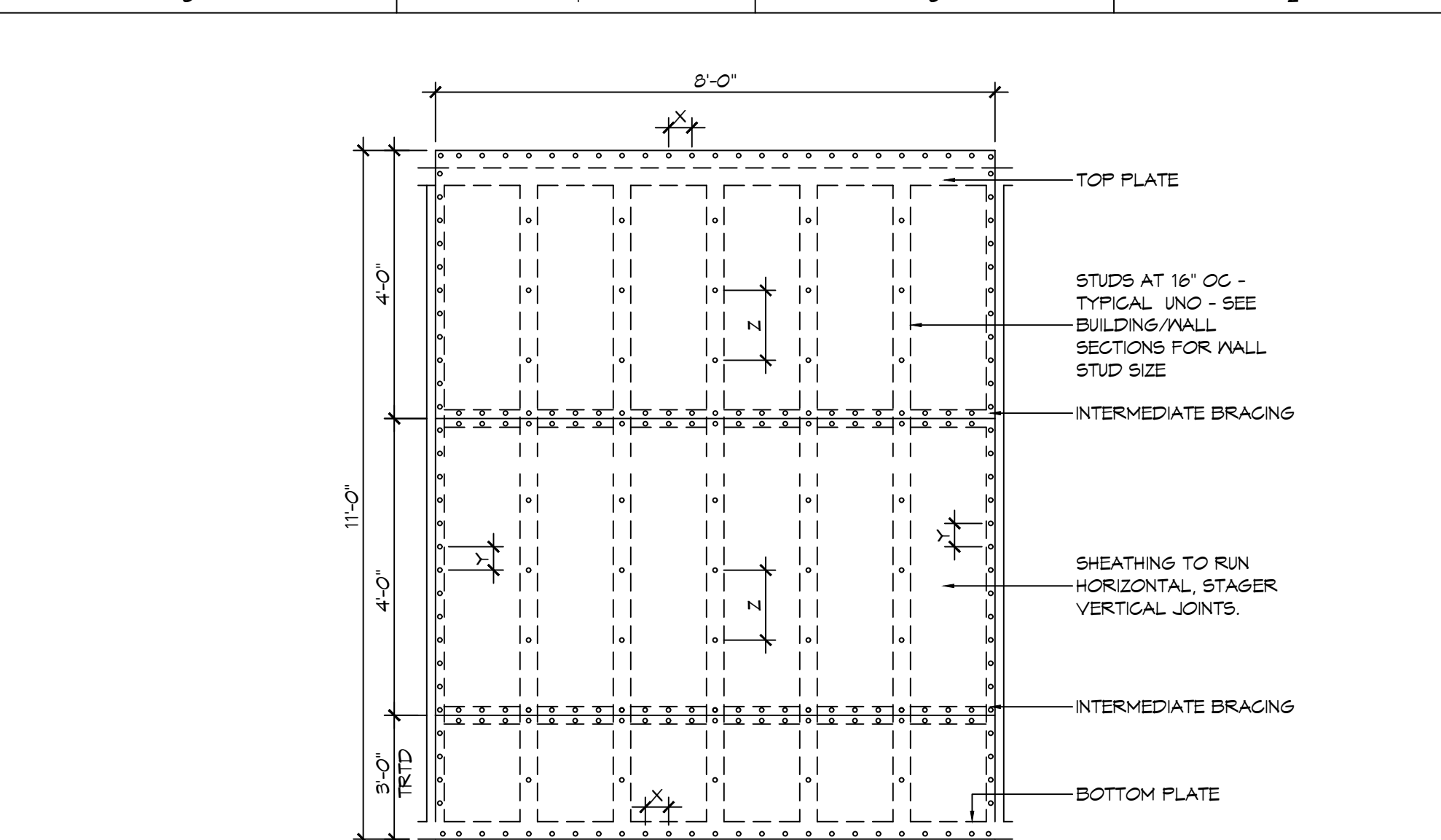
BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING UPLIFT LOADS	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	
		8' END ZONES	INTERIOR ZONES
1 - 3 STORIES	25 INCHES ON CENTER	30 INCHES ON CENTER	
		NOTE: A MINIMUM OF ONE ANCHOR BOLT SHALL BE PROVIDED WITHIN 6 TO 12 INCHES OF EACH END OF EACH PLATE	

TABLE S601.9 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING SHEAR LOADS - 140 MPH WIND EXP "B"
NFCM 2015 TABLE 3.2B

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING UPLIFT LOADS	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	
		5/8" Ø ANCHOR BOLTS	48 INCHES ON CENTER W/3X3X1/4" WASHER
4 STORY	48 INCHES ON CENTER W/3X3X1/4" WASHER	NOTE: A MINIMUM OF ONE ANCHOR BOLT SHALL BE PROVIDED WITHIN 6 TO 12 INCHES OF EACH END OF EACH PLATE	

TABLE S601.10 - FULL HEIGHT STUD REQUIREMENT FOR HEADERS OR WINDOW SILL PLATES IN EXTERIOR WALLS EXPOSURE "B"
NFCM 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



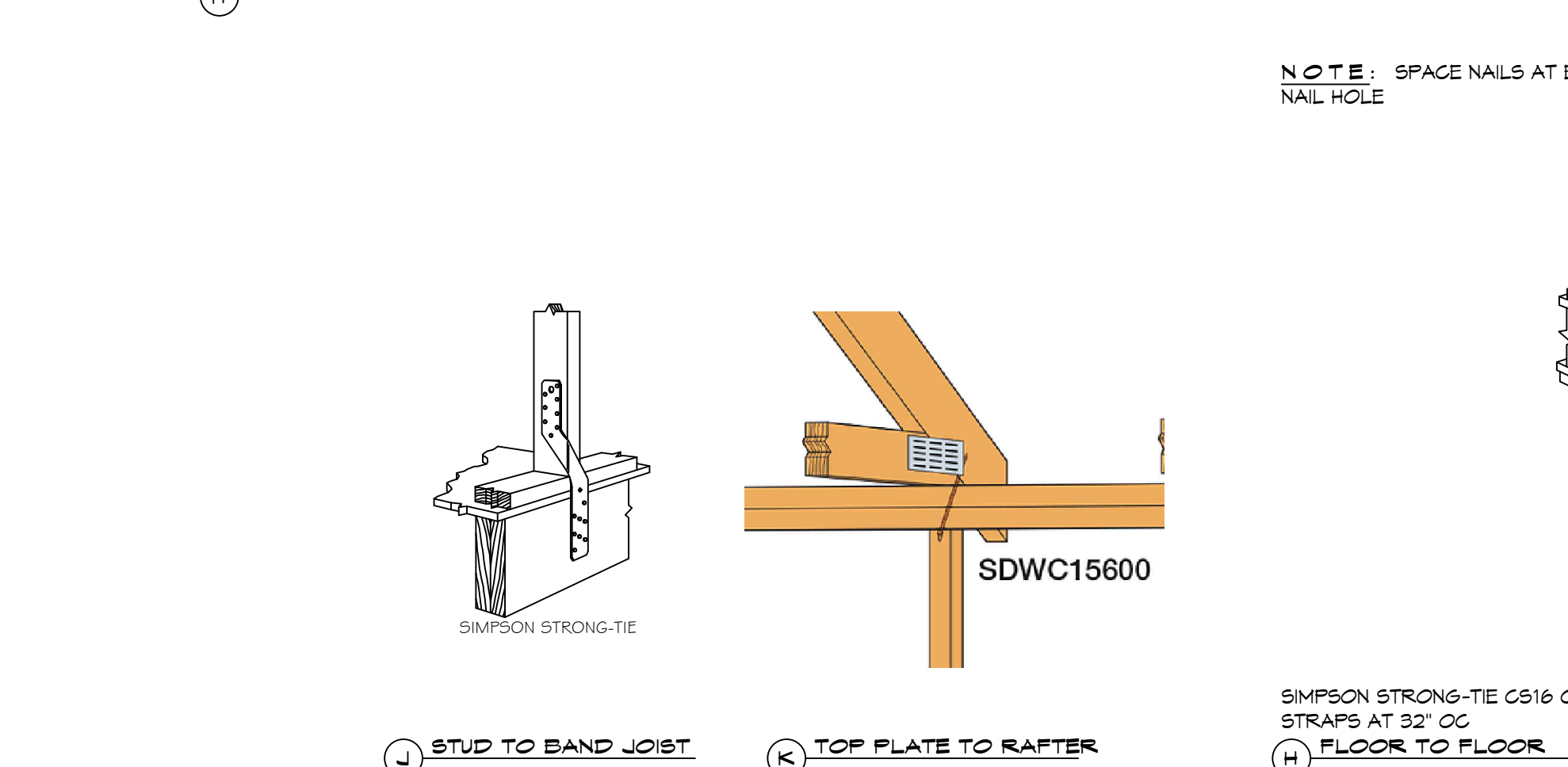
NAIL SPACING
X = 4" OC
Y = 4" OC
Z = 12" OC

INTERIOR SHEATHING
1/2" PLYWOOD EACH FACE STAGGERED 48" OC. W/8d NAILS @ 4" O.C. FASTENING @ PANEL EDGES 8d NAILS @ 12" O.C. FASTENING @ INTERMEDIATE MEMBERS.

EXTERIOR SHEATHING
5/8" PLYWOOD EACH FACE STAGGERED 48" OC. W/8d NAILS @ 4" O.C. FASTENING @ PANEL EDGES 8d NAILS @ 12" O.C. FASTENING @ INTERMEDIATE MEMBERS.

X = PLATE EDGE NAIL SPACING
Y = LONG EDGE NAIL SPACING
Z = FIELD NAIL SPACING

H SHEAR WALL EXTERIOR SHEATHING NAILING PATTERN



TYPICAL CONNECTION DETAILS
SCALE: NTS

TABLE S601.5 - JACK STUD REQ - INT LOADBEARING WALLS

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
NFCM 2021 TABLE 3.22F

ROOF AND CEILING	HEADER WIDTH - 3" (2-2x), 4.5" (3-2x), 5", 6.5" (4-2x) EACH 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								
ROOF AND CEILING	2	1	1	1	1	1	1	1	1	1
	4	1	1	1	1	1	1	1	1	1
	6	2	1	1	1	2	1	1	1	1
	8	2	2	2	1	2	2	2	1	1
	10	3	2	2	2	3	2	2	2	2
	12	3	2	2	2	3	2	2	2	2
	14	4	3	2	2	4	3	2	2	2
	16	4	3	3	2	4	3	3	2	2
ROOF, CEILING, AND ONE CENTER BEARING FLOOR	2	1	1	1	1	1	1	1	1	1
	4	2	1	1	1	2	1	1	1	1
	6	2	2	2	1	3	2	2	2	2
	8	3	2	2	2	3	2	2	2	2
	10	4	3	2	2	4	3	3	2	2
	12	4	3	3	2	5	3	3	3	3
	14	5	4	3	3	5	4	3	3	3
	16	6	4	4	3	6	4	4	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
	24" OC	4	4

TABLE S601.1 - 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	6
PERIMETER EDGE ZONE	12" OC	6	12
	16" OC	6	12

TABLE S601.3 - NAILING SCHEDULE NFCM 2015 TABLE 3.1

DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	SPACING
HEADER TO HEADER (FACE NAILED)	16d	16d	16" OC EDGES

TABLE S601.4 - BUILDING ENVELOPE REQUIREMENTS

ROOFS	OPAQUE ELEMENTS		INSULATION MIN. R-VALUE
	ASSEMBLY MAXIMUM	INSULATION MIN. R-20.0 G.I.	
ROOFS	METAL BUILDING	U-0.065	R-19
	ATTIC AND OTHER	U-0.027	R-30
	MASS	U-0.151	R-5.7 G.I.
WALLS, ABOVE GRADE	METAL BUILDING	U-0.113	R-19.0
	STEEL-FRAMED	U-0.124	R-19.0
	WOOD-FRAMED AND OTHER	U-0.089	R-19.0
FLOORS	MASS	U-0.107	R6-3 G.I.
	STEEL JOIST	U-0.052	R-19.0
	WOOD FRAMED AND OTHER	U-0.051	R-19.0
SLAB-ON-GRADE	UN-HEATED	F-0.750	NR
OPAQUE DOORS	SWINGING	U-0.700	NR
	NON-SWINGING	U-1.450	NR

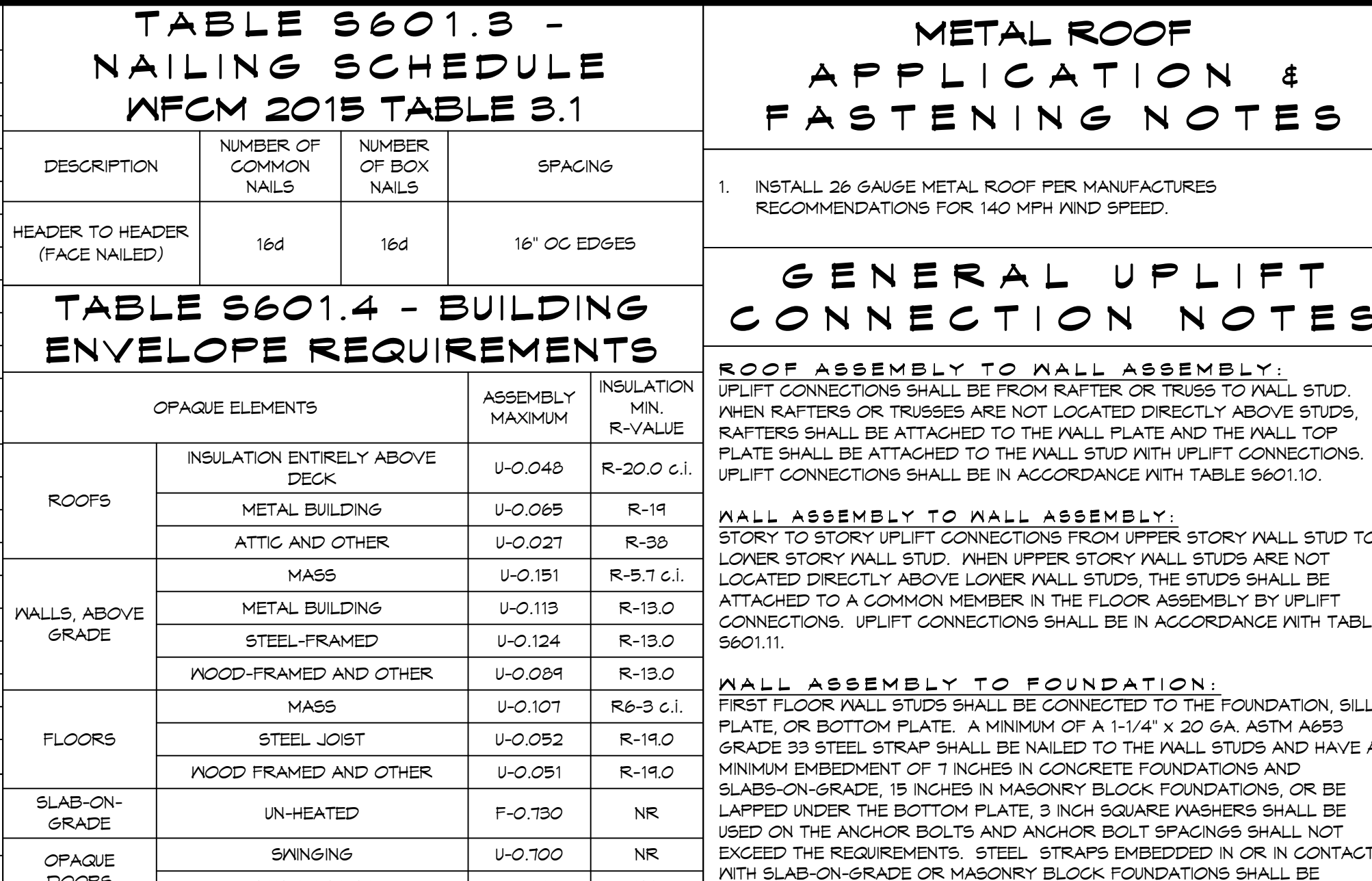


TABLE S601.1 - ROOF SHEATHING ATTACHMENT REQUIREMENT - WIND LOAD EXP "B"

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
	24" OC	4	4

TABLE S601.1 - 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	6
PERIMETER EDGE ZONE	12" OC	6	12
	16" OC	6	12

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HEADER TO HEADER (FACE NAILED)	16d	16d	16" OC EDGES

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	STEEL JOIST	U-0.052	R-19.0
	WOOD FRAMED AND OTHER	U-0.051	R-19.0
SLAB-ON-GRADE	UN-HEATED	F-0.750	NR
OPAQUE DOORS	SWINGING	U-0.700	NR
	NON-SWINGING	U-1.450	NR

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	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
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	6	2	1	1	1	3	2	2	2	4	3	2	2
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		3'	4.5'	5'	6.5'	3'	4.5'	5'	6.5'	
		NUMBER OF JACK STUDS REQUIRED								
ROOF AND CEILING	2	1	1	1	1	1	1	1	1	1
	4	1	1	1	1	1	1	1	1	1
	6	2	1	1	1	2	1	1	1	1
	8	2	2	2	1	2	2	2	1	1
	10	3	2	2	2	3	2	2	2	2
	12	3	2	2	2	3	2	2	2	2
	14	4	3	2	2	4	3	2	2	2
	16	4	3	3	2	4	3	3	2	2
ROOF, CEILING, AND ONE CENTER BEARING FLOOR	2	1	1	1	1	1	1	1	1	1
	4	2	1	1	1	2	1	1	1	1
	6	2	2	2	1	3	2	2	2	2
	8	3	2	2	2	3	2	2	2	2
	10	4	3	2	2	4	3	3	2	2
	12	4	3	3	2	5	3	3	3	3
	14	5	4	3	3	5	4	3	3	3
	16	6	4	4	3	6	4	4	3	3

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