

TABLE S102.7 - HEADER SPANS FOR INTERIOR LOAD-BEARING WALLS

HEADERS SUPPORTING	DROPPED HEADER				RAISED HEADER			
	12	24	36	48	12	24	36	48
ONE FLOOR ONLY (SINGLE CENTER BEARING WALL)	(2) 2x4	4'-0"	2'-10"	2'-4"	4'-1"	2'-10"	2'-4"	2'-4"
	(2) 2x6	5'-11"	4'-3"	3'-5"	4'-4"	4'-4"	3'-6"	3'-6"
	(2) 2x8	6'-10"	5'-2"	4'-4"	5'-5"	4'-5"	4'-5"	4'-5"
	(2) 2x10	7'-11"	6'-0"	5'-0"	6'-6"	6'-6"	5'-3"	5'-3"
TWO FLOORS (CENTER BEARING)	(3) 2x4	8'-5"	6'-4"	5'-7"	10'-4"	7'-7"	6'-3"	6'-3"
	(3) 2x6	9'-3"	6'-4"	5'-3"	8'-10"	6'-10"	5'-7"	5'-7"
	(3) 2x8	10'-5"	7'-11"	6'-0"	11'-5"	8'-11"	6'-7"	6'-7"
	(3) 2x10	11'-7"	8'-11"	7'-0"	12'-10"	9'-4"	7'-4"	7'-4"

TABLE S102.8 - HEADER SPANS FOR EXTERIOR LOAD-BEARING WALLS RESISTING WIND LOADS EXP "C"

SIZE	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH	195 MPH
	(2) 2x4	4'-9"	4'-4"	4'-1"	3'-10"	3'-7"	3'-5"	3'-2"
(2) 2x6	6'-9"	5'-4"	5'-0"	4'-5"	4'-5"	4'-2"	4'-2"	3'-10"
(2) 2x8	8'-10"	6'-4"	5'-11"	5'-6"	4'-10"	4'-7"	4'-3"	4'-3"
(2) 2x10	10'-11"	7'-4"	6'-9"	5'-11"	5'-6"	4'-11"	4'-6"	4'-10"
(3) 2x4	8'-5"	7'-4"	6'-4"	5'-11"	5'-7"	5'-3"	4'-10"	4'-10"
(3) 2x6	9'-3"	7'-4"	6'-4"	5'-11"	5'-7"	5'-3"	4'-10"	4'-10"
(3) 2x8	10'-5"	8'-3"	7'-3"	6'-10"	6'-10"	6'-5"	5'-11"	5'-11"
(3) 2x10	11'-7"	9'-7"	8'-11"	8'-4"	7'-4"	6'-11"	6'-5"	6'-5"
(4) 2x4	11'-7"	10'-3"	9'-6"	8'-4"	7'-10"	7'-10"	6'-10"	6'-10"

TABLE S102.9 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING UPLIFT LOADS - 110 MPH WIND EXP "C"

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING		INTERIOR ZONES		EXTERIOR ZONES	
	1 - 3 STORES	4+ STORES	50 INCHES ON CENTER	58 INCHES ON CENTER	50 INCHES ON CENTER	58 INCHES ON CENTER
FOUNDATION SUPPORTING	12" OC	12" OC	12" OC	12" OC	12" OC	12" OC
	16" OC	16" OC	16" OC	16" OC	16" OC	16" OC
	24" OC	24" OC	24" OC	24" OC	24" OC	24" OC
	36" OC	36" OC	36" OC	36" OC	36" OC	36" OC

TABLE S102.10 - BOTTOM PLATE TO FOUNDATION CONNECTIONS (ANCHOR BOLTS) RESISTING LATERAL & SHEAR LOADS - EXP "C"

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING		EXTERIOR ZONES	
	1 STORY	2+ STORES	50 INCHES ON CENTER	58 INCHES ON CENTER
FOUNDATION SUPPORTING	12" OC	12" OC	12" OC	12" OC
	16" OC	16" OC	16" OC	16" OC
	24" OC	24" OC	24" OC	24" OC
	36" OC	36" OC	36" OC	36" OC

TABLE S102.11 - FULL HEIGHT STUD REQUIREMENT FOR HEADERS OR WINDOW SILL PLATES IN EXTERIOR WALLS EXP "C"

HEADER SPAN (FEET)	12" OC				16" OC				24" OC			
	1	2	3	4	1	2	3	4	1	2	3	4
2	1	1	1	1	1	1	1	1	1	1	1	1
4	2	2	2	2	2	2	2	2	2	2	2	2
6	3	3	3	3	3	3	3	3	3	3	3	3
8	4	4	4	4	4	4	4	4	4	4	4	4
10	5	5	5	5	5	5	5	5	5	5	5	5
12	6	6	6	6	6	6	6	6	6	6	6	6
14	7	7	7	7	7	7	7	7	7	7	7	7
16	8	8	8	8	8	8	8	8	8	8	8	8

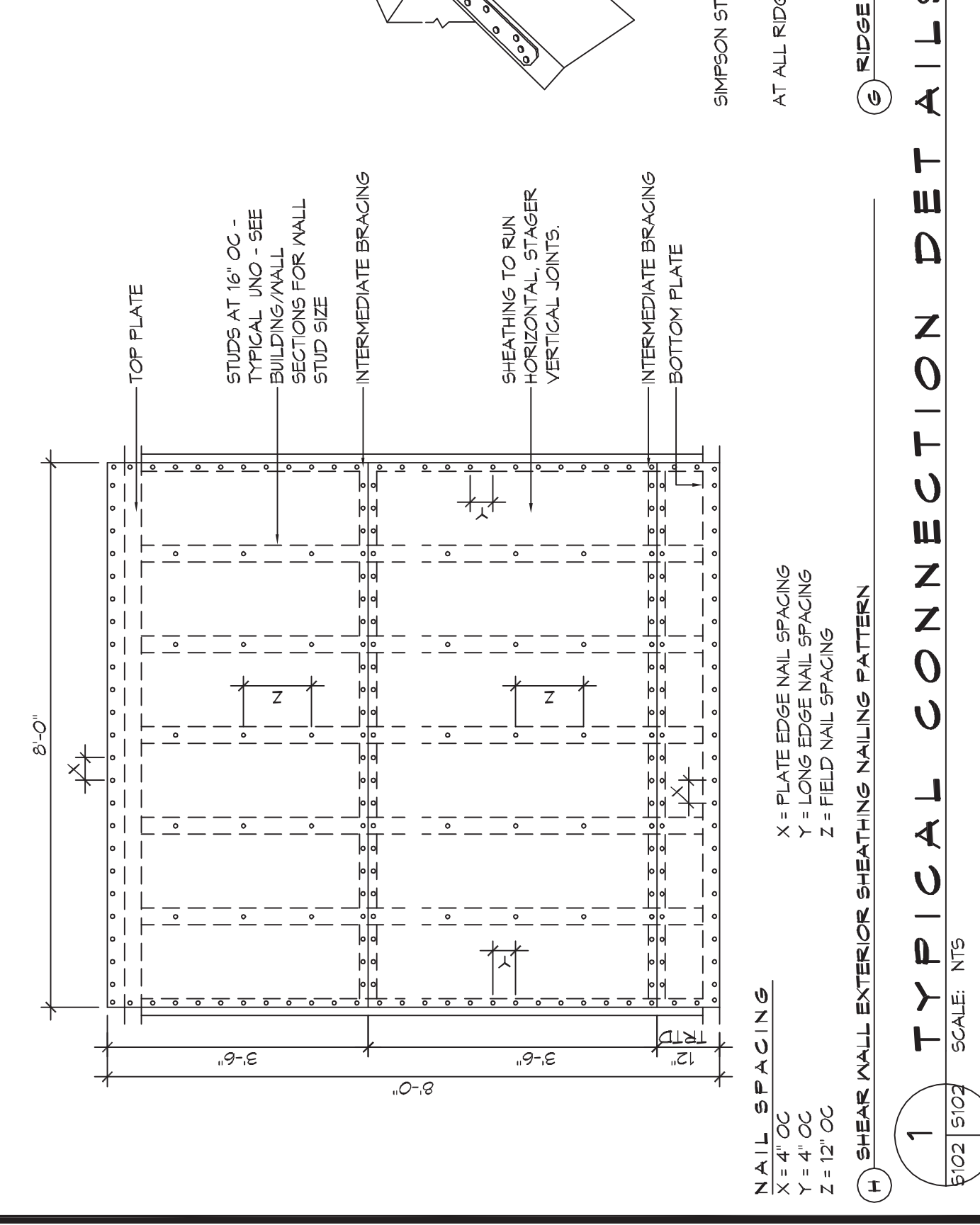


TABLE S102.5 - JACK STUD REQ - INT LOADBEARING WALLS

HEADER SPAN (FT)	ROOF SPAN (FEET)					
	3'	4.5'	5'	6'	8'	10'
2	1	1	1	1	1	1
4	1	1	1	1	1	1
6	1	1	1	1	1	1
8	1	1	1	1	1	1
10	1	1	1	1	1	1
12	1	1	1	1	1	1
14	2	1	1	1	1	1
16	2	1	1	1	1	1
18	2	1	1	1	1	1
20	2	1	1	1	1	1
22	2	1	1	1	1	1
24	2	1	1	1	1	1
26	2	1	1	1	1	1
28	2	1	1	1	1	1
30	2	1	1	1	1	1
32	2	1	1	1	1	1
34	2	1	1	1	1	1
36	2	1	1	1	1	1

TABLE S102.6 - JACK STUD REQ - EXTERIOR LOADBEARING WALLS

HEADER SPAN (FT)	GROUND SNOW LOAD 30 PSF					
	3'	4.5'	5'	6'	8'	10'
2	1	1	1	1	1	1
4	1	1	1	1	1	1
6	1	1	1	1	1	1
8	1	1	1	1	1	1
10	1	1	1	1	1	1
12	1	1	1	1	1	1
14	1	1	1	1	1	1
16	1	1	1	1	1	1
18	1	1	1	1	1	1
20	1	1	1	1	1	1
22	1	1	1	1	1	1
24	1	1	1	1	1	1
26	1	1	1	1	1	1
28	1	1	1	1	1	1
30	1	1	1	1	1	1
32	1	1	1	1	1	1
34	1	1	1	1	1	1
36	1	1	1	1	1	1

TABLE S102.4 - BUILDING ENVELOPE REQUIREMENTS

OPaque ELEMENTS	INSULATION ASSEMBLY MINIMUM R-VALUE	MINIMUM R-VALUE
ROOFS	INSULATION ENTIRELY ABOVE DECK	U-0.048 R-20.0 c.i.
WALLS	METAL BUILDING	R-19
	ATTIC AND OTHER	R-39
FLOORS	MAS5	U-0.027 R-37 c.i.
	METAL BUILDING STEEL-FRAMED	U-0.124 R-13.0
CEILING	WOOD-FRAMED AND OTHER	U-0.084 R-13.0
	MAS5	U-0.107 R-9.3 c.i.
DOORS	STEEL JOIST	U-0.052 R-19.0
	WOOD FRAMED AND OTHER	U-0.051 R-19.0
GLAZING	UNHEATED	F-0.750 NR
	HEATED	U-0.700 NR
PARTITIONS	NON-SWINGING	U-1.450 NR
	SWINGING	U-1.450 NR

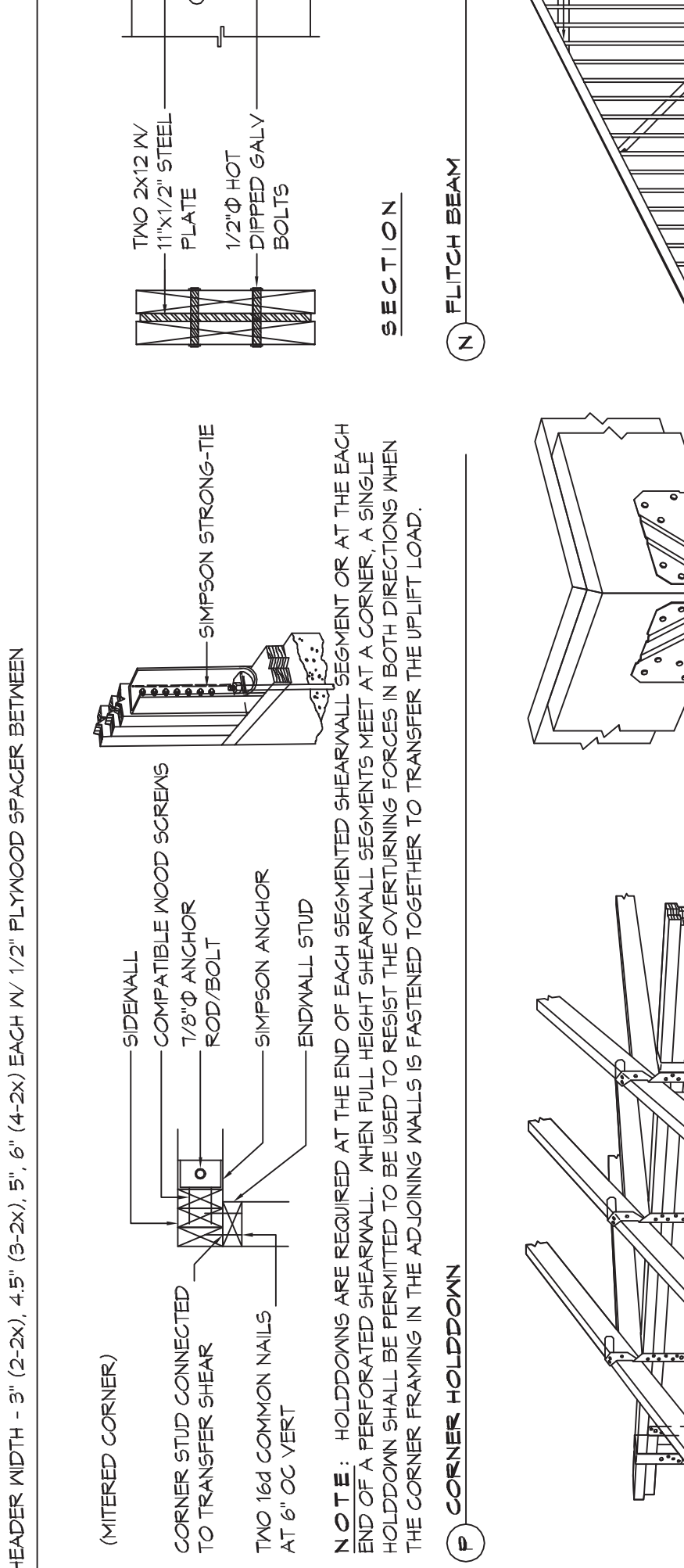
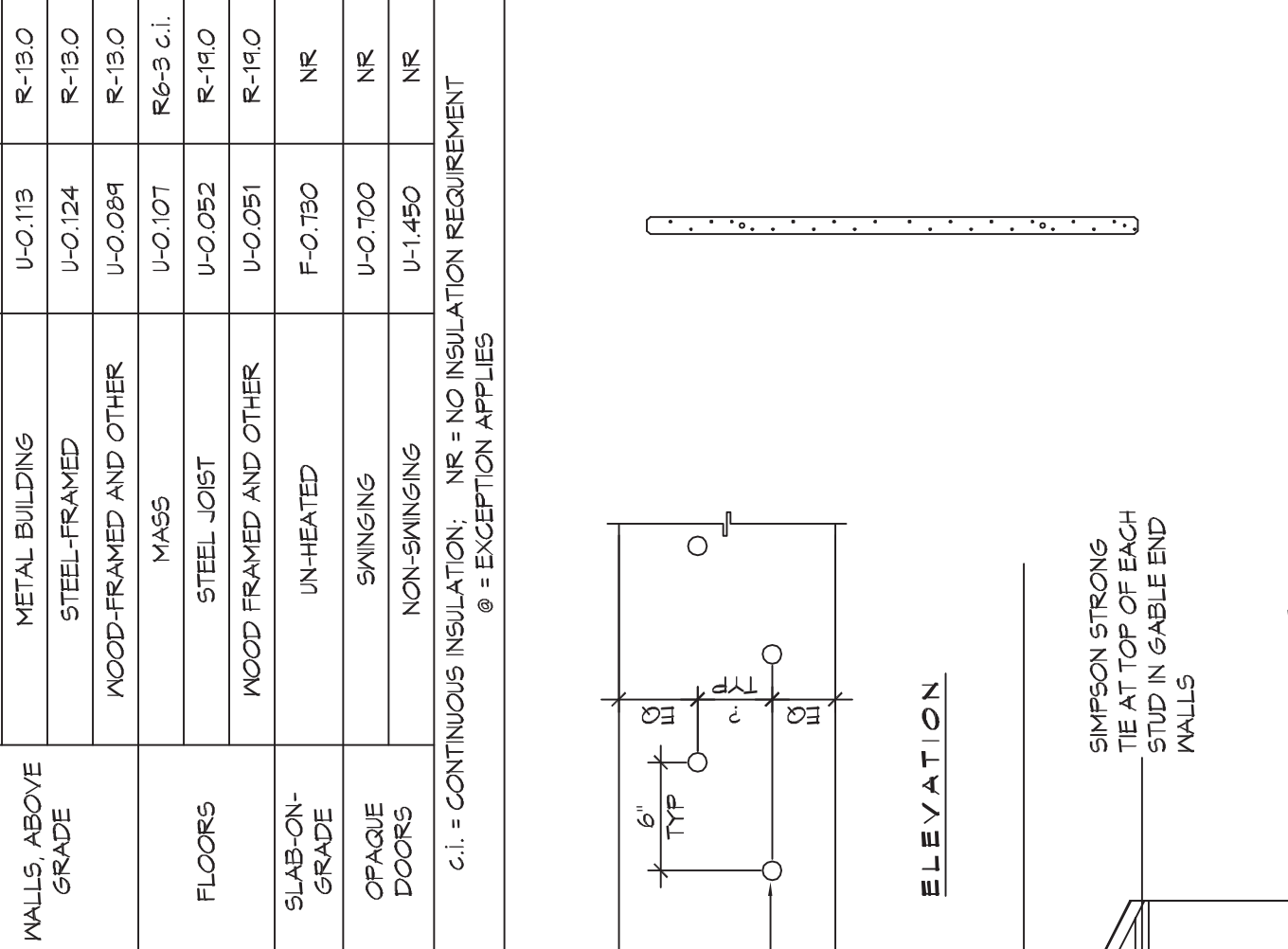


TABLE S102.3 - NAILING SCHEDULE

DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF COMMON NAILS PER FOOT	SPACING
TOP PLATE TO TOP PLATE (FACE NAILED)	2-16d	2-16d	PER FOOT
TOP PLATE AT INTERSECTION (FACE)	4-16d	5-16d	JONTS - EACH SIDE
STUD TO STUD (FACE-NAILED)	2-16d	2-16d	24" OC
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 BAND JOIST END JOIST OR BLOCKING	2-16d	2-16d	PER FOOT

TABLE S102.2 - WALL SHEATHING ENVELOPE REQUIREMENTS

WOOD STRUCTURAL PANELS	8d	10d	SEE TABLE S102.1
DIAGONAL BOARD SHEATHING	2-8d	2-10d	PER SUPPORT
1X10" OR WIDER	3-8d	3-10d	PER SUPPORT



UNDER ROOF UNDERLAYMENT NOTES

- FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (16.7% SLOPE) UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33.3% SLOPE) THE UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER:
 - APPLY A 1/4" THICK STRIP OF UNDERLAYMENT FELT PARALLEL WITH AND STARTING AT THE EAVES. FASTENED SUFFICIENTLY TO HOLD IN PLACE.
 - APPLY THE EAVE APPLY 36" WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 14" INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE.
- FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33.3% 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.

APPLICATION & FASTENING NOTES

- ASPHALT STRIP SHINGLES SHALL HAVE A MINIMUM OF SIX FASTENERS PER SHINGLE WHERE THE ROOF 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.

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 STUD WITH UPLIFT CONNECTIONS. UPLIFT CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S102.10.

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 S102.11.

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 GALV. STEEL ANCHOR BOLT SHALL BE USED TO ATTACH THE WALL STUD TO THE FOUNDATION. THE ANCHOR BOLT SHALL BE 15 INCHES LONG AND SHALL BE 3 INCHES FROM THE EDGE OF THE FOUNDATION. THE ANCHOR BOLT SHALL BE 3 INCHES FROM THE EDGE OF THE FOUNDATION. THE ANCHOR BOLT SHALL BE 3 INCHES FROM THE EDGE OF THE FOUNDATION. THE ANCHOR BOLT SHALL BE 3 INCHES FROM THE EDGE OF THE FOUNDATION.

TABLE S102.1 - ROOF SHEATHING OR CLADDING REQUIREMENT - 110 MPH WIND LOAD EXP "C"

SHEATHING LOCATION	RAFTER / TRUSS SPACING	MAXIMAL 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	12
	16" OC	6	12
	24" OC	6	12

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