

TABLE S601.7 - HEADER SPANS FOR INTERIOR LOAD-BEARING WALLS

HEADERS SUPPORTING	SIZE	DROPPED HEADER		RAISED HEADER	
		BUILDING WIDTH (FT)	MAXIMUM HEADER SPAN	BUILDING WIDTH (FT)	MAXIMUM HEADER SPAN
SUPPORTING	(2) 2x4	12	24	12	24
	(2) 2x6	12	36	12	36
	(2) 2x8	12	36	12	36
	(2) 2x10	12	36	12	36
ONE FLOOR ONLY (ENGINE CENTER BRANCHED WALL)	(2) 2x10	12	36	12	36
	(3) 2x8	12	36	12	36
	(3) 2x10	12	36	12	36
	(4) 2x12	12	36	12	36

TABLE S601.8 - 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	5'-1"	4'-8"	4'-4"	4'-1"	3'-10"	3'-7"	3'-5"	3'-2"
(2) 2x6	6'-3"	5'-9"	5'-4"	5'-0"	4'-8"	4'-5"	4'-2"	3'-10"
(2) 2x8	6'-10"	6'-4"	5'-11"	5'-6"	5'-2"	4'-10"	4'-7"	4'-3"
(2) 2x10	7'-4"	6'-10"	6'-4"	5'-11"	5'-6"	5'-2"	4'-11"	4'-6"
(3) 2x8	8'-5"	7'-8"	7'-2"	6'-8"	6'-4"	5'-11"	5'-7"	5'-2"
(3) 2x10	9'-0"	8'-4"	7'-8"	7'-3"	6'-8"	6'-4"	6'-0"	5'-7"
(3) 2x12	9'-11"	8'-5"	7'-8"	7'-3"	6'-8"	6'-4"	6'-0"	5'-7"
(4) 2x8	9'-8"	8'-0"	7'-4"	7'-0"	6'-10"	6'-6"	6'-2"	6'-0"
(4) 2x10	10'-5"	8'-7"	8'-11"	8'-4"	7'-10"	7'-4"	6'-11"	6'-5"
(4) 2x12	11'-1"	11'-1"	10'-5"	9'-6"	8'-11"	8'-4"	7'-10"	6'-10"

TABLE S601.9 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING UPLIFT LOADS - 110 MPH WIND EXP "C"

FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	
	FOUNDATION ANCHOR BOLT CONNECTION	FOUNDATION ANCHOR BOLT CONNECTION
1 - 3 STORES	50 INCHES ON CENTER	58 INCHES ON CENTER
	50 INCHES ON CENTER	58 INCHES ON CENTER
8 END ZONES	50 INCHES ON CENTER	58 INCHES ON CENTER
	50 INCHES ON CENTER	58 INCHES ON CENTER

TABLE S601.10 - BOTTOM PLATE TO FOUNDATION CONNECTIONS (ANCHOR BOLTS) RESISTING LATERAL & SHEAR LOADS - EXP "C"

FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	
	FOUNDATION ANCHOR BOLT CONNECTION	FOUNDATION ANCHOR BOLT CONNECTION
1 STORY	18" O.C.	24" O.C.
	18" O.C.	24" O.C.
1 1/2" O ANCHOR BOLTS	18" O.C.	24" O.C.
	18" O.C.	24" O.C.
2	1	1
	2	2
4	1	1
	2	2
6	1	1
	2	2
8	1	1
	2	2
10	1	1
	2	2
12	1	1
	2	2
14	1	1
	2	2
16	1	1
	2	2

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

HEADER SPAN (FT)	ROOF SPAN (FEET)					
	12 FEET	24 FEET	36 FEET	48 FEET	60 FEET	72 FEET
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
38	1	1	1	1	1	1
40	1	1	1	1	1	1
42	1	1	1	1	1	1
44	1	1	1	1	1	1
46	1	1	1	1	1	1
48	1	1	1	1	1	1
50	1	1	1	1	1	1
52	1	1	1	1	1	1
54	1	1	1	1	1	1
56	1	1	1	1	1	1
58	1	1	1	1	1	1
60	1	1	1	1	1	1

TABLE S601.6 - JACK STUD REQ - EXTERIOR LOADBEARING WALLS

HEADER SPAN (FT)	ROOF LIVE LOAD 20 PSF						GROUND SNOW LOAD 20 PSF					
	3'	4.5'	6'	7.5'	9'	10.5'	3'	4.5'	6'	7.5'	9'	10.5'
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	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1	1	1	1
32	1	1	1	1	1	1	1	1	1	1	1	1
34	1	1	1	1	1	1	1	1	1	1	1	1
36	1	1	1	1	1	1	1	1	1	1	1	1
38	1	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1	1
42	1	1	1	1	1	1	1	1	1	1	1	1
44	1	1	1	1	1	1	1	1	1	1	1	1
46	1	1	1	1	1	1	1	1	1	1	1	1
48	1	1	1	1	1	1	1	1	1	1	1	1
50	1	1	1	1	1	1	1	1	1	1	1	1
52	1	1	1	1	1	1	1	1	1	1	1	1
54	1	1	1	1	1	1	1	1	1	1	1	1
56	1	1	1	1	1	1	1	1	1	1	1	1
58	1	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1	1

TABLE S601.3 - NAILING SCHEDULE

DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	SPACING
TOP PLATE AT INTERSECTION (FACE)	4-16d	5-16d	JUNTS - EACH SIDE
STUD TO STUD (FACE NAILS)	2-16d	2-16d	24" O.C.
HEADER TO HEADER (FACE NAILS)	16d	16d	16" O.C. EDGES
TOP OR BOTTOM PLATE TO STUD (END)	SEE TABLE	SEE TABLE	FER STUD
FLOOR JOIST BANDJOIST END JOIST OR BLOCKING	2-16d	2-16d	FER FOOT
WOOD STRUCTURAL PANELS	8d	10d	SEE TABLE S 601.1
DIAGONAL BOARD SHEATHING 1x6" OR 1x8"	2-8d	2-10d	FER SUPPORT
1x10" OR WIDER	3-8d	3-10d	FER SUPPORT

TABLE S601.4 - BUILDING ENVELOPE REQUIREMENTS

OFFICE ELEMENTS	INSULATION MIN. R-VALUE	
	U-0.048	R-20.0 c1
INSULATION ENTIRELY ABOVE DECK	U-0.048	R-18
METAL BUILDING	U-0.021	R-38
ATTIC AND OTHER	U-0.021	R-38
MAS5	U-0.119	R-5.1 c1, 8
METAL BUILDING	U-0.119	R-13.0
STEEL-FRAMED	U-0.124	R-13.0
WOOD-FRAMED AND OTHER	U-0.084	R-13.0
MAS5	U-0.101	R-6.9 c1
FLOORS	U-0.052	R-14.0
WOOD FRAMED AND OTHER	U-0.051	R-14.0
UNHEATED	F-0.130	NR
SLAB-ON-GRADE	U-0.100	NR
GRADE	U-0.100	NR
NON-SWIMMING	U-1.450	NR

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 1/4" STRIP OF UNDERLAYMENT FELT PARALLEL WITH AND STARKING AT THE EAVE, FASTENED SUFFICIENTLY TO HOLD IN PLACE UNDERLAYMENT, OVERLAYING SUCCESSIVE SHEETS OF UNDERLAYMENT TO OVERLAP BY 2" 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 SHINGLE FASHION, PARALLEL TO THE DIRECTION OF THE SLOPE, FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAYERS 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:
 - 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.

GENERAL UPLIFTS CONNECTION NOTES

- ROOF ASSEMBLY TO WALL ASSEMBLY:**
 UPLIFT CONNECTIONS SHALL BE FROM RAFTER OR RIDGE TO WALL STUD. WHEN RAFTERS ARE NOT LOCATED DIRECTLY ABOVE STUDS, UPLIFT 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:**
 UPLIFT CONNECTIONS SHALL BE FROM UPPER STORY WALL STUD TO LOWER STORY WALL STUD. UPLIFT 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:**
 UPLIFT CONNECTIONS SHALL BE FROM FOUNDATION TO WALL STUDS AND HAVE A MINIMUM EMBEDMENT OF 1 INCHES IN CONCRETE FOUNDATIONS AND SLAB-ON-GRADE. 15 INCHES IN MASONRY BLOCK FOUNDATIONS, OR BE LAPPED UNDER THE BOTTOM PLATE. 3 INCH SQUARE WEDGES SHALL NOT BE USED FOR THE ANCHOR BOLTS AND ANCHOR BOLT SPACINGS SHALL NOT EXCEED THE REQUIREMENTS FOR STEEL STUD FOUNDATIONS. UPLIFT SHALL BE ATTACHED TO A COMMON MEMBER IN THE FLOOR ASSEMBLY BY UPLIFT CONNECTIONS. UPLIFT CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S601.12.

TABLE S601.1 - ROOF SHEATHING OR CLADDING REQUIREMENT - 110 MPH WIND LOAD EXP "C"

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

TABLE S601.2 - WALL SHEATHING OR CLADDING REQUIREMENT - 110 MPH WIND LOAD EXP "C"

SHEATHING LOCATION	STUD SPACING	MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES O.C.)	
		E	F
INTERIOR ZONE	12" O.C.	6	12
	16" O.C.	6	12
PERIMETER EDGE ZONE	12" O.C.	6	12
	16" O.C.	6	12
PERIMETER EDGE ZONE	24" O.C.	6	6
	24" O.C.	6	12

TABLE S601.3 - NAILING SCHEDULE

DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	SPACING
TOP PLATE AT INTERSECTION (FACE)	4-16d	5-16d	JUNTS - EACH SIDE
STUD TO STUD (FACE NAILS)	2-16d	2-16d	24" O.C.
HEADER TO HEADER (FACE NAILS)	16d	16d	16" O.C. EDGES
TOP OR BOTTOM PLATE TO STUD (END)	SEE TABLE	SEE TABLE	FER STUD
FLOOR JOIST BANDJOIST END JOIST OR BLOCKING	2-16d	2-16d	FER FOOT
WOOD STRUCTURAL PANELS	8d	10d	SEE TABLE S 601.1
DIAGONAL BOARD SHEATHING 1x6" OR 1x8"	2-8d	2-10d	FER SUPPORT
1x10" OR WIDER	3-8d	3-10d	FER SUPPORT

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#	DESCRIPTION	DATE