

UPLIFT CONNECTIONS - 130MPH WINDS EXP. "B"				
CONNECTION	FRAMING SPACING (in.)	ROOF SPAN (ft.)	NUM. OF 6d COM. NAILS OR 10d BOX NAILS IN EA. END OF 1-1/4"x20 GA. STRAP	
ROOF ASSEMBLY TO WALL ASSEMBLY	16" O.C.	17	306	4
WALL ASSEMBLY TO WALL ASSEMBLY	16" O.C.	17	306	4
WALL ASSEMBLY TO FOUNDATION	16" O.C.	17	170	436

THERMAL COMPONENT CRITERIA (U-FACTOR AND R-VALUE)				
MINIMUM INSULATION R-VALUE				
MAX. GLAZING U-FACTOR	CEILING WALLS	FLOORS	BASEMENT WALLS	CREWL SPACE WALLS
0.25	0.25	0.11	0.5	0.5

WALL SHEATH. OR CLAD. REQ. FOR WIND LOAD-EXP. B

SHEATHING LOCATION	STUD SPAC.	MAX. NAIL SPAC. FOR 8d COM. NAILS OR 10d BOX NAILS (INCHES, O.C.)	E	F
1" OR GREATER	12" O.C.	6	12	12
	16" O.C.	6	12	12
2" O.C.	12" O.C.	6	12	12
	16" O.C.	6	12	12
2 1/2" O.C.	12" O.C.	6	12	12
	16" O.C.	6	12	12
3" O.C.	12" O.C.	6	12	12
	16" O.C.	6	12	12

ROOF UNDERLAMENT APPLICATION

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), UNDERLAMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER:

APPLY A 19 INCH STRIP OF UNDERLAMENT FELT PARALLEL WITH AND STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36 INCH WIDE SHEETS OF UNDERLAMENT 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, UNDERLAMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER:

UNDERLAMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. END UNITS SHALL BE OFFSET BY 6 FEET.

SHINGLE APPLICATION/FASTENING

ASPHALT STRIP SHINGLES SHALL HAVE A MINIMUM OF SIX FASTENERS PER SHINGLE STRIP. THE ROOF IS IN ONE OF THE FOLLOWING CATEGORIES:

1. THE BASIC WIND SPEED IS 120 MPH OR GREATER AND THE EAVE IS 20 FEET OR HIGHER ABOVE GRADE.
2. THE BASIC WIND SPEED IS 120 MPH OR GREATER.
3. SPECIAL WIND ZONES.

UPLIFT CONNECTIONS

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.

WALL ASSEMBLY TO WALL ASSEMBLY:

STORY-TO-STORY UPLIFT CONNECTIONS FROM UPPER STORY WALL STUDS TO LOWER STORY WALL STUDS SHALL BE FROM STUD TO STUD. 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.

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 NAIL TO THE WALL STUDS AND HAVE A MINIMUM EXPOSED OF 7 INCHES IN CONCRETE FOUNDATION. THE STRAP SHALL BE NAIL TO THE BOTTOM PLATE OR FOUNDATION, OR BE LAPPED UNDER THE BOTTOM PLATE 3 INCH SQUARE WASHERS SHALL NOT EXCEED THE REQUIREMENTS. STEEL STRAPS EMBEDDED IN OR IN CONTACT WITH SAND-GRADE OR MASONRY BLOCK FOUNDATIONS SHALL BE HOT-DIPPED GALV. STEEL. GALV. SHALL BE IN ACCORDANCE WITH ASTM A153. UPLIFT CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE.

JACK STUD REQUIREMENTS-FOR INTERIOR LOADBEARING WALLS										
HEADER SUPPORTING	HEADER SPAN (ft.)	ROOF SPAN (ft.)					NO. JACK STUDS REQ.			
		12 FEET	5" 12 FEET	5" 12 FEET	5" 12 FEET	5" 12 FEET	3" 4.5"	5" 6.5"	5" 6.5"	
2	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1
14	2	1	1	1	1	1	1	1	1	1
16	2	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1
10	2	1	1	1	1	1	1	1	1	1
12	2	1	1	1	1	1	1	1	1	1
14	3	2	2	2	2	2	2	2	2	2
16	3	2	2	2	2	2	2	2	2	2
4	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1
10	2	1	1	1	1	1	1	1	1	1
12	2	1	1	1	1	1	1	1	1	1
14	3	2	2	2	2	2	2	2	2	2
16	3	2	2	2	2	2	2	2	2	2

JACK STUD REQUIREMENTS-FOR INTERIOR LOADBEARING WALLS										
HEADER SUPPORTING	HEADER SPAN (ft.)	ROOF SPAN (ft.)					NO. JACK STUDS REQ.			
		12 FEET	5" 12 FEET	5" 12 FEET	5" 12 FEET	5" 12 FEET	3" 4.5"	5" 6.5"	5" 6.5"	
2	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1
14	2	1	1	1	1	1	1	1	1	1
16	2	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1
10	2	1	1	1	1	1	1	1	1	1
12	2	1	1	1	1	1	1	1	1	1
14	3	2	2	2	2	2	2	2	2	2
16	3	2	2	2	2	2	2	2	2	2

SILL or BOTTOM PLATE TO FND. CONNECTIONS RESISTING SHEAR LOADS-130MPH WINDS EXP. "B"			
ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAX. ANCHOR BOLT SPACING (in.)	INTERIOR ZONES
1-3/8" DIA. BOLTS	1-3/8" DIA. BOLTS	24	33

SILL or BOTTOM PLATE TO FND. CONNECTIONS RESISTING SHEAR LOADS-130MPH WINDS EXP. "B"			
ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAX. ANCHOR BOLT SPACING (in.)	INTERIOR ZONES
1-3/8" DIA. BOLTS	1-3/8" DIA. BOLTS	24	33

HEADER SPANS-FOR INT. LOADBEARING WALLS				
HEADER SUPPORTING	SIZE	BLDG. WIDTH (ft.)		
		12	24	36
(12x45)	4x4	24	36	48
(12x60)	6x6	36	48	72
(12x75)	8x8	48	72	96
(12x90)	10x10	60	96	120
(12x105)	12x12	72	120	144
(12x120)	14x14	84	144	168
(12x135)	16x16	96	168	192
(12x150)	18x18	108	192	216
(12x165)	20x20	120	216	240
(12x180)	22x22	132	240	264
(12x195)	24x24	144	264	288
(12x210)	26x26	156	288	312
(12x225)	28x28	168	312	336
(12x240)	30x30	180	336	360
(12x255)	32x32	192	360	384
(12x270)	34x34	204	384	408
(12x285)	36x36	216	408	432
(12x300)	38x38	228	432	456
(12x315)	40x40	240	456	480
(12x330)	42x42	252	480	504
(12x345)	44x44	264	504	528
(12x360)	46x46	276	528	552
(12x375)	48x48	288	552	576
(12x390)	50x50	300	576	600
(12x405)	52x52	312	600	624
(12x420)	54x54	324	624	648
(12x435)	56x56	336	648	672
(12x450)	58x58	348	672	696
(12x465)	60x60	360	696	720
(12x480)	62x62	372	720	744
(12x495)	64x64	384	744	768
(12x510)	66x66	396	768	792
(12x525)	68x68	408	792	816
(12x540)	70x70	420	816	840
(12x555)	72x72	432	840	864
(12x570)	74x74	444	864	888
(12x585)	76x76	456	888	912
(12x600)	78x78	468	912	936
(12x615)	80x80	480	936	960
(12x630)	82x82	492	960	984
(12x645)	84x84	504	984	1008

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(12x285)	36x36	216	408	432
(12x300)	38x38	228	432	456
(12x315)	40x40	240	456	480
(12x330)	42x42	252	480	504
(12x345)	44x44	264	504	528
(12x360)	46x46	276	528	552
(12x375)	48x48	288	552	576
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ROOF SHEATH. OR CLAD. REQ. FOR WIND LOAD-EXP. B				
SHEATHING LOCATION	RAFTER/TRUSS SPAC.	MAX. NAIL SPAC. FOR 8d COM. NAILS OR 10d BOX NAILS (INCHES, O.C.)	E	F
1" OR GREATER	12" O.C.	6	12	12
	16" O.C.	6	12	12
2" O.C.	12" O.C.	6	12	12
	16" O.C.	6	12	12
2 1/2" O.C.	12" O.C.	6	12	12
	16" O.C.	6	12	12
3" O.C.	12" O.C.	6	12	12
	16" O.C.	6	12	12

HEADER SPANS-EXPOSURE B FOR EXTERIOR LOADBEARING WALLS			
HEADER SIZE	SPAN	NO. FULL HGT. STUDS REQ. AT EA. END	
(12x45)	4x4	2	
(12x60)	6x6	3	
(12x75)	8x8	4	
(12x90)	10x10	5	
(12x105)	12x12	6	
(12x1			