

**UPLIFT CONNECTIONS- 130MPH WINDS EXP. "B"**

CONNECTION	FRAMING SPACING (in.)	ROOF SPAN (ft.)	U	L	S	NUM. OF 8d 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	386	246	109R	4
WALL ASSEMBLY TO WALL ASSEMBLY	16" O.C.	17	386	246	109R	4
WALL ASSEMBLY TO FOUNDATION	16" O.C.	17	170	185	436	4

**THERMAL COMPONENT CRITERIA (U-FACTOR AND R-VALUE)**

MINIMUM INSULATION R-VALUE		BASEMENT WALLS	GRAVEL SPACE WALLS
MAX. GLAZING U-FACTOR	R-0.35	R-1.3	R-5
CEILING	R-13	R-11	R-5
FLOORS	R-11	R-5	R-5

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

SHEATHING LOCATION	STUD SPAC.	E		F	
		MAX. NAIL SPAC. FOR 8d COM. NAILS (INCHES, O.C.)	MAX. NAIL SPAC. FOR 10d BOX NAILS (INCHES, O.C.)	MAX. NAIL SPAC. FOR 8d COM. NAILS (INCHES, O.C.)	MAX. NAIL SPAC. FOR 10d BOX NAILS (INCHES, O.C.)
INTERIOR ZONE	12" O.C.	6	6	12	12
	16" O.C.	6	6	12	12
PERIMETER ZONE	12" O.C.	6	6	12	12
	16" O.C.	6	6	12	12
140 MPH WINDS-EXPOSURE B ("F")		6	6	12	12

**WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS**

FASTENER TYPE	FASTENER SPACING	
	4 FOOT PANEL SPAN	6 FOOT PANEL SPAN
2 1/2" x 6" WOOD SCREWS	12"	12"
2 1/2" x 6" WOOD SCREWS	12"	12"
2 1/2" x 6" WOOD SCREWS	12"	12"

WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS. WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS. WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS.

**HEADER NAILING SCHEDULE**

DESCRIPTION	NUM. OF COM. NAILS	NUM. OF BOX NAILS	SPACING
HEAD TO HEAD (COMMON)	8d	10d	12" O.C. INTERIOR
HEAD TO END	8d	10d	12" O.C. INTERIOR

NOTE: ALL HEADERS SHALL HAVE SOLID BLOOMING

**DESIGN CRITERIA:**

THE CONSTRUCTION FOR SAID RESIDENCE, WHERE BASIC WIND SPEED IS 30 MPH PER HOUR, IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL RESIDENTIAL CODE (IRC) AND THE INTERNATIONAL RESIDENTIAL CODE (IRC) 2006 EDITION.

**ROOF UNDERLAYMENT APPLICATION**

FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (17.3% SLOPE), UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33.3% 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 EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. 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 (33.3% SLOPE) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER:

UNDERLAYMENT SHALL BE APPLIED SHINGLE 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**

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

1. THE BASIC WIND SPEED IS 110 MPH OR GREATER AND THE EAVE IS 30 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 ROUSS TO 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 FOUNDATION:

STUDS TO STOR UPLIFT CONNECTIONS FROM UPPER STORY WALL STUD TO LOWER STORY WALL STUD, WHEN UPPER STORY WALL STUDS ARE NOT BE ADDED DIRECT TO FOUNDATION. 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 NAILED TO THE WALL STUDS AND HAVE A MINIMUM EMBEDMENT OF 7 INCHES IN CONCRETE FOUNDATIONS AND SUBS-GRADE, 1.5 INCHES IN MASONRY BLOCK FOUNDATIONS AND SUBS-GRADE. STEEL STRAPS SHALL BE 1/4" THICK SQUARE WASHERS SHALL BE USED ON THE RAFTER BOLTS AND ANCHOR BOLT SPACINGS SHALL NOT EXCEED THE REQUIREMENTS. STEEL STRAPS EMBEDDED IN OR IN CONTACT WITH SUBS-GRADE OR MASONRY BLOCK FOUNDATIONS SHALL BE HOT-DIPPED GALV. AFTER FABRICATION, OR MANUF. FROM G 185 OR Z150 GALV. STL CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE.

**JACK STUD REQUIREMENTS-FOR INTERIOR LOADBEARING WALLS**

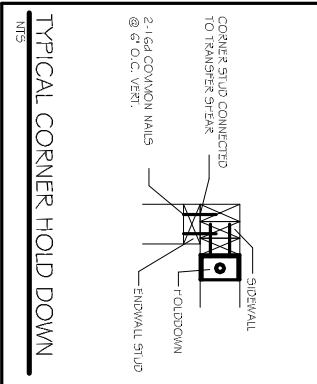
HEADER SUPPORTING	ROOF SPAN (ft.)					
	12 FEET	14 FEET	16 FEET	18 FEET	20 FEET	22 FEET
2	1	1	1	1	1	1
4	1	1	1	1	1	1
6	1	1	1	1	1	1
8	1	1	1	1	1	1
10	1	1	1	1	1	1
12	1	1	1	1	1	1
14	2	1	1	1	1	1
16	2	1	1	1	1	1
18	2	1	1	1	1	1
20	2	1	1	1	1	1
22	2	1	1	1	1	1

**SILL OR BOTTOM PLATE TO FND. CONNECTIONS RESISTING UPLIFT LOADS- 130MPH WINDS EXP. "B"**

BOTTOM PLATE TO FND. ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING		INTERIOR ZONES	
	1.5 STORIES	2 STORIES	29	33
1.5 STORIES	1.5 STORIES	29	33	

**SILL OR BOTTOM PLATE TO FND. CONNECTIONS RESISTING SHEAR LOADS- 130MPH WINDS EXP. "B"**

BOTTOM PLATE TO FND. ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING		MAX. ANCHOR BOLT SPACING (in.)	
	1.5 STORIES	2 STORIES	1/2" AWC. BOLTS	5/8" AWC. BOLTS
1.5 STORIES	1.5 STORIES	30	30	45



**HEADER SPANS-FOR INT. LOADBEARING WALLS**

HEADER SUPPORTING	BLDG. WIDTH (ft.)		
	12	24	36
12x4.5	4-0"	5-0"	6-0"
12x6.5	5-0"	6-0"	7-0"
12x8.5	6-0"	7-0"	8-0"
12x10.5	7-0"	8-0"	9-0"
12x12.5	8-0"	9-0"	10-0"
12x14.5	9-0"	10-0"	11-0"
12x16.5	10-0"	11-0"	12-0"
12x18.5	11-0"	12-0"	13-0"
12x20.5	12-0"	13-0"	14-0"
12x22.5	13-0"	14-0"	15-0"
12x24.5	14-0"	15-0"	16-0"
12x26.5	15-0"	16-0"	17-0"
12x28.5	16-0"	17-0"	18-0"
12x30.5	17-0"	18-0"	19-0"
12x32.5	18-0"	19-0"	20-0"
12x34.5	19-0"	20-0"	21-0"
12x36.5	20-0"	21-0"	22-0"

NOTE: ALL HEADERS SHALL HAVE SOLID BLOOMING

**ROOF SHEATH. OR CLAD. REQ. FOR WIND LOAD-EXP. B**

SHEATHING LOCATION	RAFTER/TRUSS SPAC.	E		F	
		MAX. NAIL SPAC. FOR 8d COM. NAILS (INCHES, O.C.)	MAX. NAIL SPAC. FOR 10d BOX NAILS (INCHES, O.C.)	MAX. NAIL SPAC. FOR 8d COM. NAILS (INCHES, O.C.)	MAX. NAIL SPAC. FOR 10d BOX NAILS (INCHES, O.C.)
INTERIOR ZONE	12" O.C.	6	6	12	12
	16" O.C.	6	6	12	12
PERIMETER ZONE	12" O.C.	6	6	12	12
	16" O.C.	6	6	12	12
140 MPH WINDS-EXPOSURE B ("F")		6	6	12	12

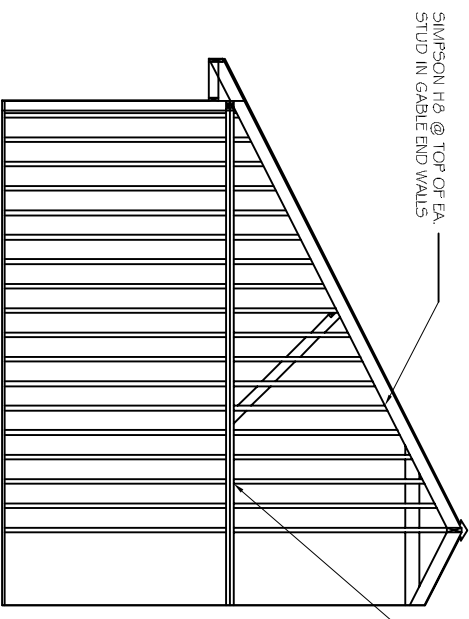
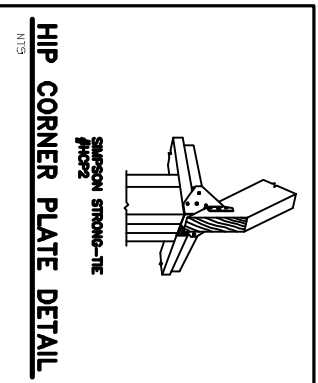
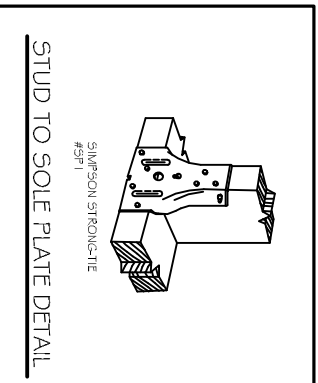
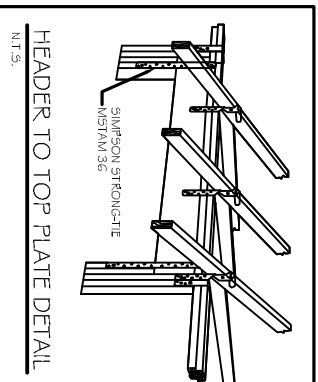
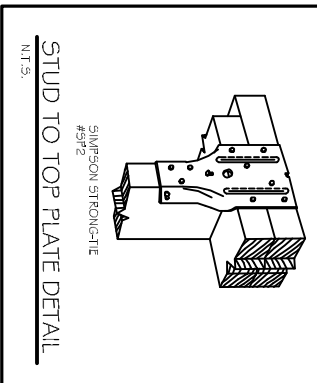
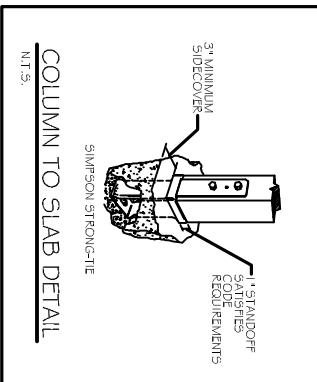
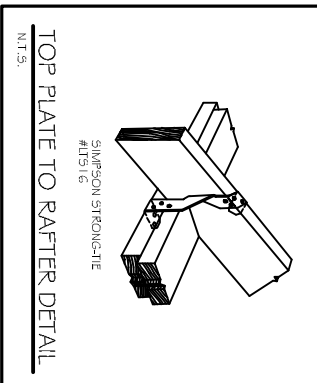
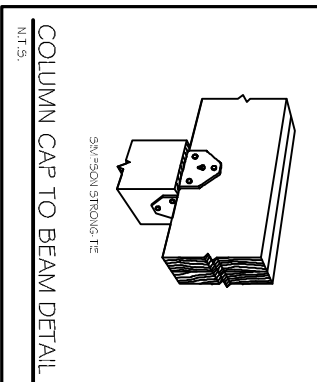
**HEADER SPANS-EXPOSURE B FOR EXTERIOR LOADBEARING WALLS**

HEADER SIZE	SPAN	NO. FULL HGT. STUDS REQ. AT EA. END	
		3	4
12x4.5	4-0"	2	2
12x6.5	5-0"	3	3
12x8.5	6-0"	3	3
12x10.5	7-0"	3	3
12x12.5	8-0"	3	3
12x14.5	9-0"	3	3
12x16.5	10-0"	3	3
12x18.5	11-0"	3	3
12x20.5	12-0"	4	4

NOTE: 1. BLDG. WIDTH IS VARYING PERPENDICULAR TO THE RIDGE. FOR WIDTHS BETWEEN 17'-0" TO 20'-0", SPANS ARE PERMITTED TO BE INTERPOLATED. 2. ALL HEADERS SHALL HAVE SOLID BLOOMING.

**JACK STUD REQ.-EXP. B FOR EXT. LOADBEARING WALLS**

HEADER SUPPORTING	HEADER WIDTH	
	3" 4" 5" 6" 5"	NO. JACK STUDS REQ.
2	1	1
4	1	1
6	2	2
8	2	2
10	3	3
12	3	3
14	4	4
16	4	4
18	5	5
20	5	5



END WALL STRAPPING

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