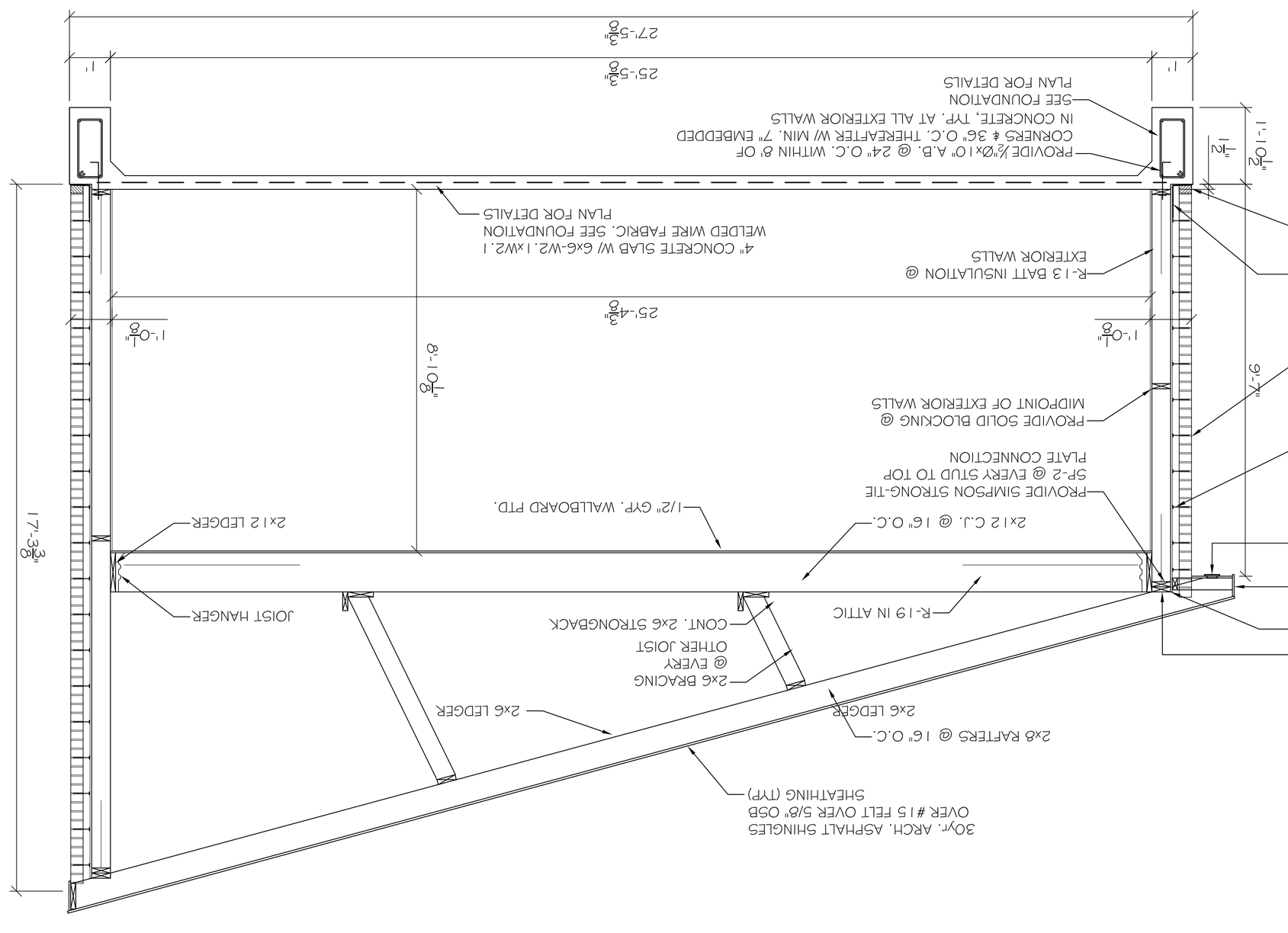

PLAN FOR DETAILS

PROVIDE 1/2"Ø x 10" A.B. @ 24" O.C. WITHIN 6" OF CORNERS & 3Ø" O.C. THEREAFTER W/ MIN. 7" EMBEDDED IN CONCRETE, TYP. AT ALL EXTERIOR WALLS SEE FOUNDATION PLAN FOR DETAILS

SECTION

SCALE: 1/2"=1'-0"

C / A2 A4

ROOF UNDERLAYMENT APPLICATION

FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (17-PERCENT SLOPE), UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZ. (33-PERCENT SLOPE), UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER:

APPLY A 19 INCH STRIP OF UNDERLAYMENT FELT PARALLEL WITH AND AT THE EAVE, APPLY 36 INCH WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE TO THE RIDGE, ON THE ANCHOR BOLTS AND ANCHOR BOLT SPACINGS SHALL NOT EXCEED THE REQUIREMENTS. STEEL SQUARE WASHERS SHALL BE USED ON THE ANCHOR BOLTS AND ANCHOR BOLTS SHALL BE LAPPED UNDER THE BOTTOM PLATE, 3 INCH STRAPS EMBEDDED IN OR IN CONTACT WITH SLAB-ON-GRADE OR FOUNDATIONS AND SLABS-ON-GRADE, 15 INCHES IN MASONRY BLOCK AFTER FABRICATION, OR MANUF. FROM G185 OR Z450 GALV. STL. CONNECTORS SHALL BE IN ACCORDANCE WITH TABLE.

FOR 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 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 ON ONE OF THE FOLLOWING CATEGORIES:

1. THE BASIC WIND SPEED IS 110 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 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.

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 SLABS-ON-GRADE, 15 INCHES IN MASONRY BLOCK FOUNDATIONS. OR BE LAPPED UNDER THE BOTTOM PLATE, 3 INCH SQUARE WASHERS SHALL BE USED ON THE ANCHOR BOLTS AND ANCHOR BOLT SPACINGS SHALL NOT EXCEED THE REQUIREMENTS. STEEL STRAPS EMBEDDED IN OR IN CONTACT WITH SLAB-ON-GRADE OR AFTER FABRICATION, OR MANUF. FROM G185 OR Z450 GALV. STL. CONNECTORS SHALL BE IN ACCORDANCE WITH TABLE.

HEADER SIZE	SPAN	NO. FULL HGT. STUDS REQ. AT EA. END
(2)2x4s	4'-7"	2
(2)2x6s	6'-1"	2
(2)2x8s	7'-6"	3
(2)2x10s	8'-9"	3
(2)2x12s	9'-6"	3
(3)2x8s	6'-3"	3
(3)2x10s	8'-2"	3
(3)2x12s	9'-6"	3
(4)2x8s	6'-0"	3
(4)2x10s	7'-9"	3
(4)2x12s	9'-0"	3

FOR EXTERIOR LOADBEARING WALLS

HEADER SPANS-EXPOSURE B

MAX. GLAZING U-FACTOR	CEILINGS	WALLS	FLOORS	BASEMENT WALLS	CRAWL SPACE WALLS
.75	R.26	R.13	R.11	R.5	R.5
	MINIMUM INSULATION R-VALUE				

THERMAL COMPONENT CRITERA (U-FACTOR AND R-VALUE)

NOTE:
ALL HEADERS SHALL HAVE SOLID BLOCKING

		* MAX SPAN EXCEEDS 16' OF WALL LN. TO 16'			
ROOF AND CEILING	(2)2x4s	2'	1'	1'	1'
	(2)2x6s	4'	1'	1'	1'
	(2)2x8s	6'	2'	2'	2'
	(2)2x10s	10'	3'	2'	2'
	(2)2x12s	14'	4'	3'	3'
	(3)2x6s	2'	1'	1'	1'
	(3)2x8s	6'	2'	2'	2'
	(3)2x10s	8'	3'	2'	2'
	(3)2x12s	12'	4'	3'	2'
	(4)2x6s	2'	1'	1'	1'
	(4)2x8s	6'	2'	2'	2'
	(4)2x10s	8'	3'	2'	2'
	(4)2x12s	12'	4'	3'	2'
2 FLOORS ONLY (CENTER BEARING)	(2)2x6s	3'-6"	6'-10"	4'-8"	3'-11"
	(2)2x8s	4'-6"	8'-8"	6'-0"	5'-0"
	(2)2x10s	5'-6"	10'-6"	7'-3"	6'-0"
	(2)2x12s	6'-6"	12'-4"	8'-6"	7'-0"
	(3)2x6s	5'-4"	10'-3"	7'-0"	5'-9"
	(3)2x8s	7'-6"	14'-6"	10'-0"	8'-3"
	(3)2x10s	9'-9"	18'-9"	12'-9"	10'-6"
	(3)2x12s	11'-6"	22'-3"	15'-0"	12'-3"
	(4)2x6s	6'-8"	13'-1"	9'-0"	7'-4"
	(4)2x8s	9'-6"	18'-3"	12'-6"	10'-3"
	(4)2x10s	11'-9"	22'-6"	15'-3"	12'-6"
	(4)2x12s	*	26'-3"	17'-9"	14'-6"
ONE FLOOR (CENTER BEARING)	(2)2x6s	6'-5"	14'-6"	9'-9"	8'-0"
	(2)2x8s	8'-11"	19'-9"	13'-6"	11'-0"
	(2)2x10s	10'-9"	23'-3"	15'-9"	12'-9"
	(2)2x12s	12'-5"	26'-9"	18'-3"	14'-9"
	(3)2x6s	8'-1"	17'-6"	11'-9"	9'-6"
	(3)2x8s	10'-9"	23'-3"	15'-9"	12'-9"
	(3)2x10s	13'-3"	26'-9"	18'-3"	14'-9"
	(3)2x12s	14'-9"	26'-9"	18'-3"	14'-9"
	(4)2x6s	9'-3"	19'-9"	13'-3"	10'-9"
	(4)2x8s	12'-3"	26'-9"	18'-3"	14'-9"
	(4)2x10s	14'-9"	26'-9"	18'-3"	14'-9"
	(4)2x12s	14'-9"	26'-9"	18'-3"	14'-9"

NOTE:
1. BLOC. WITH 2 MEASURED PERPENDICULAR TO THE EDGE. FOR WIDTHS BETWEEN THOSE SHOWN, SPANS ARE PERMITTED TO BE INTERPOLATED.
2. ALL HEADERS SHALL HAVE SOLID BLOCKING.

HEADER SIZE	SPAN (ft.)	3" 4.5" 5" 6.5" 7" 9.5"
(2)2x4s	4'	1 1 1 1 1 1
	6'	2 2 2 2 2 2
	8'	3 2 2 2 2 2
	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(2)2x6s	6'	2 2 2 2 2 2
	8'	3 2 2 2 2 2
	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(2)2x8s	8'	3 2 2 2 2 2
	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(2)2x10s	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(2)2x12s	12'	5 3 3 2 2 2
(3)2x6s	6'	2 2 2 2 2 2
	8'	3 2 2 2 2 2
	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(3)2x8s	8'	3 2 2 2 2 2
	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(3)2x10s	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(3)2x12s	12'	5 3 3 2 2 2
(4)2x6s	6'	2 2 2 2 2 2
	8'	3 2 2 2 2 2
	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(4)2x8s	8'	3 2 2 2 2 2
	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(4)2x10s	10'	4 3 2 2 2 2
	12'	5 3 3 2 2 2
(4)2x12s	12'	5 3 3 2 2 2

(4)2x12s HEADER WIDTH=3" (2)2x4: 4.5" (3)2x4: 5", 6.5" (4)2x6: 7" (4)2x8: 9.5" (4)2x10: 9.5" (4)2x12: 9.5" (4)2x12s: 9.5" ALL OTHER HEADERS: 3" (2)2x4: 4.5" (3)2x4: 5", 6.5" (4)2x6: 7" (4)2x8: 9.5" (4)2x10: 9.5" (4)2x12: 9.5" (4)2x12s: 9.5" ALL HEADERS SHALL HAVE SOLID BLOCKING

HEADER SPANS-FOR INT. LOADBEARING WALLS

HEADER SUPPORTING	SIZE	SPANS (ft.-in.)		
		BLDG. WIDTH (ft.)		
		12	24	36
ONE FLOOR	(2)2x4s	6'-5"	4'-6"	3'-8"
	(2)2x6s	9'-11"	7'-0"	5'-8"
	(2)2x8s	12'-10"	9'-0"	7'-3"
	(2)2x10s	15'-9"	11'-0"	8'-9"
	(2)2x12s	18'-2"	12'-8"	10'-2"
	(3)2x6s	11'-6"	8'-1"	6'-7"
	(3)2x8s	15'-9"	11'-0"	8'-9"
	(3)2x10s	19'-6"	13'-8"	11'-0"
	(3)2x12s	22'-3"	15'-6"	12'-6"
	(4)2x6s	13'-1"	9'-2"	7'-4"
	(4)2x8s	17'-9"	12'-6"	10'-0"
	(4)2x10s	22'-6"	15'-9"	12'-6"
	(4)2x12s	26'-3"	17'-9"	14'-6"
2 FLOORS ONLY (CENTER BEARING)	(2)2x6s	7'-0"	4'-9"	3'-11"
	(2)2x8s	9'-6"	6'-6"	5'-3"
	(2)2x10s	11'-9"	7'-9"	6'-3"
	(2)2x12s	13'-6"	8'-9"	7'-0"
	(3)2x6s	9'-6"	6'-6"	5'-3"
	(3)2x8s	12'-9"	8'-9"	7'-0"
	(3)2x10s	15'-9"	10'-9"	8'-6"
	(3)2x12s	18'-3"	12'-0"	9'-9"
	(4)2x6s	10'-6"	7'-0"	5'-9"
	(4)2x8s	14'-0"	9'-6"	7'-9"
	(4)2x10s	17'-9"	12'-0"	9'-9"
	(4)2x12s	21'-0"	14'-0"	11'-3"

HOLDOWNS

HOLDOWNS ARE REQUIRED AT THE END OF EACH SEGEMENTED SHEARWALL SEGMENT OR AT EACH END OF A PEREFORATED SHEARWALL. WHENS FULL HEIGHT SHEARWALL SEGEMENTS MEET AT A CORNER, A SINGLE HOLDOWN SHALL BE PERMITTED TO BE USED TO RESIST THE OVERTURNING FORCES IN BOTH DIRECTIONS WHEN THE CORNER FRAMING IN THE ADJOINING WALLS IS FASTENED TOGETHER TO TRANSFER THE UPLIFT LOAD. SEE CORNER HOLDOWN DETAIL.

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

SHEATHING LOCATION	STUD SPAC.	3" 4.5" 5" 6.5" 7" 9.5" COM. NAILS OR 1/0d BOX NAILS (INCHES) O.C.)
		E
INTERIOR ZONE	12"O.C.	12
	16"O.C.	12
	24"O.C.	12
FEATURES EDGE ZONE	12"O.C.	12
	16"O.C.	12
	24"O.C.	12

145 MPH WIND-EXPOSURE 'B' (TYP.)

WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS

	FASTENER SPACING		
FASTENER TYPE	4 INCH PANEL SPAN	4 FOOT PANEL SPAN	6 FOOT PANEL SPAN
8-32" #8 WOOD SCREW	16"	12"	9"
2-1/2" #8 WOOD SCREW	16"	12"	12"

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

		MAX. NAIL SPAC. FOR 6d COM. NAILS OR 1/0d BOX NAILS (INCHES) O.C.)	
SHEATHING LOCATION	RAFTER/ TRUSS SPAC.	E	F
INTERIOR ZONE	12"O.C.	6	12
	16"O.C.	6	12
	24"O.C.	6	12
FEATURES EDGE ZONE	12"O.C.	6	6
	16"O.C.	6	6
	24"O.C.	6	6

145 MPH WIND-EXPOSURE 'B' (TYP.)

SILL or BOTTOM PLATE TO FND. CONNECTIONS RESISTING SHEAR LOADS-145MPH WINDS EXP. "B"

		MAX. ANCHOR BOLT SPACING (in.)	
BOTTOM PLATE TO FND. ANCHOR BOLT CONNECTION	FOUNDATION SUPPORTING	1/2" ANC. BOLTS	5/8" ANC. BOLTS
SHEAR LOADS	1-3 STORIES	30	45

SILL or BOTTOM PLATE TO FND. CONNECTIONS RESISTING UPLIFT LOADS-145MPH WINDS EXP.

		MAX. ANCHOR BOLT SPACING (in.)	
BOTTOM PLATE TO FND. ANCHOR BOLT CONNECTION	FOUNDATION SUPPORTING	6" END ZONES	INTERIOR ZONES
UPLIFT LOADS	1-3 STORIES	26	33

JACK STUD REQUIREMENTS-FOR INTERIOR LOADBEARING WALLS

HEADER SPAN (ft.)	12 FEET			24 FEET			36 FEET		
HEADER SUPPORTING (ft.)	3' 4.5'	5'	6.5'	3' 4.5'	5'	6.5'	3' 4.5'	5'	6.5'
	NO. JACK STUDS REQ.								
ROOF SPAN (ft.)	2	1	1	1	1	1	1	1	1
	4	1	1	1	1	1	1	1	1
	6	1	1	1	1	1	2	1	1
	8	1	1	1	1	1	2	2	2
	10	1	1	1	2	1	2	2	2
	12	1	1	2	2	2	3	2	2
	14	2	1	2	2	2	4	3	3
	16	2	2	2	3	2	4	3	3
	18	2	2	3	3	2	5	3	3
	20	2	2	3	4	3	5	4	4
	22	3	2	4	4	3	6	4	4
	24	3	2	4	5	3	7	5	4
	26	3	2	5	5	3	8	5	4
	28	3	2	5	5	4	9	5	4
	30	4	3	5	6	4	9	6	5
	32	4	3	6	6	4	9	6	5
	34	4	3	6	6	4	9	6	5
	36	4	3	6	6	4	9	6	5

HEADER WIDTH=3" (2)2x4: 4.5" (3)2x4: 5", 6.5" (4)2x6: 7" (4)2x8: 9.5" (4)2x10: 9.5" (4)2x12: 9.5" (4)2x12s: 9.5" ALL OTHER HEADERS: 3" (2)2x4: 4.5" (3)2x4: 5", 6.5" (4)2x6: 7" (4)2x8: 9.5" (4)2x10: 9.5" (4)2x12: 9.5" (4)2x12s: 9.5" ALL HEADERS SHALL HAVE SOLID BLOCKING

UPLIFT CONNECTIONS-145MPH WINDS EXP. "B"

CONNECTION	FRAMING SPACING (in.)	ROOF SPAN (ft.)	U	L	S
ROOF ASSEMBLY TO WALL ASSEMBLY	16" O.C.	17	366	246	109R
WALL ASSEMBLY TO WALL ASSEMBLY	16" O.C.	17	366	246	109R
WALL ASSEMBLY TO FOUNDATION	16" O.C.	17	170	185	436
		4	4	4	4

NUM. OF ROW COM. NAILS OR 1/0d BOX NAILS IN EA. END OF 1-1/4"x20 GA. STRAP

SHEET No: 03 OF 10

BUILDING SECTION

A-1

HEADER NAILING SCHEDULE

DESCRIPTION	NUM. OF COM. NAILS	NUM. OF BOX NAILS	SPACING
HEAD. TO HEAD. (FACE-NAILED)	6d	1/0d	6" O.C. (TOP)/ 12" O.C. (BTM)

NOTE:
ALL HEADERS SHALL HAVE SOLID BLOCKING

#	DESCRIPTION	DATE
	REVISIONS	

PAUL WRIGHT ADDITION TO EXISTING RESIDENCE
671 1 1 LOUISIANA HWY 434
LACOMBE, LA
70135

JOB No: 2147
DATE: 08-06-2012
DRAWN BY: BSN
CHECKED BY: BSN

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