FILE NAME: J:\- Office Warehouse\XXXX - Johny Bourlice\Drawings\Current Drawings\S601 - Typical Connection Details-Schedules & Notes.dwg PLOT DATE & TIME: Thursday, August 11, 2016 8:41:26 AM

TABLE S601.10 - UPLIFT CONNECTIONS - 130 MPH WINDS EXP "C"

CONNECTION	FRAMING SPACING (INCHES)	ROOF SPAN (FEET)	U	L	S	NUMBER OF 8d COMMON NAILS OR 10d BOX NAILS IN EACH END OF 1 1/4"X20 GA STRAP
ROOF ASSEMBLY TO WALL ASSEMBLY	16" OC	17	386	246	109R	4
WALL ASSEMBLY TO WALL ASSEMBLY	16" OC	17	386	246	109R	4
HEADER TO HEADER (FACE NAILED)	16" OC	17	170	185	436	4

TABLE S601.11 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING UPLIFT LOADS - 130 MPH WIND EXP "B"

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING	
		8' END ZONES	INTERIOR ZONES
UPLIFT LOADS	1 - 3 STORIES	28	33

TABLE S601.12 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING SHEAR LOADS - 130 MPH WIND EXP "B"

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING 9INCHES)	
		1/2" Φ ANCHOR BOLTS	5/8" Φ ANCHOR BOLTS
UPLIFT LOADS	1 - 3 STORIES	30	45

TABLE S601.9 - JACK STUD REQ - INTR LOADBEARING WALLS

HEADER SUPPORTING	HEADER SPAN (FT)	ROOF SPAN (FEET) 12 FEET 3"	12 FEET 4.5"	12 FEET 5"	12 FEET 6.5"	24 FEET 3"	24 FEET 4.5"	24 FEET 5"	24 FEET 6.5"	36 FEET 3"	36 FEET 4.5"	36 FEET 5"	36 FEET 6.5"
		NUMBER OF JACK STUDS REQUIRED											
ROOF AND CEILING	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	2	1	1	1
	8	1	1	1	1	2	1	1	1	2	2	2	1
	10	1	1	1	1	2	2	1	1	2	2	2	1
	12	1	1	1	1	2	2	2	1	3	2	2	2
	14	2	1	1	1	3	2	2	2	4	3	3	2
	16	2	1	1	1	3	2	2	2	4	3	3	2
ROOF, CEILING, AND ONE CENTER BEARING FLOOR	2	1	1	1	1	1	1	1	1	2	1	1	1
	4	1	1	1	1	2	1	1	1	3	2	2	2
	6	2	1	1	1	3	2	2	2	4	3	3	2
	8	2	2	1	1	3	2	2	2	5	3	3	3
	10	2	2	2	1	4	3	3	3	6	4	4	3
	12	3	2	2	2	5	3	3	3	7	5	4	4
	14	3	2	2	2	5	4	3	3	8	5	5	4
	16	4	3	2	2	6	4	4	3	9	6	5	5

HEADER WIDTH - 3" (2-2x), 4.5" (3-2x), 5", 6.5" (4-2x) EACH W/ 1/2" PLYWOOD SPACER BETWEEN

TABLE S601.3 - HEADER SPANS - INTERIOR LOADBEARING WALLS

HEADER SUPPORTING	SIZE	OPENING WIDTH (FT) 12	24	36
		SPAN (FT - IN)		
ONE FLOOR (CENTER BEARING)	(2) 2x4	4'-4"	3'-1"	2'-6"
	(2) 2x6	6'-5"	4'-6"	3'-8"
	(2) 2x8	8'-1"	5'-9"	4'-8"
	(2) 2x10	9'-11"	7'-0"	5'-9"
	(2) 2x12	11'-6"	8'-1"	6'-7"
	(3) 2x8	10'-2"	7'-2"	5'-10"
	(3) 2x10	12'-5"	8'-9"	7'-2"
	(3) 2x12	14'-4"	10'-2"	8'-3"
	(4) 2x8	11'-6"	8'-3"	6'-9"
	(4) 2x10	14'-4"	10'-1"	8'-3"
	(4) 2x12	*	11'-9"	9'-7"
TWO FLOORS ONLY (CENTER BEARING)	(2) 2x4	2'-10"	2'-1"	1'-8"
	(2) 2x6	4'-2"	3'-1"	2'-6"
	(2) 2x8	5'-4"	3'-11"	3'-3"
	(2) 2x10	6'-6"	4'-9"	3'-11"
	(2) 2x12	7'-6"	5'-6"	4'-7"
	(3) 2x8	6'-8"	4'-10"	4'-0"
	(3) 2x10	8'-1"	6'-0"	4'-11"
	(3) 2x12	9'-5"	6'-11"	5'-9"
	(4) 2x8	7'-8"	5'-8"	4'-8"
	(4) 2x10	9'-4"	6'-10"	5'-8"
	(4) 2x12	10'-10"	8'-0"	6'-7"

MAXIMUM SPAN 16'-0"

TABLE S601.4 - ROOF SHEATHING OR CLADDING REQUIREMENT - WIND LOAD EXP "C"

SHEATHING LOCATION	RAFTER / TRUSS SPACING	E: MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	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	6
	24" OC	6	6

130 MPH WIND - EXPOSURE "C" TYPICAL

TABLE S601.5 - WALL SHEATHING OR CLADDING REQUIREMENT - WIND LOAD EXP "C"

SHEATHING LOCATION	STUD SPACING	E: MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	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

130 MPH WIND - EXPOSURE "C" TYPICAL

TABLE S601.6 - WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS

FASTENER TYPE	FASTENER SPACING: PANEL SPAN ≤ 4'	4' PANEL SPAN ≤ 6'	6' PANEL SPAN ≤ 8'
2 1/2" #6 WOOD SCREWS	16"	12"	9"
2-1/2" #8 WOOD SCREWS	16"	16"	12"

WINDOWS IN BUILDINGS LOCATED IN WIND BORNE DEBRIS REGIONS SHALL HAVE GLAZED OPENINGS PROTECTED FROM WINDBORNE DEBRIS. WOOD STRUCTURAL PANELS WITH A MIN. THICKNESS OF 7/16" AND A MAX. SPAN OF 8 FEET SHALL BE PERMITTED FOR OPENING PROTECTION IN ONE AND TWO STORY BUILDINGS. PANELS SHALL BE PRECUT TO COVER THE GLAZED OPENINGS WITH ATTACHMENT HARDWARE PROVIDED.

TABLE S601.7 - HEADER NAILING SCHEDULE

DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	SPACING
HEADER TO HEADER (FACE NAILED)	8d	10d	6" OC EDGES 12" OC FIELD

TABLE S601.8 - THERMAL COMPONENT CRITERIA (U-VALUE FACTOR & R-VALUE

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

TABLE S601.1 - HEADER SPANS - EXPOSURE "C" FOR EXTERIOR LOADBEARING WALLS

HEADER SIZE	SPAN	NUMBER FULL HEIGHT STUDS REQ AT EA END
(2) 2x4	4'-7"	TWO
(2) 2x6	5'-6"	TWO
(2) 2x8	6'-1"	THREE
(2) 2x10	6'-8"	THREE
(2) 2x12	7'-1"	THREE
(3) 2x8	7'-5"	THREE
(3) 2x10	8'-3"	THREE
(3) 2x12	8'-7"	THREE
(4) 2x8	9'-6"	THREE
(4) 2x12	10'-0"	FOUR

130 MPH WIND - EXPOSURE "C" (TYPICAL) EACH W/1/2" PLYWOOD SPACER BETWEEN

NOTE:
1. BUILDING WIDTH IS MEASURE PERPENDICULAR TO THE RIDGE. FIR WIDTHS BETWEEN THOSE SHOWN, SPANS ARE PERMITTED TO BE INTERPOLATED.
2. ALL HEADERS SHALL HAVE SOLID BLOCKING.

TABLE S601.2 - JACK STUD REQ - EXPOSURE "C" FOR EXT LOADBEARING WALLS

HEADER SUPPORTING	HEADER SPAN (FT)	HEADER WIDTH 3"	4.5"	5"	6.5"
		# JACK STUDS REQUIRED			
ROOF AND CEILING	2	1	1	1	1
	4	1	1	1	1
	6	2	1	2	2
	8	2	2	2	2
	10	3	2	2	2
	12	3	2	2	2
	14	4	3	2	2
	16	4	3	3	2
ROOF, CEILING, AND ONE CENTER BEARING FLOOR	2	1	1	1	1
	4	2	1	1	1
	6	2	2	2	1
	8	3	2	2	3
	10	4	3	2	2
	12	4	3	3	2
	14	5	3	3	3
	16	5	4	3	3

HEADER WIDTHS (2-2X), 4.5 (3-2X), 5, 6.5 (4-2X) EACH WITH 12 PLYWOOD SPACER BETWEEN

ROOF UNDERLAYMENT NOTES

1. 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:
   a. APPLY A 19 INCH STRIP OF UNDERLAYMENT FELT PARALLEL WITH AND STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36 INCH WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE.
2. 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:
   a. 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 NOTES

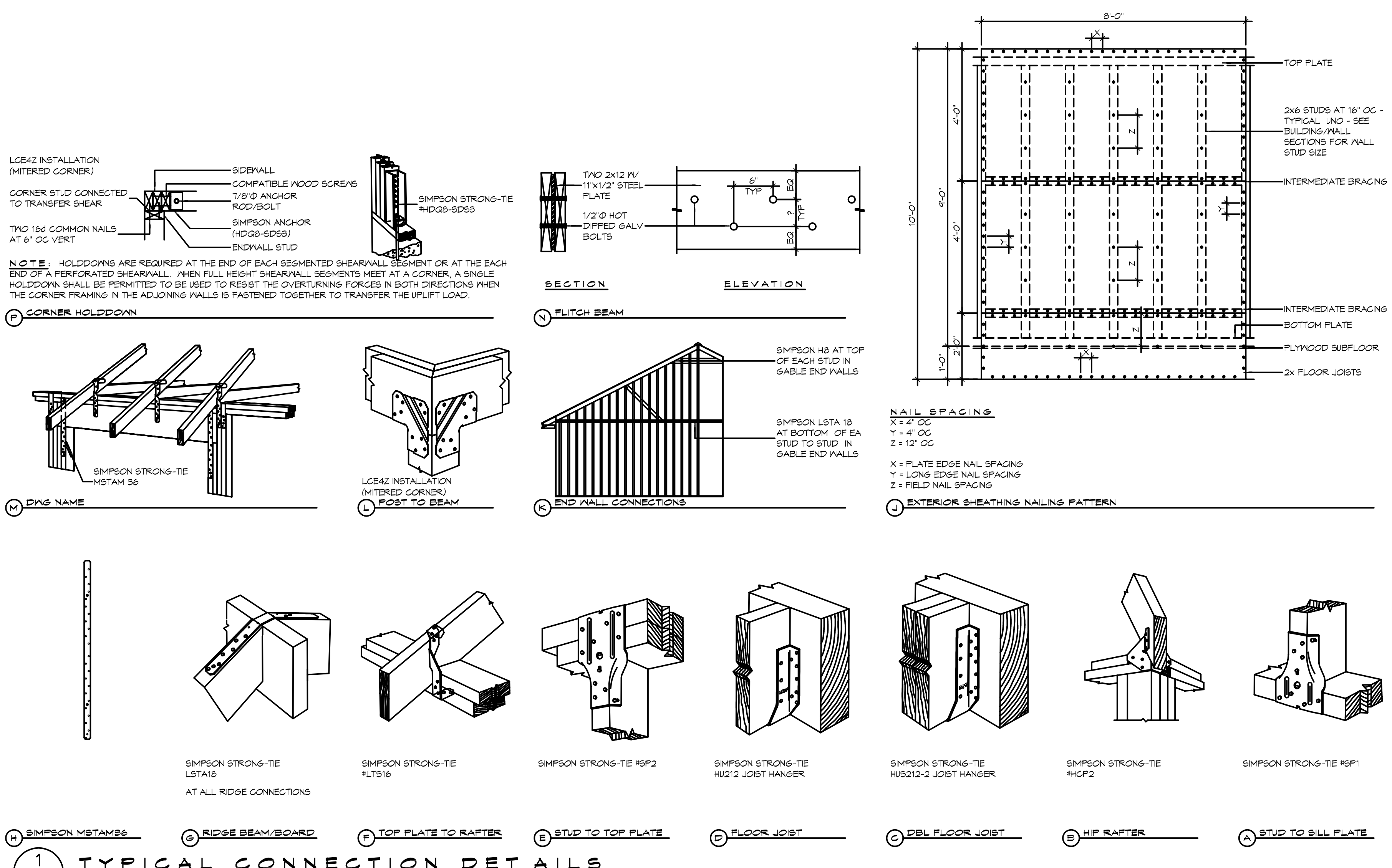
1. ASPHALT STRIP SHINGLES SHALL HAVE A MINIMUM OF SIX FASTENERS PER SHINGLE WHERE THE ROOF IS IN ONE OF THE FOLLOWING CATEGORIES:
   a. THE BASIC WIND SPEED IS 110 MPH OR GREATER AND THE EAVE IS 20 FEET OR HIGHER ABOVE GRADE.
   b. THE BASIC WIND SPEED IS 120 MPH OR GREATER.
   c. SPECIAL WIND ZONES.

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 PLATE AND THE WALL TOP PLATE 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:
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 S601.11.

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 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 MASONRY BLOCK FOUNDATIONS SHALL BE HOT-DIPPED GALV. AFTER FABRICATION, OR MANUF. FROM G185 OR Z450 GALV. STL. CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S601.12.



1 S601 S601 TYPICAL CONNECTION DETAILS
SCALE: NTS

REVISIONS

#	DESCRIPTION	DATE

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SHEET TITLE:
TYPICAL CONNECTION DETAILS, SCHEDULES, AND NOTES

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