

**TABLE S107.7 - UPLIFT CONNECTIONS - 130 MPH WINDS EXP "C"**  
MFCM 2015 TABLE 9.2

CONNECTION	FRAMING SPACING (INCHES)	ROOF SPAN (FEET)	UPLIFT	LATERAL	SHEAR	NUMBER OF 8d COMMON NAILS OR 10d BOX NAILS IN EACH END OF WALL ASSEMBLY TO FOUNDATION
WALL ASSEMBLY TO FOUNDATION	16" OC	16	4.01	2.52	15.9R	4
	16" OC	16	2.24	2.19	4.93	4

**TABLE S107.8 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING UPLIFT LOADS - 130 MPH WIND EXP "C"**  
MFCM 2015 TABLE 9.2C

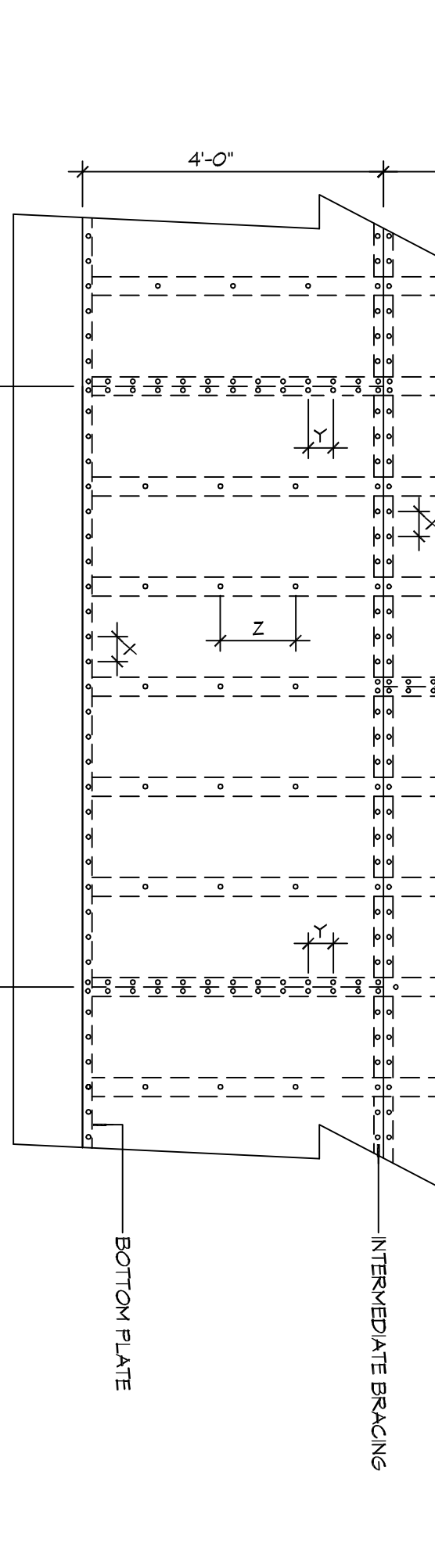
BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	8 END ZONES	23 INCHES ON CENTER	30 INCHES ON CENTER
UPLIFT LOADS	FOUNDATION SUPPORTING	1 - 3 STOREYS	23 INCHES ON CENTER	30 INCHES ON CENTER

**TABLE S107.9 - SILL OR BOTTOM SHEAR PLATE TO FOUNDATION CONNECTIONS RESISTING UPLIFT LOADS - 130 MPH WIND EXP "C"**  
MFCM 2015 TABLE 9.2B

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	INTERIOR ZONES
UPLIFT LOADS	FOUNDATION SUPPORTING	48 INCHES ON CENTER (MAXIMUM) 4" WAGHER	5/8" Ø ANCHOR BOLTS

**TABLE S107.10 - FULL HEIGHT STUD REQUIREMENT FOR HEADERS OR WINDOW SILL PLATES IN EXTERIOR WALLS EXPOSURE "C"**  
MFCM 2015 TABLE 9.2C

HEADER SPAN (FEET)	12" O.C.	16" O.C.	24" O.C.
2	1	1	1
4	2	2	1
6	3	3	2
8	4	3	2



**NAIL SPACING**  
 X 1/2" O.C.  
 Y 1/4" O.C.  
 Z 1/2" O.C.

**INTERIOR SHEATHING**  
 1/2" PLYWOOD EACH FACE STAGGERED 48"  
 8" O.C. FASTENING @ PANEL EDGES 3d NAILS @ 12" O.C. FASTENING @ MEMBERS.

**EXTERIOR SHEATHING**  
 5/8" DENSGLASS SHEATHING EXTERIOR FACE STAGGERED 48" O.C. FASTENING @ PANEL EDGES 3d NAILS @ 12" O.C. FASTENING @ INTERMEDIATE MEMBERS.

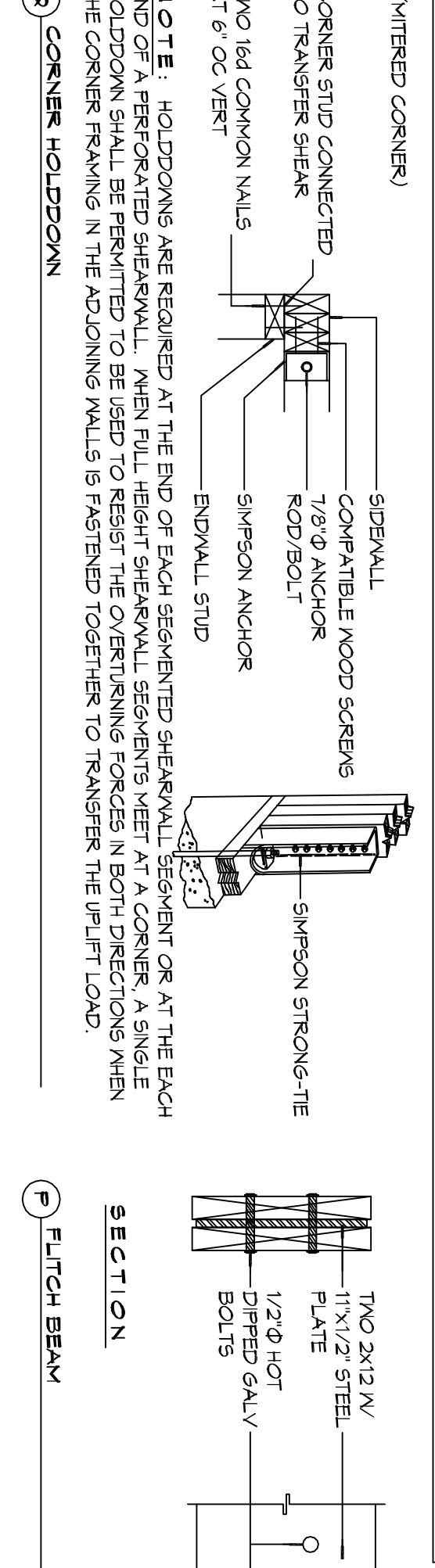
**NOTE:** SPACE WALLS AT EACH NAIL HOLE

**TABLE S107.5 - JACK STUD REQ - INT LOADBEARING WALLS**  
MFCM 2015 TABLE 9.2F

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	2	2	2	2	2	2
12	3	3	3	3	3	3
14	4	4	4	4	4	4
16	5	5	5	5	5	5

**TABLE S107.6 - JACK STUD REQ - EXTERIOR LOADBEARING WALLS**  
MFCM 2015 TABLE 9.2F

HEADER WIDTH - 3" (2-2X), 4.5" (3-2X), 5" (4-2X), 5.5" (4-2X) EACH W/ 1/2" PLYWOOD SPACERS BETWEEN	ROOF LIVE LOAD 20 PSF						ROOF LIVE LOAD 30 PSF					
	3'	4.5'	5'	6.5'	7'	8.5'	3'	4.5'	5'	6.5'	7'	8.5'
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	2	2	2	2	2	2	2	2	2	2	2	2
8	2	2	2	2	2	2	2	2	2	2	2	2
10	3	3	3	3	3	3	3	3	3	3	3	3
12	3	3	3	3	3	3	3	3	3	3	3	3
14	4	4	4	4	4	4	4	4	4	4	4	4
16	4	4	4	4	4	4	4	4	4	4	4	4



**NOTE:** JOISTS ARE REQUIRED AT THE END OF EACH SEGMENTED SHEATHING JOINT OR AT THE END OF A PERFORATED SHEATHING. WHEN FULL-HEIGHT SHEATHING MEET AT A CORNER, A SINGLE JOIST SHALL BE PERMITTED TO BE USED TO RESIST THE OVERLAPPING FORCES IN BOTH DIRECTIONS WHEN THE CORNER FRAMING IN THE ADJOINING WALLS IS FASTENED TOGETHER TO TRANSFER THE UPLIFT LOAD.

**TABLE S107.3 - NAILING SCHEDULE**  
MFCM 2015 TABLE 9.1

DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	SPACING
HEADER TO HEADER (FACE NAIL)	16d	16d	16" OC EDGES

**TABLE S107.4 - BUILDING ENVELOPE REQUIREMENTS**

OPaque ELEMENTS	ASSEMBLY	MIN. R-VALUE	INSULATION
INSULATION ENVELOPE ABOVE DECK	U-0.046	R-20.0 c.i.	
METAL BUILDING	U-0.046	R-14	
ATTIC AND OTHER	U-0.021	R-38	
MASS	U-0.151	R-5.1 c.i.	
METAL BUILDING	U-0.119	R-13.0	
STEEL-FRAMED	U-0.124	R-13.0	
WOOD-FRAMED AND OTHER	U-0.024	R-13.0	
MASS	U-0.101	R-5.9 c.i.	
STEEL JOIST	U-0.023	R-14.0	
WOOD-FRAMED AND OTHER	U-0.021	R-14.0	
UNHEATED	F-0.130	NR	
SPINNING	U-0.100	NR	
NON-SPINNING	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:  
 a. APPLY A 1/4 INCH STRIP OF UNDERLAYMENT FELT PARALLEL WITH AND STAKING AT THE EAVE, FASTENED SUFFICIENTLY TO HOLD IN PLACE UNDERLAYMENT. OVERLAPPING 30-DEGREE SHEETS 1/4 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE.  
 b. FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL, UNDERLAYMENT SHALL BE APPLIED IN ONE LAYER.  
 c. UNDERLAYMENT SHALL BE APPLIED IN SINGLE PLY, PARALLEL TO AND STAKING FROM THE EAVE AND LAPPED 2 INCHES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS SHALL BE OFFSET BY 6 FEET.

**ROOF APPLICATION & FASTENING NOTES**

- INSTALL ROOF PER MANUFACTURER'S RECOMMENDATIONS FOR 130MPH WIND SPEED.

**GENERAL UPLIFT CONNECTION NOTES**

- ROOF ASSEMBLY TO WALL ASSEMBLY:**  
 WHEN RAFTERS OR TRUSSES ARE NOT LOCATED UNDER STUDS, RAFTERS SHALL BE ATTACHED TO THE WALL PLATE AND THE WALL PLATE SHALL BE ATTACHED TO THE WALL STUD WITH UPLIFT CONNECTIONS.
- WALL ASSEMBLY TO WALL ASSEMBLY:**  
 STUDS TO STUD UPLIFT CONNECTIONS FROM UPPER STORY WALL STUD TO LOWER STORY WALL STUD SHALL BE ATTACHED TO THE WALL STUD WITH UPLIFT CONNECTIONS.
- WALL ASSEMBLY TO FOUNDATION:**  
 FIRST FLOOR WALL STUDS SHALL BE CONNECTED TO THE FOUNDATION SILL. GRADE 36 STEEL STRAP SHALL BE WELDED TO THE WALL STUDS AND HAVE A MINIMUM EMBEDMENT OF 1 INCHES IN CONCRETE FOUNDATIONS AND SLABS-ON-GRADE IS INCHES IN MASONRY BLOCK FOUNDATIONS. OR BE LAPPED UNDER THE BOTTOM PLATE. 3 INCH SQUARE WAGHERS SHALL BE USED ON THE ANCHOR BOLTS AND ANCHOR BOLT SPACINGS SHALL NOT EXCEED THE REQUIREMENTS. STEEL STRAPS EMBEDDED IN OR IN CONTACT WITH CONCRETE SHALL BE HOT-DIPPED GALV. AFTER FABRICATION, OR WAGHER FROM G155 OR Z150 GALV. STL.

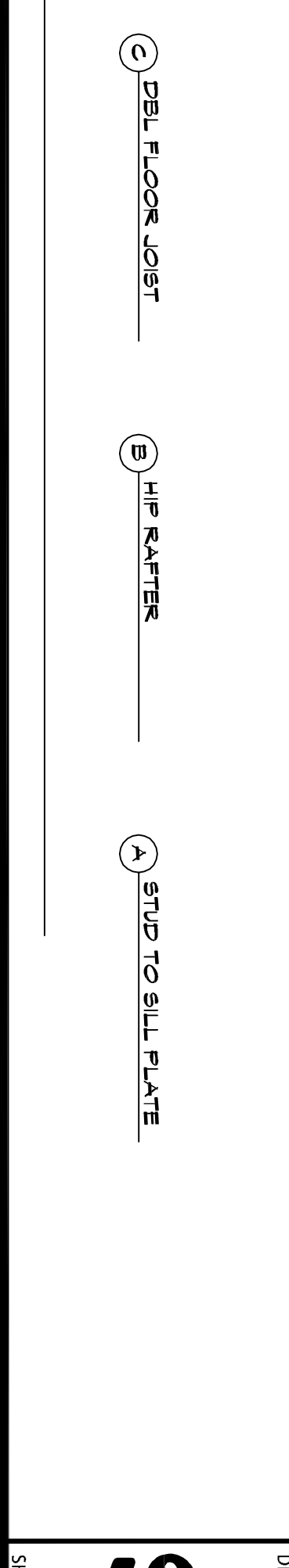
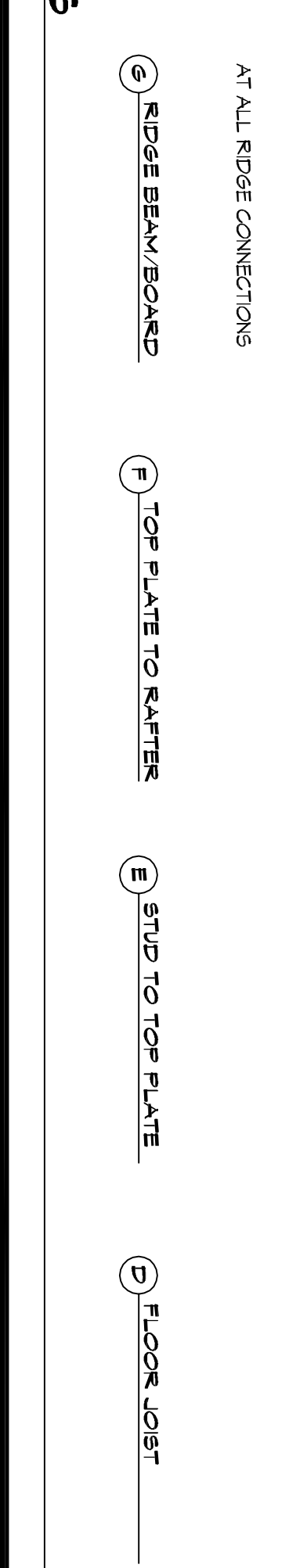
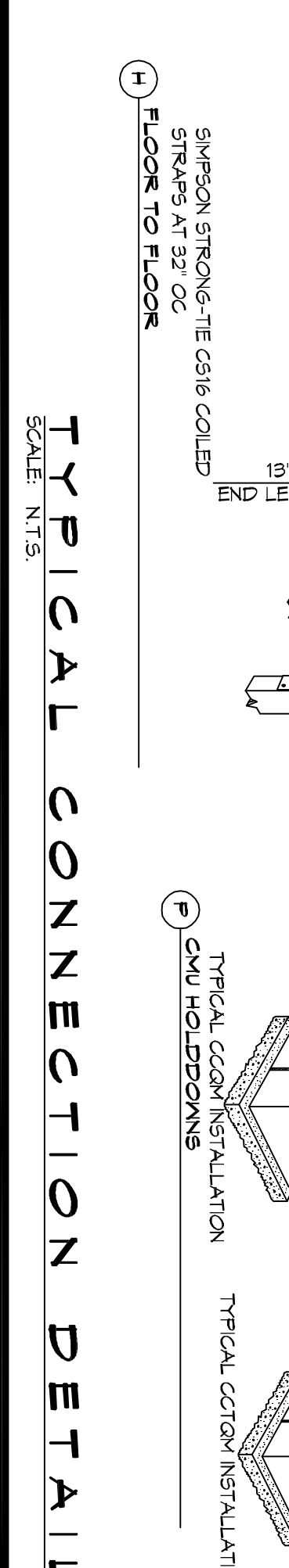
**TABLE S107.1 - ROOF SHEATHING OR CLADDING REQUIREMENT - WIND LOAD EXP "C"**

SHEATHING LOCATION	RAFTER / TRUSS SPACING	MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	
		E	F
INTERIOR ZONE	12" OC	6	12
	16" OC	6	6
	24" OC	6	6
PERIMETER EDGE ZONE	12" OC	6	4
	16" OC	4	4
	24" OC	3	3

**DESIGN CRITERIA**

130 MPH WIND - EXPOSURE "C" TYPICAL  
 E = NAIL SPACING AT PANEL EDGES, INCHES  
 F = NAIL SPACING AT INTERMEDIATE SUPPORTS IN THE PANEL FIELD, INCHES

THE CONSTRUCTION FOR SAID RESIDENCE, WHERE BASIC WIND SPEED IS 130 MPH PER HOUR, WIND EXPOSURE ZONE C, IS DESIGNED IN ACCORDANCE WITH AMERICAN FOREST AND PAPER ASSOCIATION (AF&PA) WOOD FRAME CONSTRUCTION MANUAL FOR ONE AND TWO FAMILY DWELLINGS (MFCM) 2015 EDITION AS WELL AS THE INTERNATIONAL RESIDENTIAL CODE (IRC) 2015 EDITION.



**TYPICAL CONNECTION DETAILS**  
 SCALE: N.T.S.

**ADDITION**  
**DAY GANT**  
 36245 JOHN MESSOR  
 PEARL RIVER, LA

DRAWING NUMBER: **5102**

DATE: 05-18-2021

JOHN BY: CKD CHECKED BY: CKD

**DAMMON ENGINEERING INC.**  
 LOUISIANA & MISSISSIPPI

Chief Engineer: Brian Mstich, PE  
 554 Old Spanish Trail  
 Slidell, LA 70458

www.dammonengineering.com  
 info@dammonengineering.com  
 PH: 985.649.5832

#	DESCRIPTION	DATE

**REVISIONS**

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