

TABLE S601.7 - UPLIFT CONNECTIONS - 150 MPH WINDS EXP "C"
WFCM 2015 TABLE 3.2

CONNECTION	FRAMING SPACING (INCHES)	ROOF SPAN (FEET)	UPLIFT	LATERAL	SHEAR	NUMBER OF 8d COMMON NAILS OR 10d BOX NAILS IN EACH END OF 1-1/4" X 20 GAGE STRAP
ROOF ASSEMBLY TO WALL ASSEMBLY	16" OC	16	40T	242	152R	4
WALL ASSEMBLY TO FOUNDATION	16" OC	16	224	219	436	4

TABLE S601.8 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING UPLIFT LOADS - 150 MPH WIND EXP "C"
WFCM 2015 TABLE 3.2C

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)
UPLIFT LOADS	1 - 3 STORIES	25 INCHES ON CENTER
		30 INCHES ON CENTER

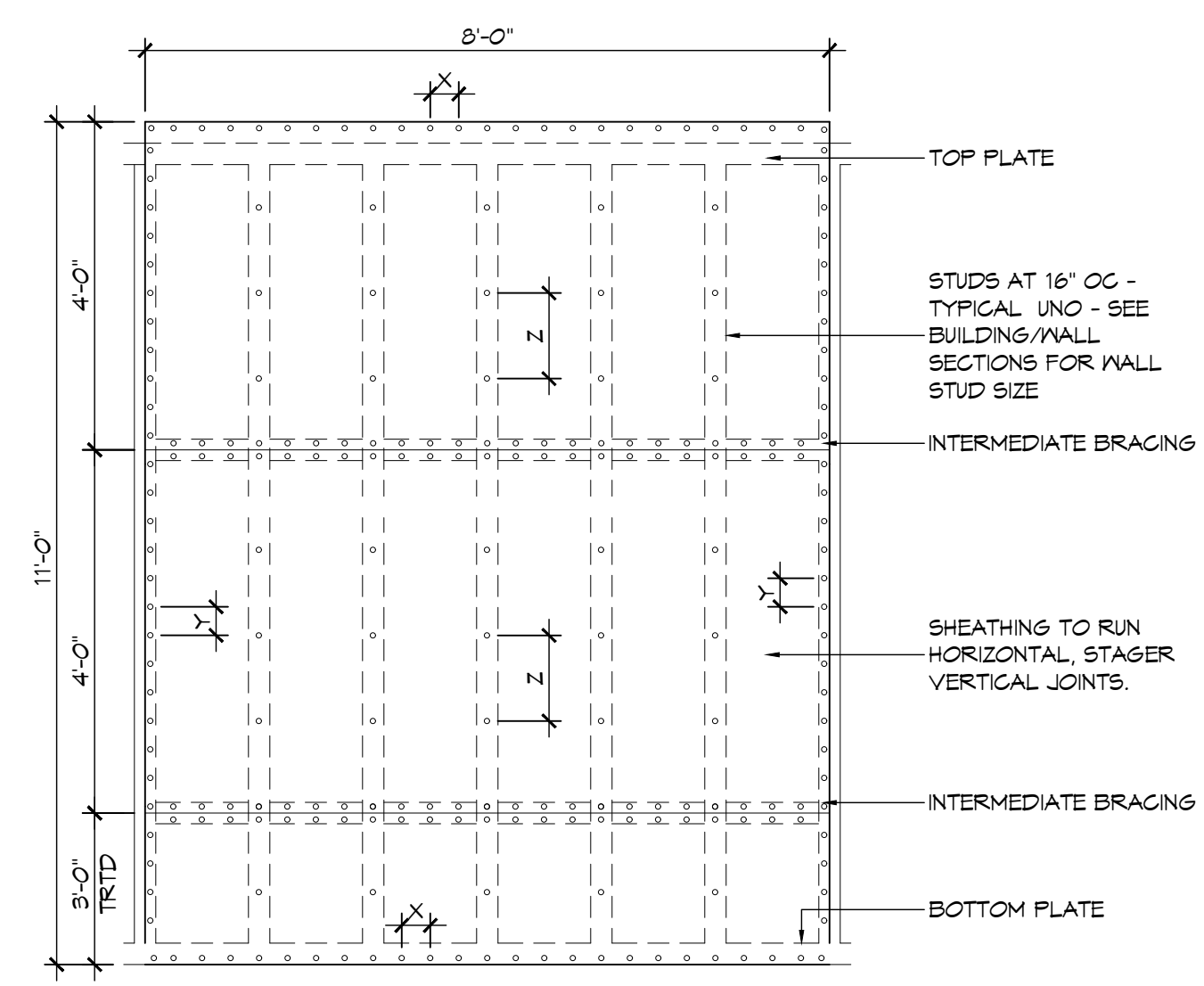
NOTE: A MINIMUM OF ONE ANCHOR BOLT SHALL BE PROVIDED WITHIN 6 TO 12 INCHES OF EACH END OF EACH PLATE

TABLE S601.9 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING SHEAR LOADS - 150 MPH WIND EXP "C"
WFCM 2015 TABLE 3.2B

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)
UPLIFT LOADS	4 STORY	5/8" Ø ANCHOR BOLTS
		48 INCHES ON CENTER W/ 3/8" X 1/4" WASHER

TABLE S601.10 - FULL HEIGHT STUD REQUIREMENT FOR HEADERS OR WINDOW SILL PLATES IN EXTERIOR WALLS EXPOSURE "C"
WFCM 2015 TABLE 3.23C

HEADER SPAN (FEET)	WALL SPACING (INCHES)		
	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



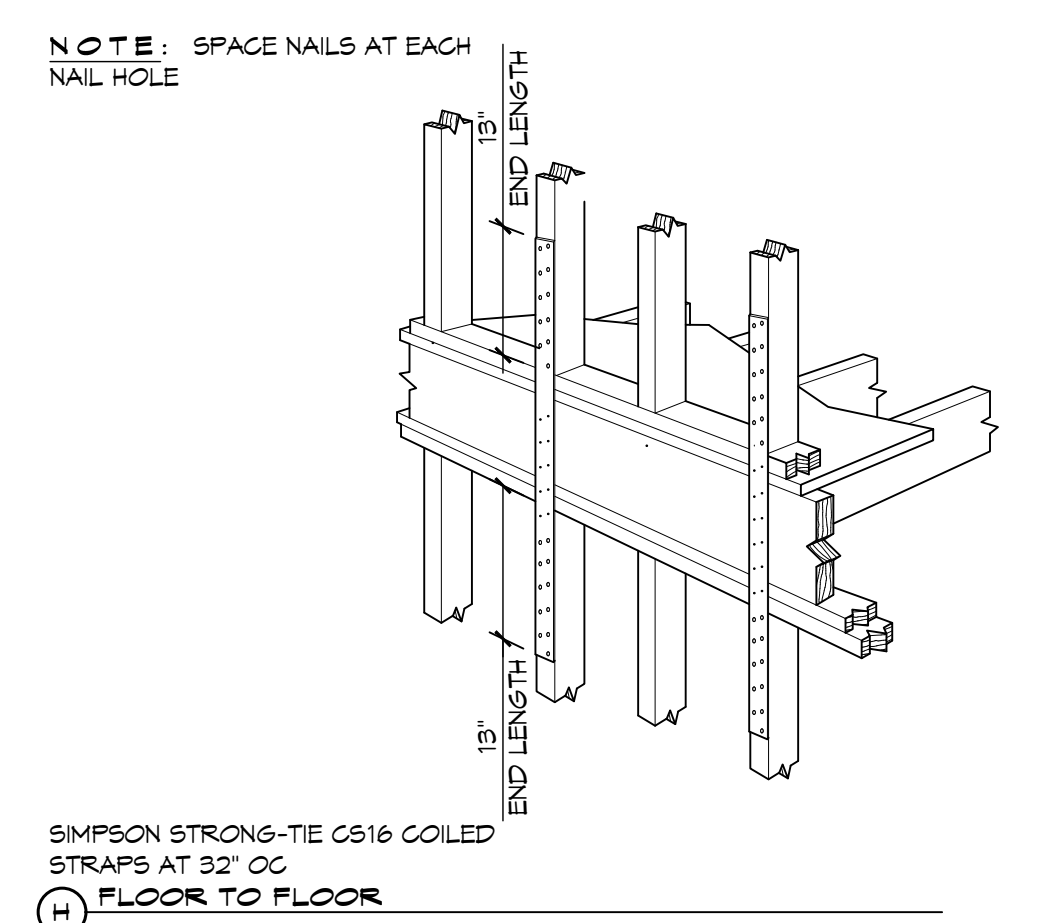
NAIL SPACING
X = 4" OC
Y = 4" OC
Z = 12" OC

X = PLATE EDGE NAIL SPACING
Y = LONG EDGE NAIL SPACING
Z = FIELD NAIL SPACING

INTERIOR SHEATHING
1/2" PLYWOOD EACH FACE STAGGERED 48" OC. W/ 8d NAILS @ 4" O.C. FASTENING @ PANEL EDGES 8d NAILS @ 12" O.C. FASTENING @ INTERMEDIATE MEMBERS.

EXTERIOR SHEATHING
1/2" PLYWOOD EACH FACE STAGGERED 48" OC. W/ 8d NAILS @ 4" O.C. FASTENING @ PANEL EDGES 8d NAILS @ 12" O.C. FASTENING @ INTERMEDIATE MEMBERS.

3 SHEAR WALL EXTERIOR SHEATHING NAILING PATTERN



4 NOT USED

5 FLOOR TO FLOOR

6 RIDGE BEAM/BOARD

7 TOP PLATE TO RAFTER

8 STUD TO TOP PLATE

9 FLOOR JOIST

10 DEL FLOOR JOIST

11 HIP RAFTER

12 STUD TO SILL PLATE

TYPICAL CONNECTION DETAILS
SCALE: NTS

TABLE S601.5 - JACK STUD REQ - INT LOADBEARING WALLS

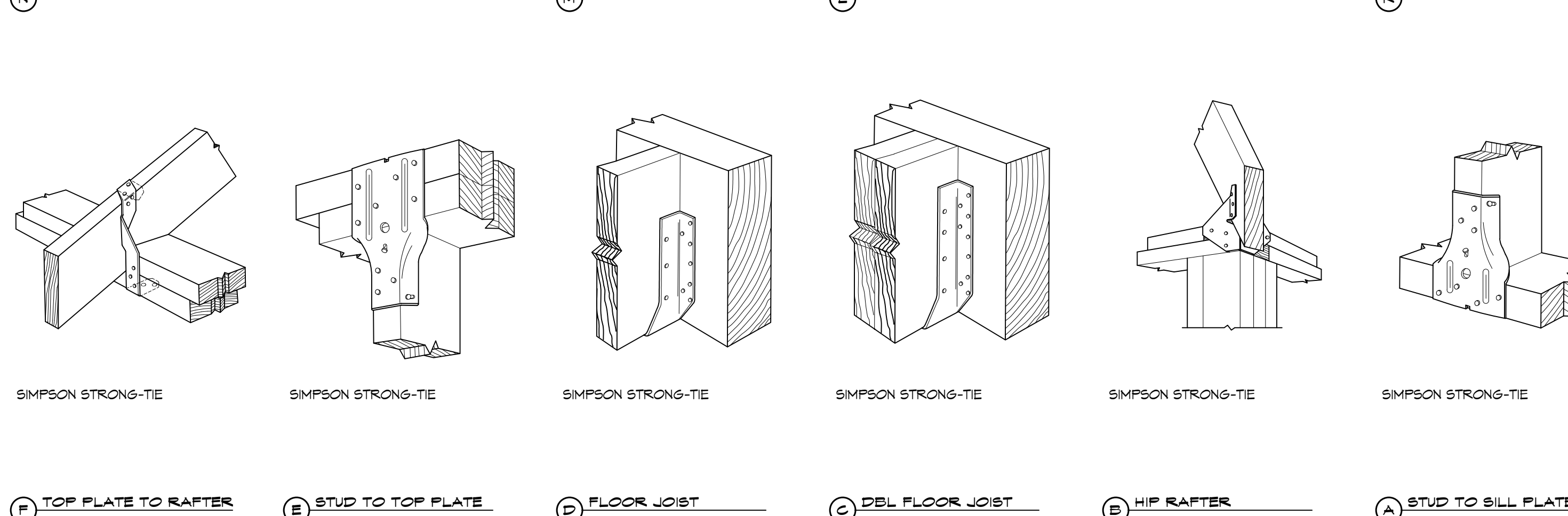
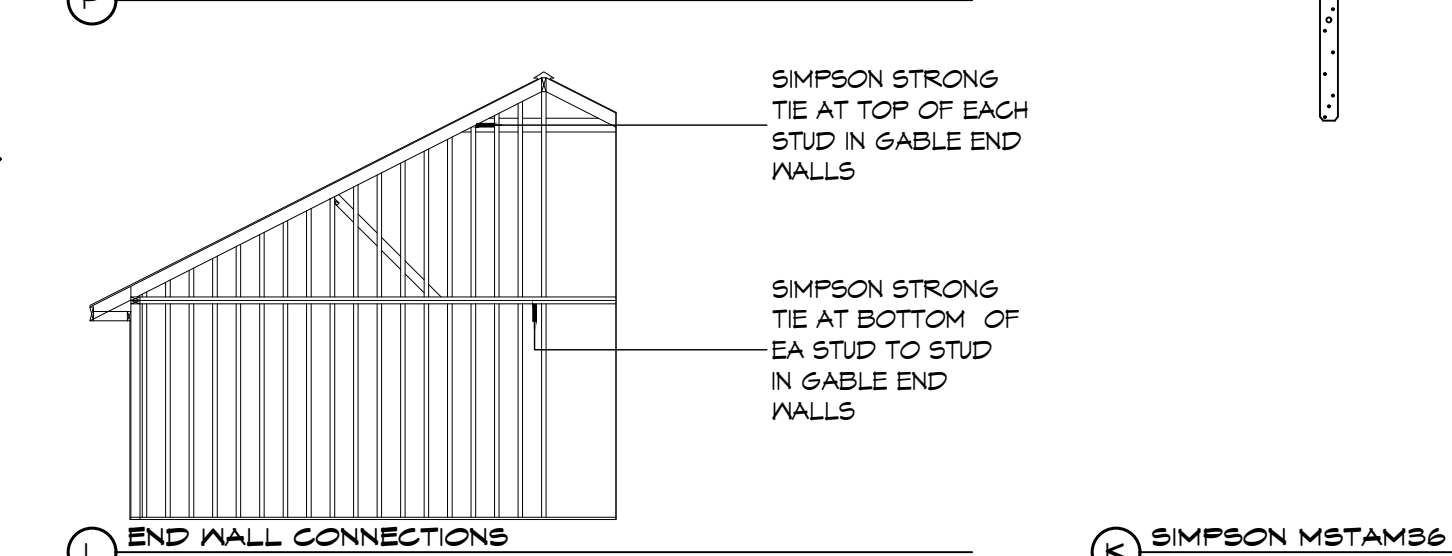
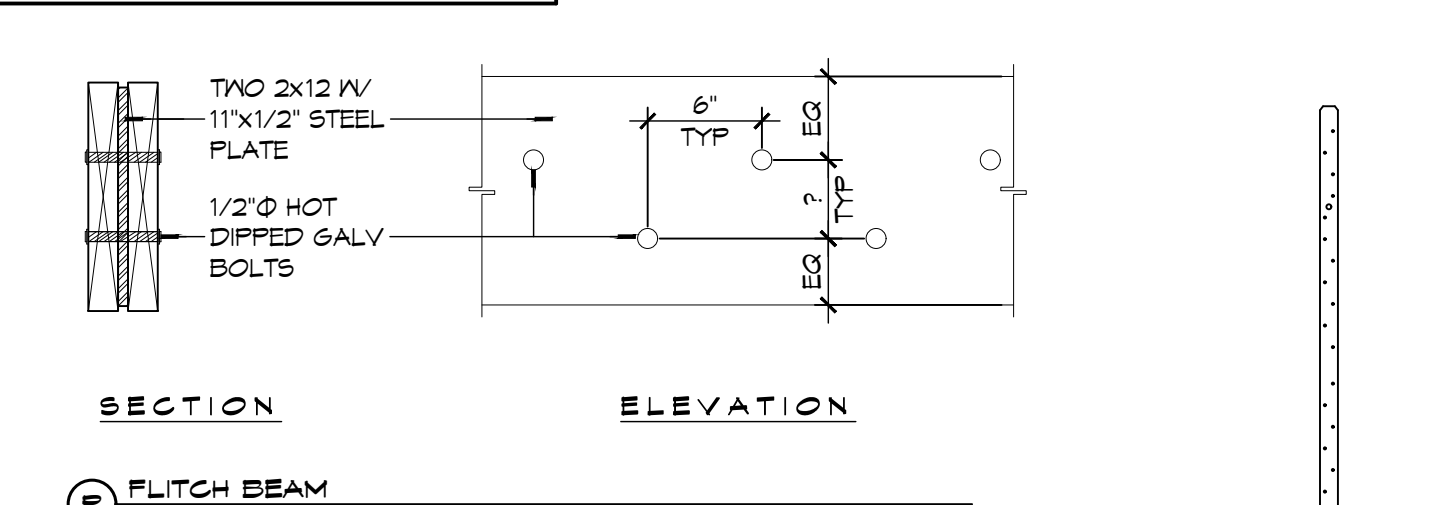
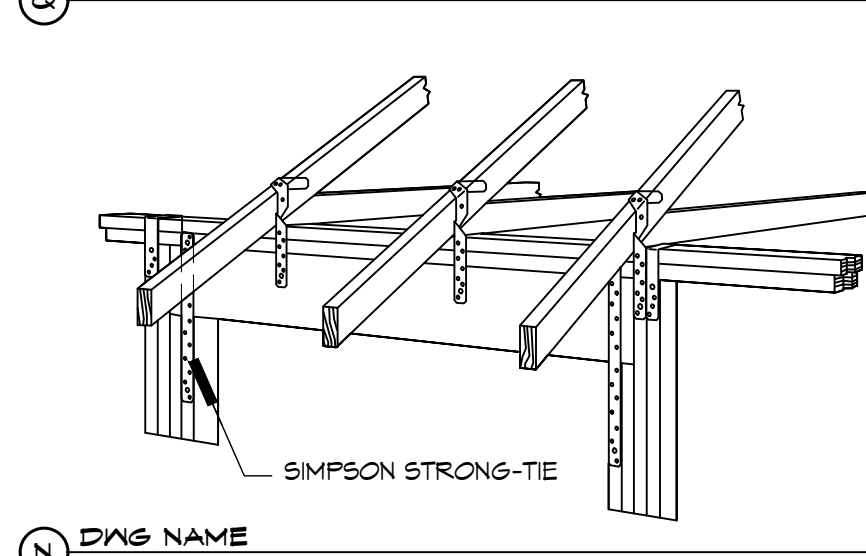
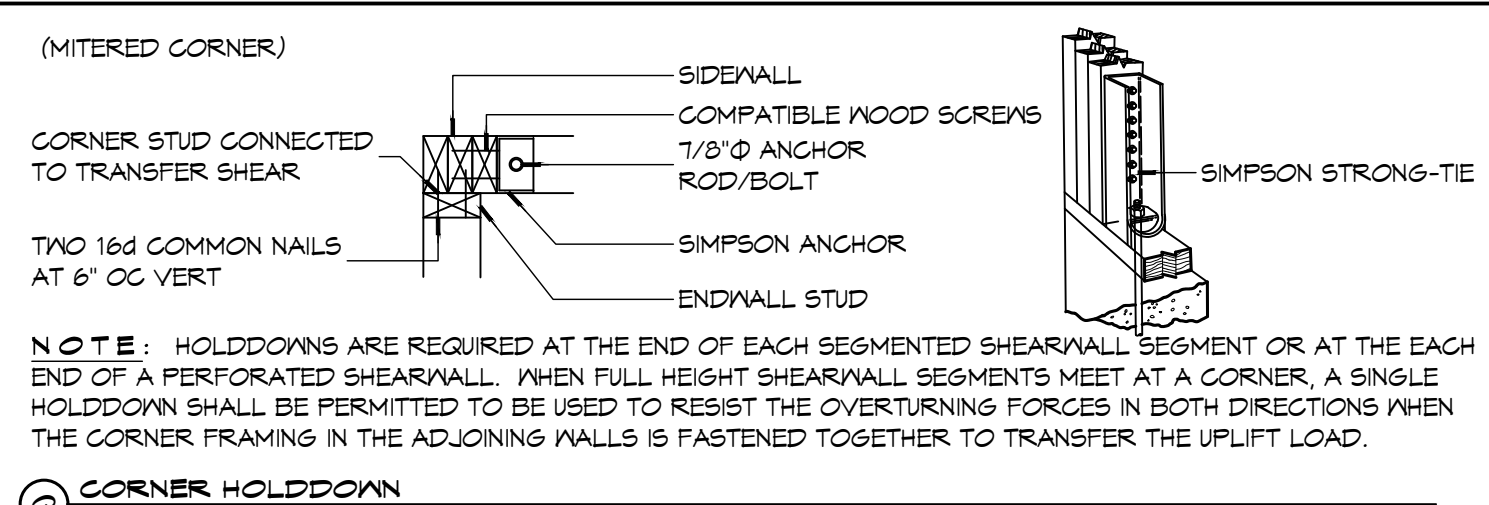
HEADER SUPPORTING	HEADER SPAN (FT)	ROOF SPAN (FEET)											
		12 FEET				24 FEET				36 FEET			
		3"	4.5"	5"	6.5"	3"	4.5"	5"	6.5"	3"	4.5"	5"	6"
ONE FLOOR ONLY (CENTER BEARING)	2	1	1	1	1	1	1	1	1	1	1	1	1
	4	1	1	1	1	1	1	1	1	1	1	1	1
	6	1	1	1	1	1	1	1	1	2	1	1	1
	8	1	1	1	1	2	1	1	1	2	2	2	1
	10	1	1	1	1	2	2	1	1	3	2	2	2
	12	1	1	1	1	2	2	2	1	3	2	2	2
TWO FLOORS (CENTER BEARING)	2	2	2	1	1	3	2	2	2	4	3	3	2
	4	1	1	1	1	1	1	1	1	2	1	1	1
	6	2	1	1	1	3	2	2	2	4	3	2	2
	8	2	2	1	1	3	2	2	2	5	3	3	3
	10	2	2	2	1	4	3	3	2	6	4	4	3
	12	3	2	2	2	5	3	3	3	7	5	4	4
14	3	2	2	2	6	4	4	3	8	5	5	4	
16	4	3	2	2	6	4	4	3	9	6	6	5	

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

TABLE S601.6 - JACK STUD REQ - EXTERIOR LOADBEARING WALLS
WFCM 2015 TABLE 3.22F

		ROOF LIVE LOAD 20 PSF				ROOF LIVE LOAD 30 PSF			
		3"	4.5"	5"	6.5"	3"	4.5"	5"	6.5"
		NUMBER OF JACK STUDS REQUIRED							
ROOF AND CEILING	2	1	1	1	1	1	1	1	1
	4	1	1	1	1	1	1	1	1
	6	2	1	1	1	2	1	1	1
	8	2	2	2	1	2	2	2	1
	10	3	2	2	2	3	2	2	2
	12	3	2	2	2	3	2	2	2
ROOF, CEILING, AND ONE CENTER BEARING FLOOR	2	1	1	1	1	1	1	1	1
	4	2	1	1	1	2	1	1	1
	6	2	2	2	1	3	2	2	2
	8	3	2	2	2	3	2	2	2
	10	4	3	2	2	4	3	3	2
	12	4	3	3	2	5	3	3	3
14	5	4	3	3	5	4	3	3	
16	6	4	4	3	6	4	4	3	

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



13 RIDGE BEAM/BOARD **14 TOP PLATE TO RAFTER** **15 STUD TO TOP PLATE** **16 FLOOR JOIST** **17 DEL FLOOR JOIST** **18 HIP RAFTER** **19 STUD TO SILL PLATE**

TABLE S601.3 - NAILING SCHEDULE
WFCM 2015 TABLE 3.1

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

TABLE S601.4 - BUILDING ENVELOPE REQUIREMENTS

OPAQUE ELEMENTS	ASSEMBLY MAXIMUM	INSULATION MIN. R-VALUE
ROOFS		
INSULATION ENTIRELY ABOVE DECK	U-0.040	R-20.0 c.i.
METAL BUILDING	U-0.065	R-19
ATTIC AND OTHER	U-0.027	R-30
WALLS, ABOVE GRADE		
MASS	U-0.151	R-5.7 c.i.
METAL BUILDING	U-0.113	R-19.0
STEEL-FRAMED	U-0.124	R-19.0
WOOD-FRAMED AND OTHER	U-0.089	R-19.0
FLOORS		
MASS	U-0.107	R6-3 c.i.
STEEL JOIST	U-0.052	R-19.0
WOOD FRAMED AND OTHER	U-0.051	R-19.0
SLAB-ON-GRADE		
UN-HEATED	F-0.750	NR
OPAQUE DOORS		
SWINGING	U-0.700	NR
NON-SWINGING	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:
 - APPLY A 14 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 14 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE.
- 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 NOTES

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

METAL ROOF APPLICATION & FASTENING NOTES

- INSTALL METAL ROOF PER MANUFACTURES RECOMMENDATIONS FOR 150MPH WIND SPEED.

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.

TABLE S601.1 - ROOF SHEATHING ATTACHMENT REQUIREMENT - WIND LOAD EXP "C"

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

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

TABLE S601.1 - WALL SHEATHING AND CLADDING REQUIREMENT - WIND LOAD EXP "C"

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

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

TABLE S601.1 - WALL SHEATHING AND CLADDING REQUIREMENT - WIND LOAD EXP "C"

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

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

DAMMON ENGINEERING, INC.
LOUISIANA & MISSISSIPPI

612 SOUTH BEACH BLVD.
BAY ST LOUIS, MS 39520
JOB No: _____
DRAWN BY: _____

Chief Engineer: Brian Mistich, PE
554 Old Spanish Trail
Slidell, LA 70688
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#	DESCRIPTION	DATE

SEAL: **BRIAN A. MISTICH**
LICENSED PROFESSIONAL ENGINEER
STATE OF MISSISSIPPI
20971

S - N - V - P - O - I - T - R - A - S

SHEET TITLE: **TYPICAL CONNECTION DETAILS, SCHEDULES, AND NOTES**

DRAWING NUMBER: **S102**

SHEET No: **3** of **5**

P.E. NAME: A.A. - PROFESSIONAL ENGINEER (Professional Seal No. 15, 2023, 11/20/24)

WIND SPEED
 THE CONSTRUCTION FOR SAID HOUSE, WIND SPEED IS 150 MPH. THIS DESIGN IS IN ACCORDANCE WITH: AMERICAN WOOD COUNCIL, WOOD FRAME CONSTRUCTION MANUAL FOR ONE AND TWO FAMILY DWELLINGS (WFCM) 2018 EDITION AS WELL AS THE INTERNATIONAL RESIDENTIAL CODE (IRC) 2018 EDITION.

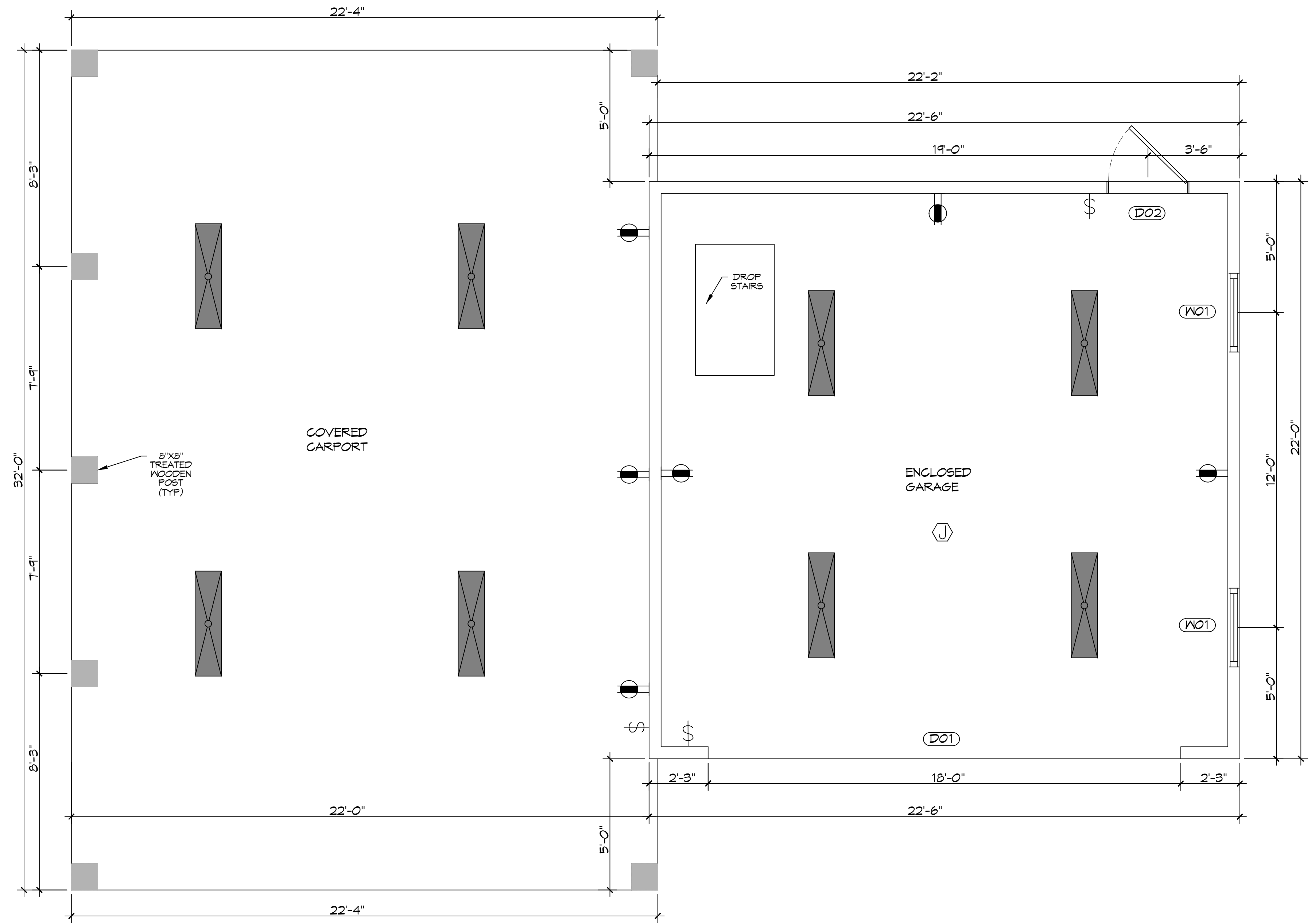
DOOR SCHEDULE

MK	WIDTH	HEIGHT	THK	DOOR MAT	FRAME MAT	NOTES
D01	18'-0"	8'-0"	-	ALUM	-	GARAGE DOOR
D02	3'-0"	6'-8"	1-3/4"	ALUM	WOOD	EXTERIOR DOOR

WINDOW SCHEDULE

MK	WIDTH	HEIGHT	FRAME MAT	NOTES
W01	3'-0"	5'-0"	ALUM	SINGLE HUNG INSULATED

NOTE: ALL EXTERIOR WINDOWS AND DOOR ASSEMBLES TO BE RATED FOR 150 MPH WINDS AND SHALL BE MISSILE IMPACT RESISTANT.



7 FLOOR PLAN
 SCALE: 3/8" = 1'-0"

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REVISIONS

#	DESCRIPTION	DATE



NEW GARAGE

MARTY HOPKINS

512 SOUTH BEACH BLVD.
 BAY ST LOUIS, MS 39520

JOB No: _____ DATE: 05-15-23
 DRAWN BY: CKD CHECKED BY: B.A.M.

SHEET TITLE:
FLOOR PLAN

DRAWING NUMBER:
A101

SHEET No: 4 of 5

