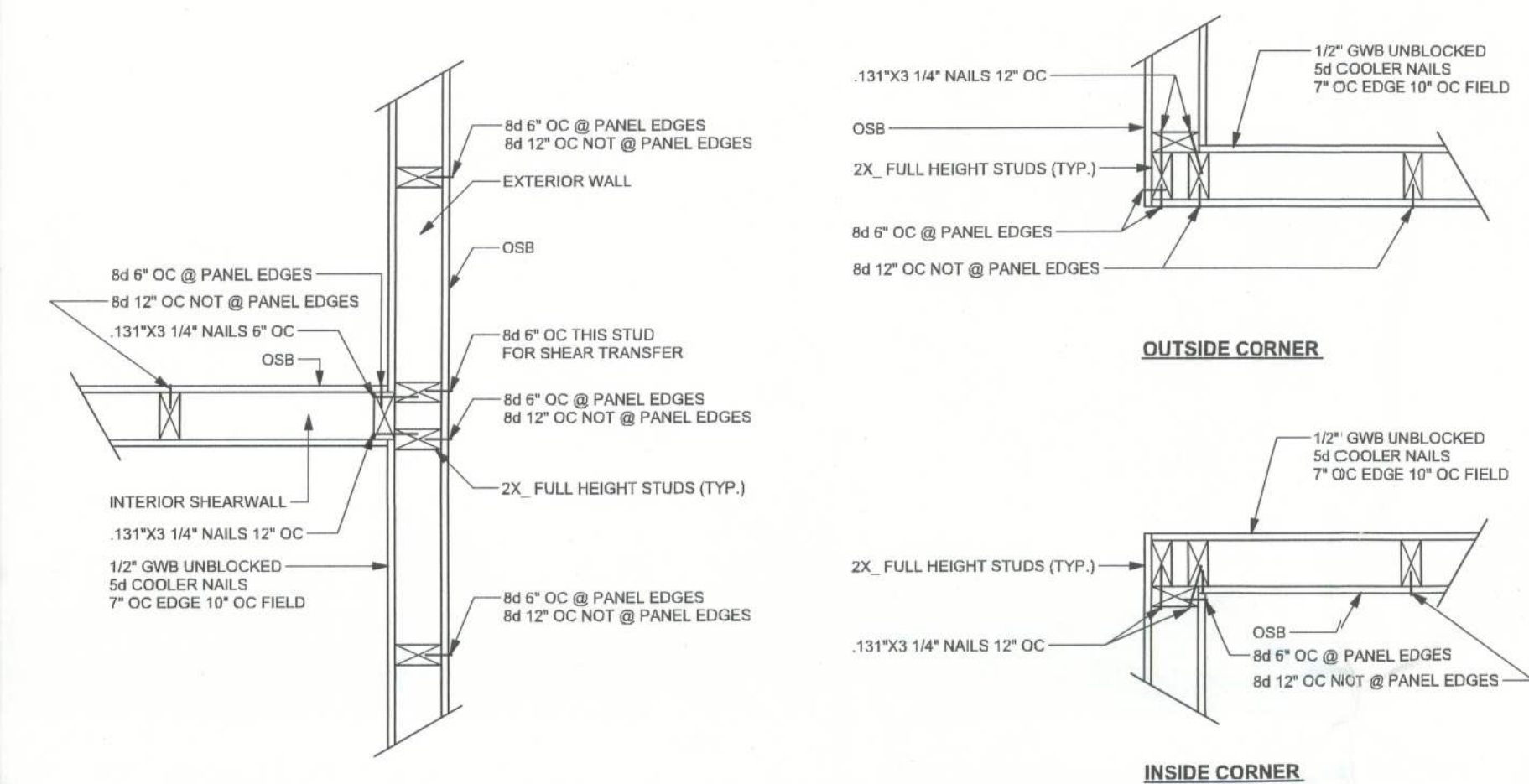
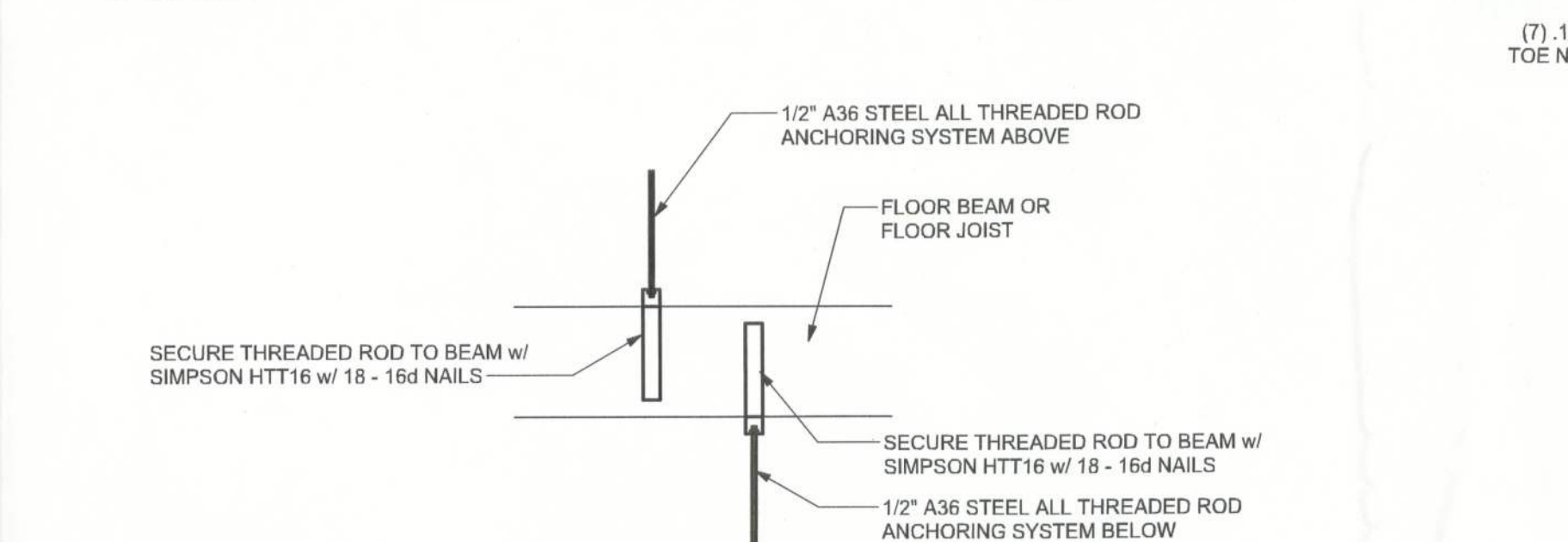


(TYP.) WALL CONNECTIONS  
ONE STORY WOOD FRAME

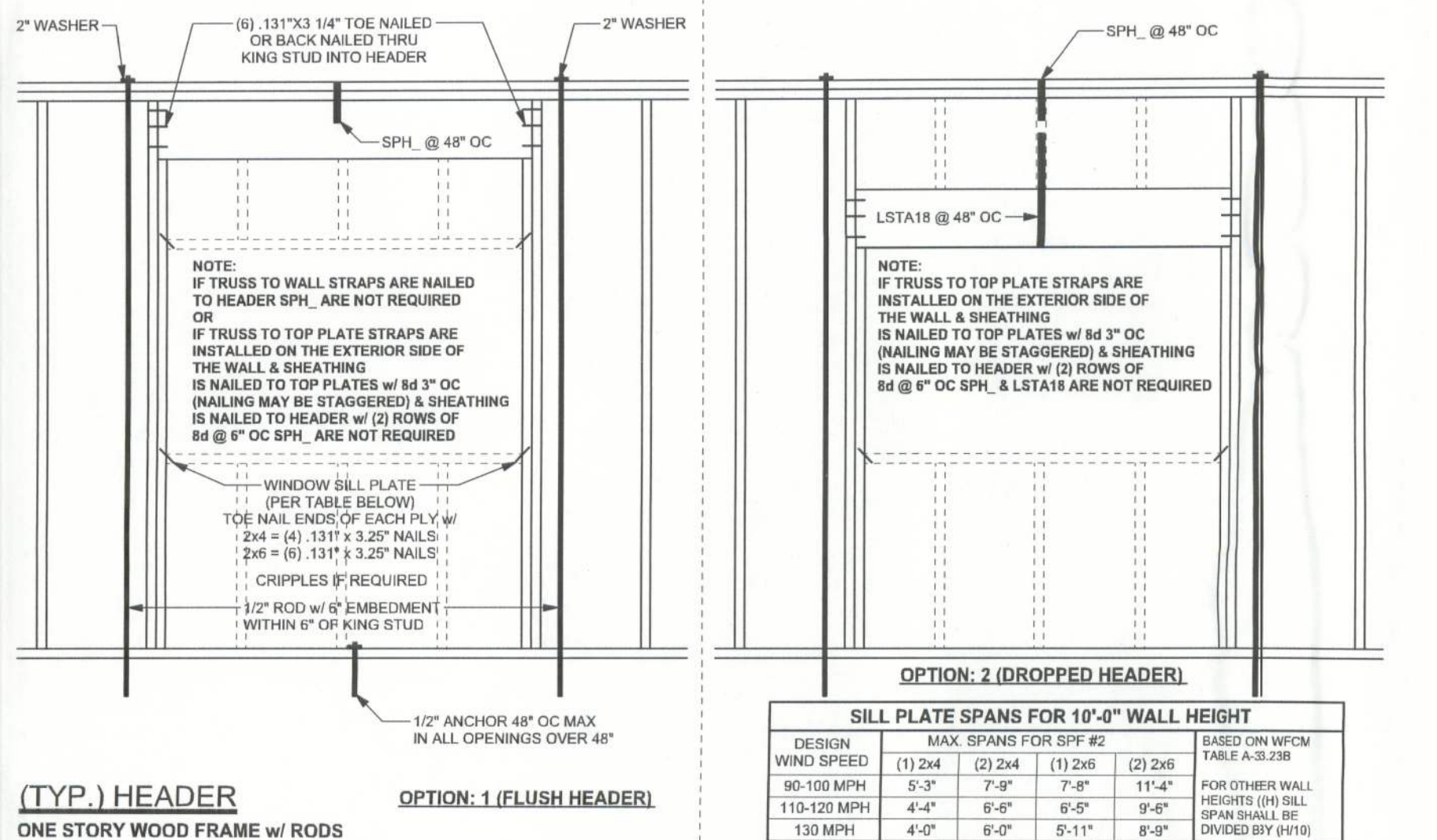


(TYP.) INTERSECTING WALL FRAMING  
WOOD FRAME

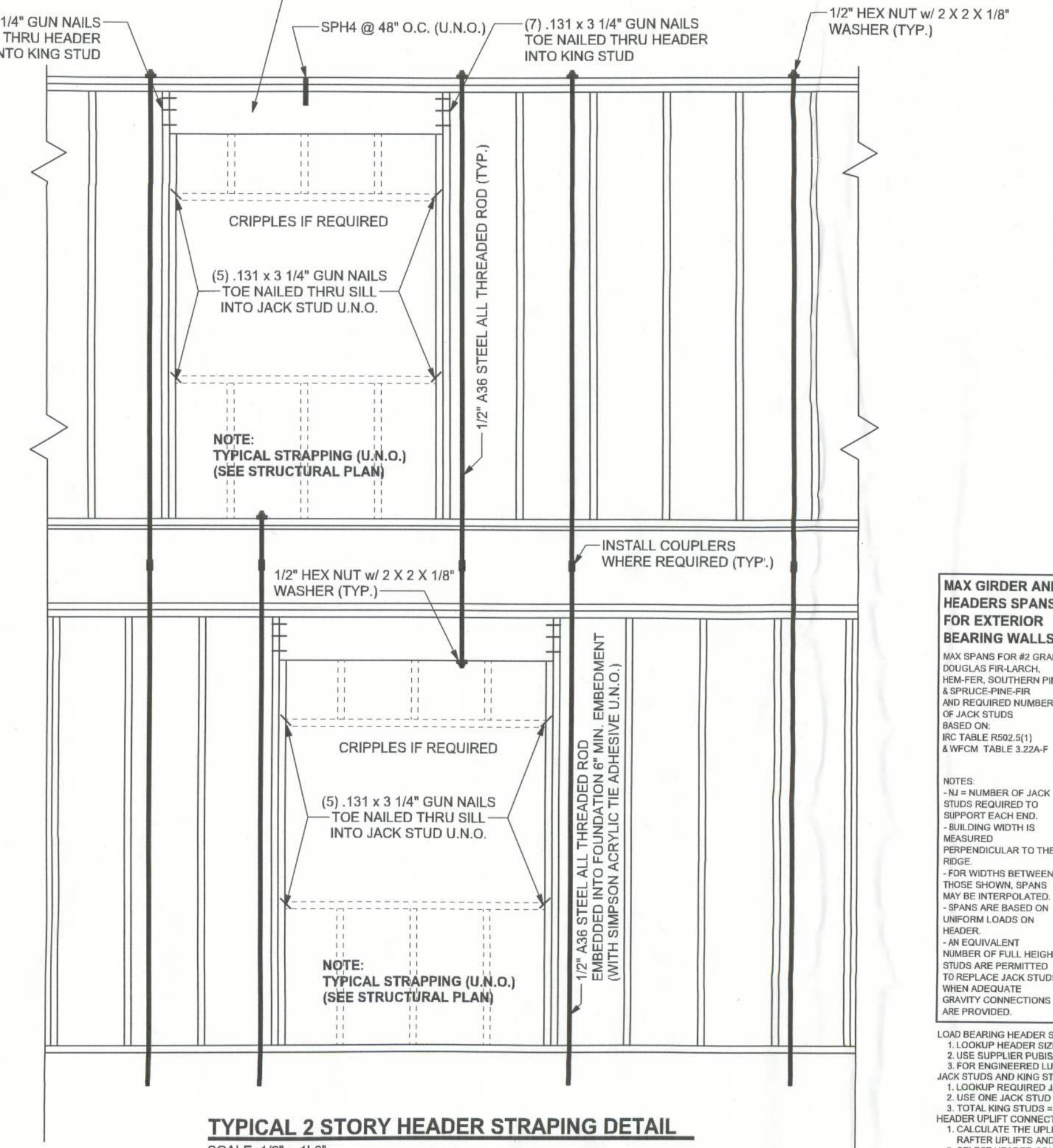
(TYP.) CORNER FRAMING  
WOOD FRAME



OPTIONAL THREADED ROD TO  
FLOOR BEAM OR FLOOR JOIST  
SCALE: 1/2" = 1'-0"



(TYP.) HEADER  
ONE STORY WOOD FRAME w/ RODS

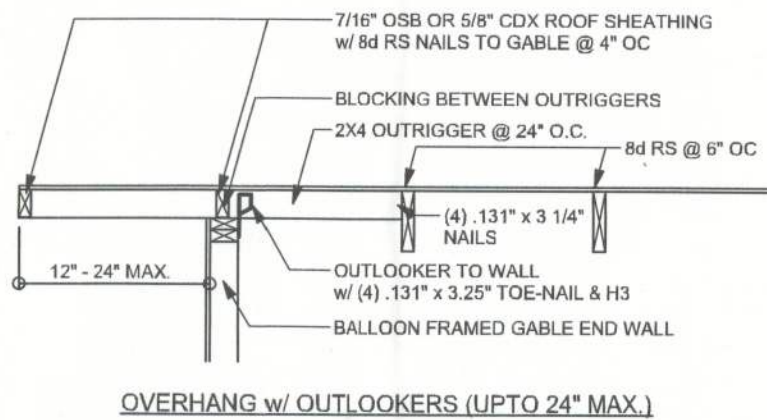


TYPICAL 2 STORY HEADER STRAPPING DETAIL  
SCALE: 1/2" = 1'-0"

## ANCHOR TABLE

OBTAIN UPLIFT REQUIREMENTS FROM TRUSS  
MANUFACTURER'S ENGINEERING

UPLIFT LBS. SYP	UPLIFT LBS. SPF	TRUSS CONNECTOR*	TO PLATES	TO RAFTER/TRUSS	TO STUDS
< 420	< 245	H5A	3-8d	3-8d	
< 455	< 265	H5	4-8d	4-8d	
< 360	< 235	H4	4-8d	4-8d	
< 455	< 320	H3	4-8d	4-8d	
< 415	< 365	H2.5	5-8d	5-8d	
< 600	< 535	H2.5A	5-8d	5-8d	
< 950	< 820	H6	8-8d	8-8d	
< 745	< 565	H8	5-10d, 1 1/2"	5-10d, 1 1/2"	
< 1465	< 1050	H14-1	13-8d	12-8d, 1 1/2"	
< 1465	< 1050	H14-2	15-8d	12-8d, 1 1/2"	
< 990	< 850	H10-1	8-8d, 1 1/2"	8-8d, 1 1/2"	
< 760	< 655	H10-2	6-10d	6-10d	
< 1470	< 1265	H16-1	10-10d, 1 1/2"	2-10d, 1 1/2"	
< 1470	< 1265	H16-2	10-10d, 1 1/2"	2-10d, 1 1/2"	
< 1000	< 860	MTS24C	7-10d 1 1/2"	7-10d 1 1/2"	
< 1450	< 1245	HTS24	12-10d 1 1/2"	12-10d 1 1/2"	
< 2900	< 2490	2 - HTS24			
< 2050	< 1785	LGT2	14-16d	14-16d	
HEAVY GIRDER TIEDOWNS*			TO FOUNDATION		
< 3965	< 3330	MG1		22-10d	1-5/8" THREADED ROD 12" EMBEDMENT
< 10680	< 6485	HGT-2		16-10d	2-5/8" THREADED ROD 12" EMBEDMENT
< 10530	< 9035	HGT-3		16-10d	2-5/8" THREADED ROD 12" EMBEDMENT
< 9250	< 9250	HGT-4		16-10d	2-5/8" THREADED ROD 12" EMBEDMENT
STUD STRAP CONNECTOR*			TO STUDS		
< 435	< 435	SSP DOUBLE TOP PLATE	3-10d		4-10d
< 455	< 420	SSP SINGLE SILL PLATE	1-10d		4-10d
< 825	< 825	DSP DOUBLE TOP PLATE	6-10d		5-10d
< 825	< 600	DSP SINGLE SILL PLATE	2-10d		5-10d
< 685	< 760	SP4			6-10d, 1 1/2"
< 1240	< 1065	SPH4			10-10d, 1 1/2"
< 885	< 760	SP6			6-10d, 1 1/2"
< 1240	< 1065	SPH6			10-10d, 1 1/2"
< 1235	< 1165	LSTA18	14-10d		
< 1235	< 1235	LSTA21	16-10d		
< 1030	< 1030	CS20	18-8d		
< 1705	< 1705	CS16	28-8d		
STUD ANCHORS*			TO STUDS	TO FOUNDATION	
< 1350	< 1305	LTT19	8-16d		1/2" AB
< 2310	< 2310	LTT131	18-10d, 1 1/2"		1/2" AB
< 2775	< 2570	HD2A	2-5/8" BOLTS		5/8" AB
< 4175	< 3895	HTT16	18 - 16d		5/8" AB
< 1400	< 1400	PAHD42	16-16d		
< 3335	< 3335	HPAHD22	16-16d		
< 2200	< 2200	ABU44	12-16d		1/2" AB
< 2300	< 2300	ABU66	12-16d		1/2" AB
< 2320	< 2320	ABU88	18 - 16d		2-5/8" AB

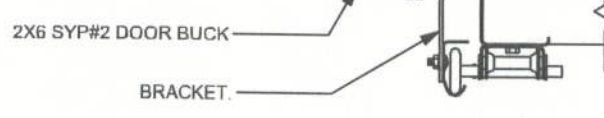


TYPICAL GABLE OVERHANG DETAIL  
AT BALLOON FRAMED GABLE END WALLS

## 2X6 SYP#2 GARAGE DOOR BUCK ATTACHMENT

ATTACH GARAGE DOOR BUCK TO STUD PACK AT EACH SIDE OF DOOR OPENING WITH 3/8"x4" LAG SCREWS w/ 1" WASHER LAG SCREWS MAY BE COUNTERSUNK. HORIZONTAL JAMBS DO NOT TRANSFER LOAD. CENTER LAG SCREWS ON STAGGER 16d NAILS OR (2) ROWS OF 131°X3 1/4" ON PER TABLE BELOW.

DOOR WIDTH	3/8"x4" LAG	16d STAGGER	(2) ROWS OF 131°X3 1/4" NAILS
8' - 10'	24" OC	5" OC	5" OC
11' - 15'	18" OC	4" OC	4" OC
16' - 18'	16" OC	3" OC	3" OC



(TYP.) GARAGE DOOR BUCK INSTALLATION  
WOOD FRAME

## EXTERIOR WALL STUD TABLE FOR SPF #2 STUDS

(1) 2x4 @ 16" OC	TO 10'-6" STUD HEIGHT
(1) 2x4 @ 12" OC	TO 11'-1" STUD HEIGHT
(1) 2x6 @ 16" OC	TO 16'-10" STUD HEIGHT
(1) 2x6 @ 12" OC	TO 18'-1" STUD HEIGHT

THIS STUD HEIGHT TABLE IS PER WFCM 2001, TABLE 3.20B. EXTERIOR LOAD BEARING & NON LOAD BEARING STUD LENGTHS RESISTING INTERIOR ZONE WINDLOADS 110 MPH EXPOSURE C. STUD SPACINGS SHALL BE MULTIPLIED BY 0.85 FOR FRAMING LOCATED WITHIN 4 FEET OF CORNERS FOR END ZONE LOADING. EXAMPLE 18" O.C. x 0.85 = 15.3" O.C.

## GRADE & SPECIES TABLE

		Fb (psi)	E (10 <sup>6</sup> psi)
2x8	SYP #2	1200	1.6
2x10	SYP #2	1050	1.6
2x12	SYP #2	975	1.6
GLB	24F-V3 SP	2400	1.8
LVL	TIMBERSTRAND	1700	1.7
LVL	MICROLAM	2900	2.0
PSL	PARALAM	2900	2.0

## GENERAL NOTES:

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE FBCR 2007. TRUSS ENGINEERING SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS. TRUSS ENGINEERING IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER AND SHALL BE SIGNED AND SEALED BY THE MANUFACTURER'S DESIGN ENGINEER. IT IS THE BUILDER'S RESPONSIBILITY TO VERIFY THE TRUSS DESIGNER FULLY SATISFIED ALL THE ABOVE REQUIREMENTS AND TO SELECT UPLIFT CONNECTIONS BASED ON TRUSS ENGINEERING UPLIFT AND REACTION LOADS. FOR INTERIOR BEARING WALLS, BUILDER IS TO FURNISH TRUSS ENGINEERING TO WIND LOAD ENGINEER FOR REVIEW OF TRUSS REACTIONS ON THE BUILDING STRUCTURE. STRAP 2X6 RAFTERS WITH MIN UPLIFT CONNECTION 415LB EACH END, 2X8 RAFTERS 700 LB EACH END.

SITE PREPARATION: SITE ANALYSIS AND PREPARATION IS NOT PART OF THIS PLAN

FOUNDATION: CONFIRM THAT THE FOUNDATION DESIGN & SITE CONDITIONS MEET GRAVITY LOAD REQUIREMENTS (ASSUME 1500 PSF BEARING CAPACITY UNLESS VISUAL OBSERVATION OR SOILS TEST PROVES OTHERWISE)

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS, F<sub>c</sub> = 3000 PSI.

WELDED WIRE REINFORCED SLAB: 6" x 6" W14 x W14, F<sub>y</sub> = 85KSI, WELDED WIRE REINFORCEMENT FABRIC (W.W.A.) CONFORMING TO ASTM A185, LOCATED IN MIDDLE OF THE SLAB, SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT SPACINGS NOT TO EXCEED 3'.

FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER REINFORCEMENT, FIBER LENGTH 1/2 INCH TO 2 INCHES, DOSAGE AMOUNTS FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD PER THE MANUFACTURER'S RECOMMENDATIONS. FIBERS TO COMPLY WITH ASTM C 1116. SUPPLIER TO PROVIDE ASTM C 1116 CERTIFICATION OF COMPLIANCE WHEN REQUESTED BY BUILDING OFFICIAL.

CONTROL JOINTS: WHERE SPECIFIED, SAWN CONTROL JOINTS IN SLAB ON-GRADE SHALL BE CUT IN ACCORDANCE WITH ACI 302. JOINTS SHALL BE CUT WITHIN 12 HOURS OF SLAB PLACEMENT. THE LENGTH / WIDTH RATIOS OF SLAB AREAS SHALL NOT EXCEED 1.5 AND TYPICAL SPACING OF CUTS TO BE 1FT. DO NOT CUT WMM OR REINFORCING STEEL. (RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER AND CONTRACTOR'S APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCOURAGE THE SLAB TO CRACK ON A GIVEN LINE.)

REBAR: ASTM A 615, GRADE 60, DEFORMED BARS, F<sub>y</sub> = 60 KSI. ALL LAP SPLICES 4" DB (25' FOR #5 BARS); UNO. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 318-06, U.N.O.

GULIM BEAMS: GLE 24F-V3SP, F<sub>b</sub> = 2,400 PSI, E = 1,800,000 UNO. SUPPLIER MAY SUPPLY AN ALTERNATE BEAM WITH EQUAL PROPERTIES OR MAY SUBMIT THEIR OWN SIZING CALCULATIONS.

ROOF SHEATHING: ALL ROOFS ARE HORIZONTAL DIAPHRAGMS. 7/16" OSB SHEATHING, UNBLOCKED, APPLIED PERPENDICULAR TO FRAMING, OVER A MINIMUM OF 3 FRAMING MEMBERS, WITH PANEL EDGES STAGGERED, FASTENED WITH 8d COMMON NAILS (131), 6" OC PANEL EDGES, 12" OC INTERMEDIATE MEMBERS, GABLE ENDS AND DIAPHRAGM BOUNDARY, 4" OC, UNO.

STRUCTURAL CONNECTORS: MANUFACTURERS AND PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLE NOT ENDORSEMENT. AN EQUIVALENT DEVICE OF THE SAME OR OTHER MANUFACTURER CAN BE SUBSTITUTED FOR ANY DEVICES LISTED IN THE EXAMPLE TABLES AS LONG AS IT MEETS THE REQUIRED LOAD CAPACITIES. MANUFACTURER'S INSTALLATION INSTRUCTIONS MUST BE FOLLOWED TO ACHIEVE RATED LOADS.

ANCHOR BOLTS: A-307 ANCHOR BOLTS WITH MINIMUM EMBEDMENT AS SPECIFIED IN DRAWINGS BUT NO LESS THAN 7" IN CONCRETE OR REINFORCED BOND BEAM OR 15" IN GROUTED CMU.

WASHERS: WASHERS USED WITH 1/2" BOLTS TO BE 3" x 2" x 3/64", WITH 5/8" BOLTS TO BE 3" x 3" x 3/64", WITH 3/4" BOLTS TO BE 3" x 3" x 5/16", UNO.

NAILS: ALL NAILS ARE COMMON NAILS UNLESS OTHERWISE SPECIFIED OR ACCEPTED BY FBC TEST REPORTS AS HAVING EQUAL STRUCTURAL VALUES.

## BUILDER'S RESPONSIBILITY

THE BUILDER AND OWNER ARE RESPONSIBLE FOR THE FOLLOWING, WHICH ARE SPECIFICALLY NOT PART OF THE WIND LOAD ENGINEER'S SCOPE OF WORK.

1) as built documentation based on discussion with the builders and personal observations.  
2) engineering analysis of existing members, and connections based on available information, and 3) specification of future construction required to provide wind load stability to the completed structure.

To the best of my knowledge this engineering is as accurate as possible without determining the owner's intent was to construct this addition in full compliance with the structural requirements of the building code and not allow deficiencies in member sizes, material, or workmanship.

WINDLOAD ENGINEER:  
Mark Disoway, P.E.  
No. 53915, P.O. Box 868, Lake City, FL 32066,  
386-754-5419

DIMENSIONS:  
Stated dimensions supersede located dimensions. Refer all questions to Mark Disoway, P.E. for resolution. Do not proceed without clarification.

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CERTIFICATION: I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with section R301.2.1, Florida building code residential 2007 & 2000 supplements to the best of my knowledge.

## DESIGN DATA

WIND LOADS PER FLORIDA BUILDING CODE 2007 RESIDENTIAL, SECTION R301.2.1 (ENCLOSED SIMPLE DIAPHRAGM BUILDINGS WITH FLAT, HIPPED, OR GABLE ROOFS). MEAN ROOF HEIGHT NOT EXCEEDING LEAST HORIZONTAL DIMENSION OR 60 FT; NOT ON UPPER HALF OF HILL OR ESCARPMENT 60 FT IN EXP. 5, 30 FT IN EXP. C AND 100% SLOPE AND UNOBSTRUCTED UPWIND FOR 50x HEIGHT OR 1 MILE WHICHEVER IS LESS.)

BUILDING IS NOT IN THE HIGH VELOCITY HURRICANE REGION

BUILDING IS NOT IN THE WIND-BORNE DEBRIS REGION

1) BASIC WIND SPEED = 110 MPH

2) WIND EXPOSURE = C

3) WIND IMPORTANCE FACTOR = 1.0

4) BUILDING CATEGORY = II

5) ROOF ANGLE = 10-45 DEGREES

6) MEAN ROOF HEIGHT = < 30 FT

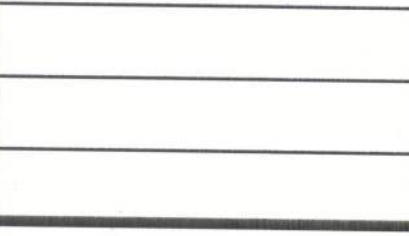
7) INTERNAL PRESSURE COEFFICIENT = N/A (ENCLOSED BUILDING)

8) COMPONENTS AND CLADDING DESIGN WIND PRESSURES (TABLE R301.2(2))

Zone	Effective Wind Area (ft <sup>2</sup> )	
10	100	
1	27.8 - 30.5	25.3 - 30.5
2	27.8 - 35.7	25.3 - 30.5
2 On	56.8	56.8
3	27.8 - 35.7	25.3 - 30.5
3 On	95.8	95.8
4	30.5 - 33.0	25.9 - 28.5
5	30.5 - 40.7	25.9 - 31.6
Doors & Windows	30.5	40.7
Worst Case (Zone 5, 10 ft <sup>2</sup> )		
8x7' Garage Door	27.3	32.0
16x7' Garage Door	25.9	29.4

DESIGN LOADS	
FLOOR	40 PSF (ALL OTHER DWELLING ROOMS)
	30 PSF (SLEEPING ROOMS)
	30 PSF (ATTICS WITH STORAGE)
	10 PSF (ATTICS WITHOUT STORAGE, < 3'12")
ROOF	20 PSF (FLAT OR < 4'12")
	16 PSF (4'12" TO < 12'12")
	12 PSF (12'12" AND GREATER)
STAIRS	40 PSF (ONE & TWO FAMILY DWELLINGS)
SOL. BEARING CAPACITY	1000PSF
NOT IN FLOOD ZONE (BUILDER TO VERIFY)	

## REVISIONS



ARCHITECTURAL DESIGN SOFTWARE

SCOPE OF WORK:  
This plan is for structural engineering for an addition to a single family residence. The structural work was partially complete at the time of this engineering. Portions of the structure including connections and nailing patterns were already covered. Therefore this engineering is 1) as built documentation based on discussion with the builders and personal observations, 2) engineering analysis of existing members, and connections based on available information, and 3) specification of future construction required to provide wind load stability to the completed structure.

WINDLOAD ENGINEER:  
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CERTIFICATION: I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with section R301.2.1, Florida building code residential 2007 & 2000 supplements to the best of my knowledge.

LIMITATION: This design is valid for one building, at specified location.

MARK DISOWAY  
P.E. 53915

12 MAR 10