# signed by ROBERT W 2021.01.14



GABLE ROOF OPTION

FRONT VIEW

SCALE 1/8" = 1'-0"

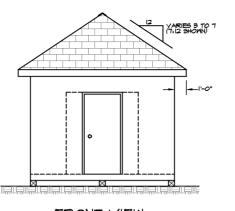
SIDE VIEW

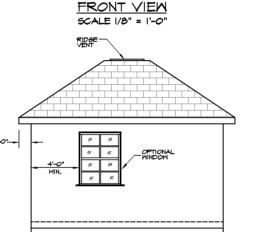
ROOF PLAN

SCALE 1/8" = 1'-0"

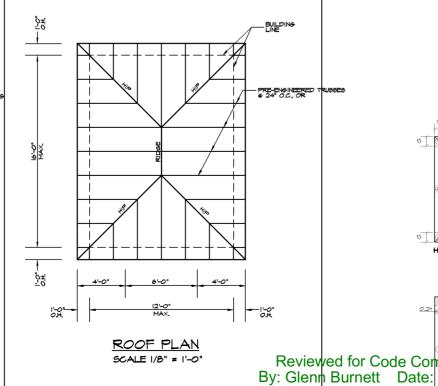
RAKE

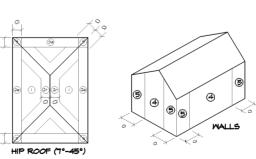
SCALE 1/8" = 1'-0"





SIDE VIEW SCALE 1/8" = 1'-0"





INSTALLATION NOTES: MEANS OF EGRESS TEMPERED WINDOW

O.H. GARAGE DOOR EGRESS PER FBC 1008.1.3.6, 1025.4, & R310.4

APPLICABLE CODES:

∑ 2020 FLORIDA BUILDING CODE, RESIDENTIAL, SEVENTH EDITION

FLAT ROOF (0°-7°)	GABLE ROOF (1°-45°)
: 01/15/21 1-00001	7 6 6 6 6 6
(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
0.6h	

0.2

RESMSTR2021

2020 FBC (TTH EDITION) COMPONENTS & CLADDING TABLES					
HIP ROOF					
ROOF SLOPE	ZONE	POSITIVE (+)	NEGATIVE (-)		
	1	+17.6	-46.4		
	2r	+17.6	-54.4		
7° - 20°	20, 3	+17.6	-56.6		
	I	+17.6	-32.8		
21° - 27°	2e, 2r, 3	+17.8	-45.6		
	1	+17.1	-34.9		
	20	+17.1	-31.0		
	25	+17.1	-488		
28° - 45°	3	+17,1	-475		
	4	+26.4	-28.7		
MALL	5	+26.4	-945		

Dx = DOOR DESIGNATION

MX = MINDOM DESIGNATION

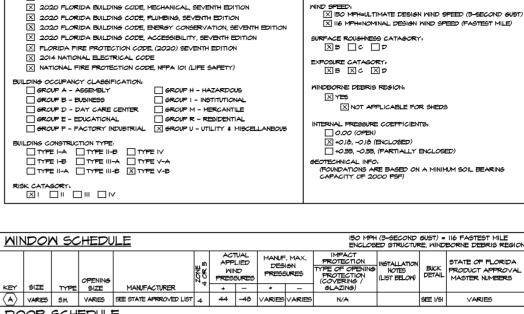
SLX = SKYLITE DESIGNATION

M = MIDTH

H = HEIGHT

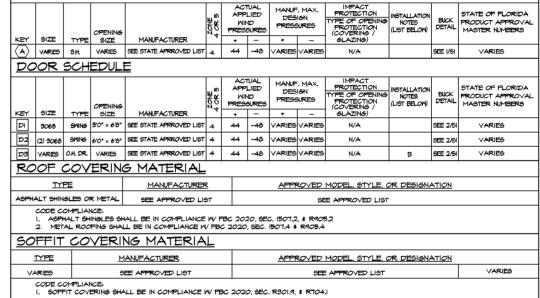
FBC 2020 (HIP)	FBC	2020	(HIP)
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2020 FBC (TTH EDITION) COMPONENTS & CLADDING TABLES						
FLAT / GABLE ROOF						
ROOF SLOPE	ZONE	POSITIVE (+)	NEGATIVE (-)			
	I, Ig	+10.5	-34.1			
	2	+105	-51.6			
0° - 7°	3	+10.5	-665			
	l, 2e	+IT.8	-51.0			
	2n, 2r, 3e	+IT.B	-64.3			
8° - 20°	3r	+IT.8	-75.9			
	l, 2e	#IT&	-39.3			
	2n, 2r, 3e	#ITÆ	-55.0			
21° - 27°	9r	+ITB	-62.8			
	l, 2e, 2r	+225	-39.3			
	2n, 5r	+225	-45.6			
28° - 45°	30	+22.5	-55.7			
	4	+26.4	-28.7			
MALL	5	+26.4	-34.5			



WIND LOADS:
(WIND LOADS ARE BASED ON CH. 26 THRU 30 OF ASCE 7)

DESIGN PARAMETERS:



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		20	①	۹	<b>②</b>	1	20	

FBC 2020 (GABLE)

ANUARY 1, 2020 SHEET

4

SCALE: AS NOTED

DATE:

12' ST

SCALE: AS NOTED

DATE: JANUARY 1, 2020

SHEET

LEE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT DIVISION OF CODES AND BUILDING SERVICES HURRICANE RESISTANT RESIDENTIAL CONSTRUCTION PURSUANT TO 2020 FLORIDA BUILDING CODE

-(2) 2"x12" RIDGE BEAM W 1/2" GALV. BOLTS @ 2'-0' O.C. W "SIMPSON" RIDGE RAFTER CONNECTOR ① FRAMING ANCHOR (TYPICAL): TP4X ("USP"), OR EQUIVALENT. DOUBLE 2"X4" 2"x6" CEILII JOISTS 9 |6" O.C. 4 —(4) 2"x4" KING POST e EACH END OF RIDGE BEAM ATTACHED M/ I/2" 6ALV. BOLTS e 2"-0" O.C. || (2) 5/8" GALV. BOLTS-EACH WAY FINISH GRADE -6"x6" PT MD. —— POSTS, MIN. EMBEDMENT=8'-0" TYPICAL WOOD FRAME ENDWALL SECTION

GENERAL NOTE: PRE-ENGINEERED ROOF TRUSSES REQUIRE NO COLLAR TIES.

PRE-ENGINEERED ROOF TRUSSES WITH HIP ROOFS REQUIRE NO BLOCKING. GABLE DIDWALLS WITH RAFTERS MIST BALLOONED FRAMED W (4) 2"x4" KING PALLOONED FRAMED W (4) 2"x4" KING GABLE DIDWALLS WITH TRUSSES MAY DE BALLOONED FRAMED OR

PLATFORM FRAMED.

PROVIDE A MINIMUM OF 2 LF OF WALL BETWEEN ALL DOORS AND WINDOWS AND CORNERS

FEMA NOTE:
MEN BLD6, IS LOCATED WITHIN A
FEMA FLOOD ZONE AREA.
HTDROSTATIC VENTING IS REOD.
HTDROSTATIC VENTING SIALL BE
SO ARRANGED TO FEMALE BE
AUTOMATIC PASSAGE OF STORMMATER.
ALL VENTING SHALL BE LOCATED A
MAXIMIM OF I'-O' ABOVE FF.
I SO, IN, O' VENTING SHALL BE
REOD, FOR EA, SO, FT, O'F FLOOR AREA.

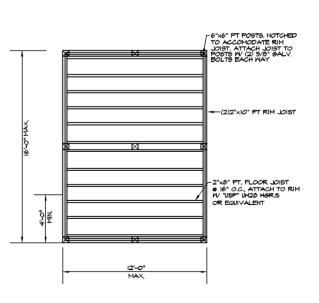
PLANS ARE NOT TO BE UTILIZED IN ANY FEMA "V" ZONE DESIGNATION.



# OPTIONAL ROOF PITCHES

- 5/8" CDX PLYWOOD
- ASPHALT SHINGLES OR GALV. STL METAL ROOFING
- 4 OPTIONAL STUCCO FINISH

Reviewed for Code Compliance By: Glenn Burnett Date: 01/15/21 RESMSTR2021-00001



FLOOR PLAN

SCALE 1/8" = 1'-0"

ы 8 В

FLOOR FRAMING PLAN SCALE 1/8" = 1'-0"

3. These plans are intended to be mastered. The repetitive use of these plans for permitting is

approved.

4. All windows, doors, and other such systems, components and cladding shall be designed in accordance with Section 1609 of the Seventh Edition of the 2020 Florida Building Code for design pressures generated by a three second gust design wind velocity of 150 mph, (116 mph fastest mile wind velocity), see "Design Parameters" for specific pressures.

FASTENERS \$ CONNECTORS

1. Approved connectors, anchors and other fastening devices not included in the Florida Building Code shall be installed in accordance with the manufacturer's recommendations.

2. Where fasteners are not otherwise specified fasteners shall be provided in accordance with Table 2304.4.1 of the Seventh Edition of the 2020 Florida Building Code. Nails, screws, or bolts shall

be able to resist the forces in this Code.

3. Unless otherwise stated, sizes given for nails are common wire nails. For example, 8d = 2 1/2 inches long x 0.131-inch diameter. See Table 12.3B, columns 2, 3, and 4, in the National Design Specifications for Wood Construction. Metal plates, connectors, screws, bolts and nails exposed directly to the weather or subject to salt corrosion in coastal areas, as determined by the Building Official, shall be stainless steel, or hot dipped galvanized after the fastener or connector is fabricated to form a zinc coating not less than I oz per sq ft, or hot dipped galvanized with a minimum coating of I.O oz per sq ft of steel meeting the requirements of ASTM A 90 Triple Spot Test.

# FOOTINGS AND FOUNDATIONS

### GENERAL

- All exterior walls, bearing walls, columns, and piers shall be supported on continuous concrete footings, piles, or other approved structural systems which shall be a sufficient design to support safely the loads imposed as determined from the character of the soil. Refer to standard details for typical foundation details.
- 3. Fill shall be placed and compacted in one foot lifts.
- Concrete shall have a minimum specified compressive strength of 3000 psi at 20 days. Reinforcing Steel shall be minimum Grade 40 and identified in accordance with ASTM A
- 615 A 616 A 617 or A 706
- Metal Accessories: Joint reinforcement, anchors, ties, and wire fabric shall conform to the following standards:
  - ASTM 82 for joint reinforcement and wire anchors and ties.
  - ASTM 36 for plate, headed and bent bar anchors.
  - ASTM 366 for sheet metal anchors and ties.
- 7. Metal accessories for use in interior wall construction shall be mill galvanized in accordance with ASTM A 641. Class I.
- Minimum concrete cover over reinforcing bars shall be 3 inches. In narrow footings where insufficient which is available to accommodate a standard 90 degree hook and provide the required concrete cover, the hook shall be rotated in the horizontal direction until the required concrete cover is achieved.
- 9. Masonry Units shall be hollow or solid concrete units in accordance with ASTM C 90 or C 145 and shall have a minimum net area compressive strength of 1900 psi.
   10. Mortar shall be either Type M or S in accordance with ASTM C 270.
- II. Grout shall have a maximum coarse aggregate size of 3/8 inch placed at an 8 to 11 inch slump and have a minimum specified compressive strength of 2,000 psi at 28 days when tested in accordance with ASTM C 1019, or shall be in accordance with ASTM C 476.

  12. All mortar joints for hollow unit masonry shall extend the full width of face shells. Mortar joints for solid masonry shall be full head and bed joints.
- 13. Bed joints shall be 3/8 inch ( $\frac{7}{8}$  1/8 inch) thick. Head joints shall be 3/8 inch (+ 3/8 inch or -
- 14. The bed joint of the starting course placed over footings shall be permitted to vary in thickness from a minimum of 1/4 inch to a maximum of 3/4 inch.
  15. Masonry walls shall be running bond or stack bond construction. Walls of stack bond
- construction, in addition to required vertical reinforcement, shall be provided with a minimum of 9 gage horizontal joint reinforcement placed in bed joints not more than 16
- 16. Longitudinal wires of joint reinforcement shall be fully embedded in mortar or grout with a minimum cover of 5/8 inch when exposed to earth or weather and 1/2 inch when not exposed to earth or weather.
- Reinforcing bar used in masonry walls shall have a masonry cover (including grout) not less
- 18. All concrete is to be mixed, transported, and placed in accordance with the latest AC
- Specifications and Recommendations.

  19. Foundations have been designed for an allowable soil bearing pressure of 2,000 PSF, and the existing soil being a granular material should poor soil conditions be found it is the
- contractor's responsibility to notify the engineer prior to commencing.

  20. Provide granular fill, clay materials are unacceptable. Existing soil under footing and slabs shall be compacted to 95% of AASHTO T-99.
- Provide (I) #5 electrical ground to foundation steel.
- A 6 mil minimium polyethylene dampproofing vapor barrier shall be provided, per FBC R320.1.4. and
- Fill shall be termite treated and a "Certificate for Termite Treatment" is required on the permit board pursuant to FBC SEc. 105.10 and FBC R320.1.
- All footings shall be a minimum of 12" below finished grade.
- The top of slab shall be a minimum of 8" above finished grade for wood frame construction.
- The top of slab shall be a minimum of 4" above finished grade for masonry veneer and a minimum of 6" elsewhere.

### WOOD GENERAL

- I. All wood construction shall comply with the latest NFPA and AITC Specifications and Recommendations
- Lumber standard shall be American Softwood Lumber Standard PS 20-70, S4S, 19%
- moisture or as required by structural design. Structural lumber (roof beams, headers, columns, exterior wall studs to be Southern Pine No. 2 KD 15 with a Fb=1,300 PSI E=1,600,000 PSI, and Fv = 95 PSI.
- Glue laminated timber shall conform with ASTM D-3737 and AITC IIT. Roof beams shall be designated 24F-VI or 24F-EI.

- Plywood for sheathing shall be APA rated sheathing as per plans and shall bear the APA Mark.
- Wood in contact with concrete, masonry and/or exposed to weather shall be protected or pressure treated in accordance with AITC-IO9.

### WOOD FLOORS

- Floor joists shall be of Group II species lumber and sized in accordance with the National Forest Products Association's (NFOPA) Span Tables for Joists and Rafters. Trussed Floor joists shall be in accordance with accepted engineering practice.

  Floor trusses shall be in accordance with TPI Design Specifications for Metal Plate
- Connected Parallel Chord Wood Trusses. Top chords shall be of Group II species lumber. Floor trusses shall also be in accordance with 2020 FBC Sec. 2303.4, R502.II.4., and R802.IO.I.
- 3. Floor sheathing shall be 19/32-inch minimum C-D sheathing grade plywood (wood structural panels), or equivalent. The sheathing shall be installed with long dimension perpendicular to framing and with end joints staggered. See Detail Sheets.

  4. Floor framing shall be spaced not more than 24 inches on center for 25/32-inch plywood
- (wood structural panels) sheathing and not more than 20 inches on center for other floor sheathing. In no case shall spacing exceed span ratings shown on sheathing panels. The floor joists/trusses shall be fastened to the sill plate or top plate in accordance with
- Florida Building Code and these plans and specifications. In addition, uplift connectors shall be provided to resist uplift loads.
- Provide bracing in the first two framing spaces at each end of floor system, spaced 4 feet on center maximum. Bracing members shall be full depth of joist or truss. No other blocking is
- required except as chosen to create a stronger diaphragm.

  7. Fasten floor sheathing to panels to framing and blocking with IOd common or IOd hot dipped galvanized box nails at the following spacing: a. 6 inches on center at all panel edges.
  - b. 12 inches on center at all intermediate framing.

# EXTERIOR WALL FRAMING

- Studs shall be placed with the wide face perpendicular to the wall.
- Header Beams shall be provided and sixed in accordance with Section R602.7. of the Seventh Edition of the 2020 Florida Building Code.
- The minimum number of header studs supporting each end of a header beam shall be 2.
- The minimum number of full-length wall studs at each end of a header beam shall be 2 for openings of 6 feet or less, and 3 feet for all other openings.
   Uplift connectors shall be provided at the top and bottom of cripple studs, of header studs, and at least one wall stud at each side of opening.

- CONNECTIONS FOR EXTERIOR WALL FRAMING Framing members in exterior wall systems shall be fastened together in accordance with Section 2305 of the Seventh Edition of the 2020 Florida Building Code.
- Uplift connectors shall be provided to resist the uplift loads.
- Uplift load resistance shall be continuous from roof to foundation.

  Studs shall be connected to plates and plates to floor framing with connectors designed, rated, and approved for each individual location and condition. See Windload Connectors
- 5. Where Anchor down connectors occur connectors required for uplift resistance may be

### EXTERIOR WALLS

- 1. Exterior wall segments shall not contain openings which when added together will exceed 144 sq in (1 sq ft) in any individual segment.
- Each corner shall be sheated for a least 3 feet and may be counted as a shearwall segment. Minimum length of a shearwall segment shall be 2'-5". The tops of all shearwall segments
- in any wall shall be connected by drag struts. Studs shall be doubled at each end of each shearwall segment.
- Joints shall be lap-spliced. Within the center third of a wall length, the minimum lap shall be 4 feet. Lap splices shall be connected with 14 16d common nails
- Provide bridging/blocking at mid-span of exterior wall studs

# PLYWOOD SHEATING USED FOR UPLIFT RESISTANCE

- Panels shall be 15/32" exposure I C-D sheating grade plywood and shall be installed as

  - ions: Panels shall be installed with face grain parallel to studs. All horizontal joints hall occur over framing and shall be attached per Detail
  - Flatwise blocking shall be used at all horizontal panel joints.
  - Panels shall be attached to bottom plates and top member of the double top plate. Lowest plates shall be attached to foundation with bolts or connectors of sufficient capacity to resist the uplift forces developed in the plywood sheated walls. Panel attachment to framing shall be as illustrated in the Detail Sheets. Where windows and doors interrupt plywood sheating, framing anchors or connectors shall be used to resist the appropriate uplift loads.

# ANCHOR DOWN CONNECTORS

- Exterior walls require anchor downs to resist overturning moment.
- Two studs and anchor down are required at each end of each shearwall segment.
- The anchor down shall be fastened through the doubled stude and to the construction below in accordance with the manufacturer's recommendations. See Windload Connectors

- 2. Parallel Chord Roof Trusses shall be in accordance with TPI Design Specifications for Metal Plate Connected Parallel Chord Wood Trusses. Truss design submittals shall indicate design wind speed, height above ground, and amount
- of uplift at bearings.

  Metal plate connected wood trusses shall be spaced no more than 24 inches on center and
- Metal plate connected wood trusses shall be spaced no more than 24 inches on center and designed for live loads and Windloads for an enclosed building based on Sections 2304.4, R502.11.4, and R802.10.1, of the Seventh Edition of the 2020 Florida Building Codes. Girder trusses shall be identified by the confidence of trusses shall show both upilit and lateral connection load requirements at end of girder trusses shall be Burnett Date: 01/15/21 Top chords of trusses shall be ground the provided by the upilit loads. Where trusses are used to form a hipped roof, a step down hip system shall be used. See detail sheets

- 9. Provide blocking at ends and mid-spans of roof trusses.
- 10. Roof trusses shall be pre-engineered and designed by a Florida Registered Engineer. Truss manufacturer shall provide shop drawings signed and sealed by a Florida Registered Enaineer. Roof trusses shall be placed in accordance with the truss manufacturers drawinas

### ROOF SHEATHING

- Roof sheating shall be 5/8 inch Exposure I C-D sheating grade plywood (wood structural
- The sheating shall be installed in accordance with Detail Sheets
- Long dimension shall be perpendicular to framing and end joints shall be staggered.
- 4. Sheathing shall be fastened to roof framing with 8d ring-shank nails at 6 inches on center at edges and 6 inches on center at intermediate framing. (pursuant to the Florida Building Code) Ring-shank nails shall have the following minimum dimensions:

  - a. O.113-inch nominal shank diameter b. Ring diameter of O.012 over shank diameter c. 16-20 rings per inch

  - d. 0.280 inch full round head diameter
  - e. 2-inch nail length Exceptions:

Where roof diaphraam requirements may necessitate a closer fastener spacina.

# ASPHALT SHINGLE ROOF COVERING

- I. Roof coverings shall be applied in accordance with the applicable provisions of FBC Sec. 1507 and the manufacturer's installation instructions.
- 2. The installation of asphalt shingles shall comply with the provisions of fbc Sec. 1507.3.
- Asphalt shingles shall be solidly sheathed decks.
   Asphalt shingles shall be used only on roof slopes of 3:12 or greater. For roof slopes from 3:12 up to 4:12, double underlayment application is required in accordance with 1507.3.8.
   Unless otherwise noted, required underlayment shall conform with ASTM D 226, type 1, or

- 6. Self-adhering polymer modified bitumen sheet shall comply with ASTM 1970.

  7. Asphalt shingles shall have self-seal strips or be interlocking, and comply with ASTM D 225
- 8. Fasteners for asphalt shingles shall be galvanized, stainless steel, aluminum or copper roofing nails, minimum 12 gauge shank with a minimum 3/8 inch diameter head, of a length to penetrate through the roofing materials and a minimum of 3/4 inch into the roof sheathing. Where the roof sheathing is less than 3/4 inch thick, the nails shall penetrate through the sheathing.

  9. Asphalt shingles shall be secured to the roof with not less than four fasteners per strip shingle
- or two fasteners per individual shingle.

  10. For roof slopes from 3:12 up to 4:12, underlayment shall be a minimum of two layers applied
- a. Starting at the eave, a 19-inch strip of underlayment shall be applied parallel with the eave and fastened sufficiently to stay in place.
  b. Starting at the eave, 36-inch-wide strips of underlayment felt shall be applied
- overlapping successive sheets 19 inches and fastened sufficiently to stay in place.
- II. For roof slopes 4:12 or greater, underlayment shall be a minimum of one layer of underlayment felt as follows: starting at the eave, underlayment shall be applied shingle fashion parallel to the eave, lapped 2 inches, and fastened sufficiently to stay in place.

### CEILING DIAPHRAGMS

- I. In those cases where a gable endwall is not build using full-height studs continuouse from floor to roof (balloon framing) a ceiling diaphragm shall be used to resist the lateral loads at the horizontal joint between the top plate of a platform-framed endwall and the gable construction above.
- Where there is no ceiling diaphragm at the height, such as a cathedral ceiling condition, the entire endwall, including the gable, must be constructed using full length studs from the floor to the roof deck (balloon framing), see detail sheets.
- to the roar aeck (balloon framing), see aetail sheets.

  Where a gypsum wallboard celling is used to create the required diaphragm, the diaphragm length must be at least two times the width of the building.

  The gypsum board must be a ,omo.i, pf 5/8 inch thick and must be fastened directly to the ceiling joists or bottom chords of trusses (no furring) with 5d cooler nails or GWB-54 I I/2 inch nails at 7 inches on center.
- Ceiling framing shall be braced with full depth blocking at 4 feet on center in the first four framing spaces from each end at top and bottom chords. Lateral loads at the endwall top plate shall be resisted by connecting the top plate to a 2x ceiling nailer with IOd nails at 6 inches on center. See detail sheets.

- EXTERIOR WALL VENEERS

  I. Exterior wall veneers shall be installed in accordance with Section 1405 of the Seventh Edition
- of the 2020 Florida Building Code.

  Application of stucco (portland cement plaster) shall be in accordance with ASTM C 296,

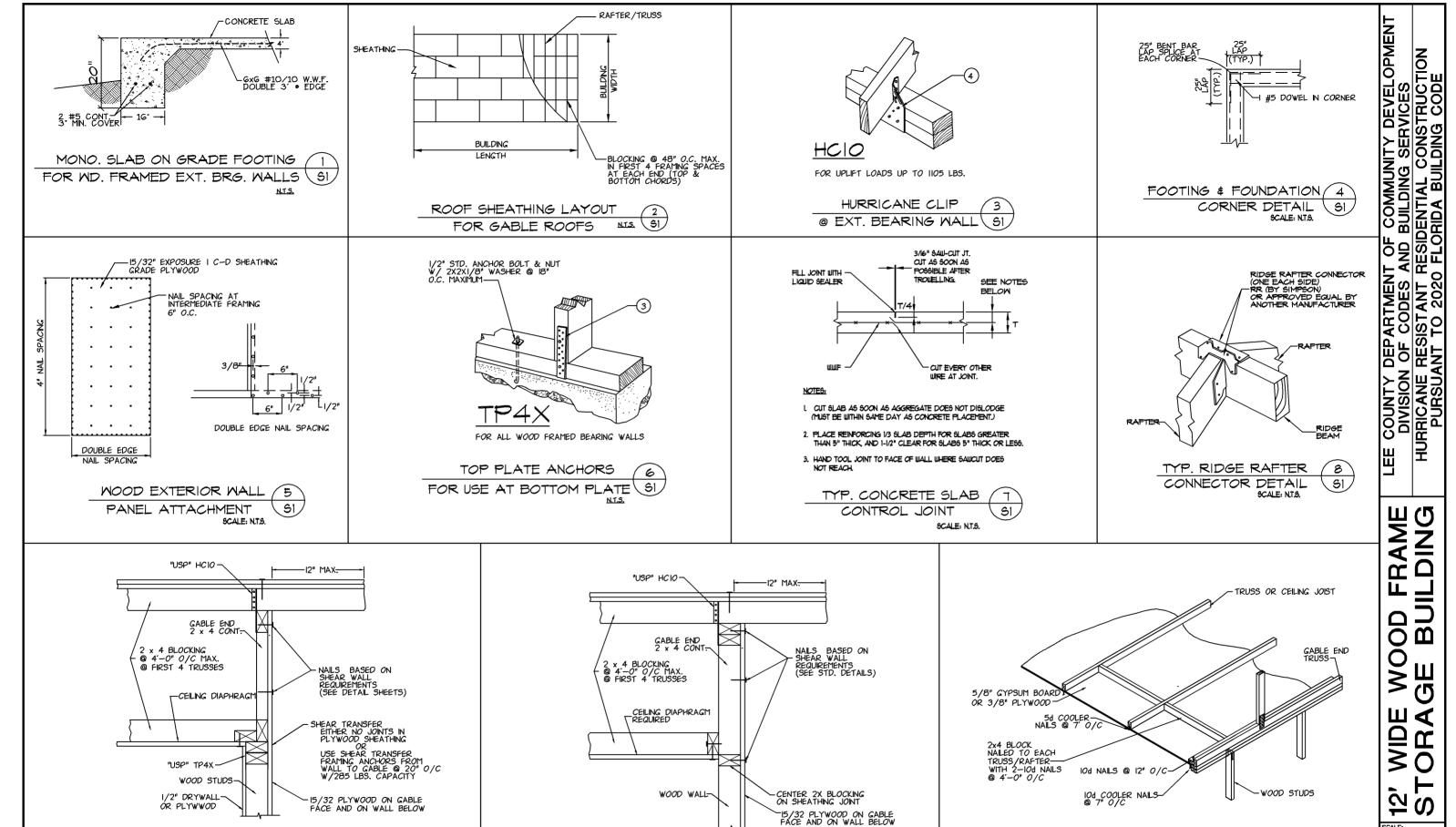
  Application of Portland Cement Based Plaster.

LABEL	MANUFA	CTURER	DESCRIPTION	FASTENERS		
LABEL	USP	MIZAMIZ				
1	(2) TDX5	(2) HD2A/5	VOOD TO VOOD UPLIFT CONN. ASSY.	(4) 3/4' MB		
(B)	HTA24	HETA24	TRUS2/RAFTER ANCHOR	10-10d×1-1/2*		
(D)	TP4X	SPH4	TOP/BOTTOM PLATE ANCHORS	10-10d		
4	HC10	H10	HURRICANE CLIP	9-10d - 9-10d		
(5)	RT22T	HTS24	TRUSS/RAFTER TIES	18-16d (24-16d W/ SIMPSON STRA		
6	TDX5	HD2A/5	ANCHER DEVN	(2)5/8'MB - (1)5/8'AB		
7	RT30F	LTSA30	TRUSS/RAFTER TIES	18-16d		
8	SHA2	N/A	MAS. UPLIFT CONNECTOR	(2)3/4"MB - (4)1/2"AB		
9	HTA20	HETA20	TRUSS ANCHOR, HIGH UPLIFT	16-10d×1-1/2*		
(10)	PA23	PA23	PURLIN ANCHOR	18-16d		
(II)	HC10-2	H10-2	HURRICANE CLIP	9-10d - 9-10d		
œ	USC3F	N/A	TRUSS/RAFTER TIES	(8) 16d - (4) 3/4" A.B.		

RAME DING 2 m 0 0 ₩ S. <del>1</del>2 SCALE: NTS DATE:

EE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT DIVISION OF CODES AND BUILDING SERVICES HURRICANE RESISTANT RESIDENTIAL CONSTRUCTION PURSUANT TO 2020 FLORIDA BUILDING CODE

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Baviewed for Code Compliance FRAMING y: Gienn Burnett Date: 01/15/21 RESNIS 19205180000FRS scale: NTS.

GABLE ENDWALL, PLATFORM FRAMING

FOR ROOF TRUSSES

CEILING CONNECTION TO GABLE ENDWALL (61) FOR CEILING DIAPHRAGMS

N.T.S. DATE: JANUARY 1, 2020 SHEET S

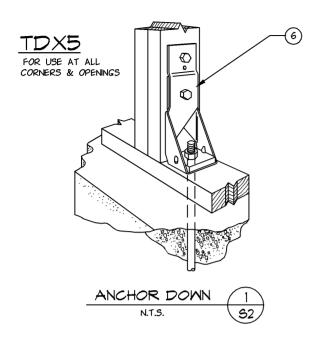
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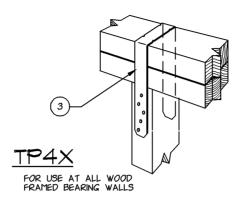
FLOOR JOIST





N.T.S.

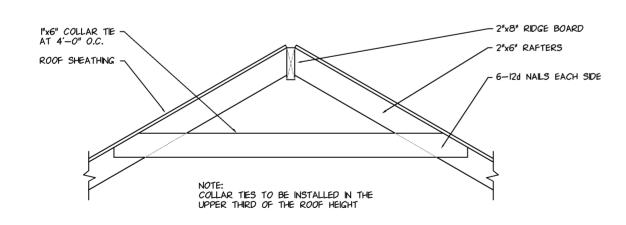




TOP PLATE ANCHOR 2 52

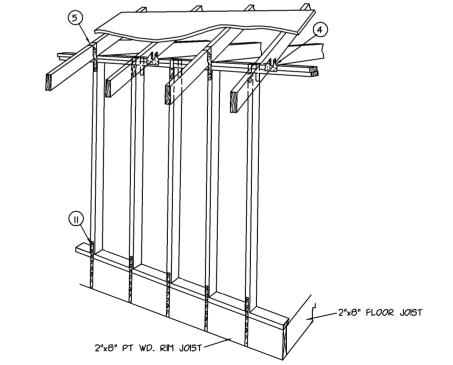


2"x8" PT. WD. RIM JOIST





Reviewed for Code Compliance By: Glenn Burnett Date: 01/15/21 RESMSTR2021-00001



TYPICAL EXT. WD. FRAME BEARING TYPICAL EXT. WD. FRAME BEARING 5 WALL CONNECTIONS & STRAPPING 52