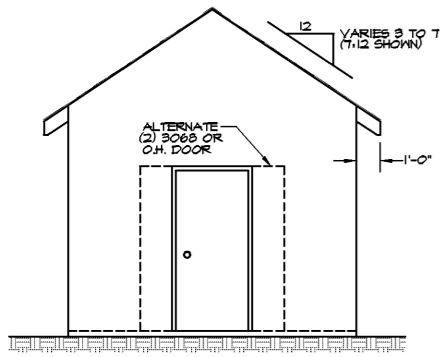
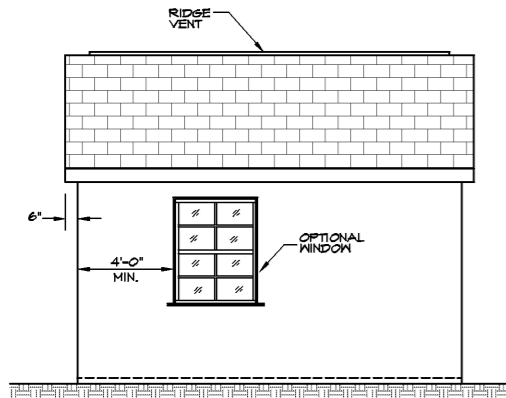


# GABLE ROOF OPTION

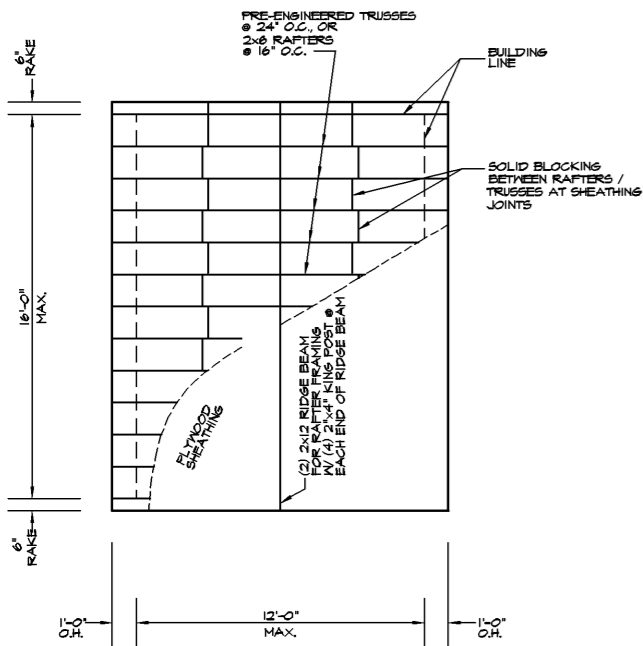


**FRONT VIEW**  
SCALE 1/8" = 1'-0"



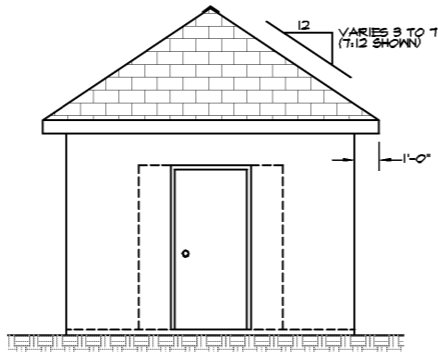
**SIDE VIEW**  
SCALE 1/8" = 1'-0"

NOTE:  
IF LENGTH IS TO EXCEED 16'-0"  
PRE-ENGINEERED ROOF TRUSSES  
MUST BE USED.

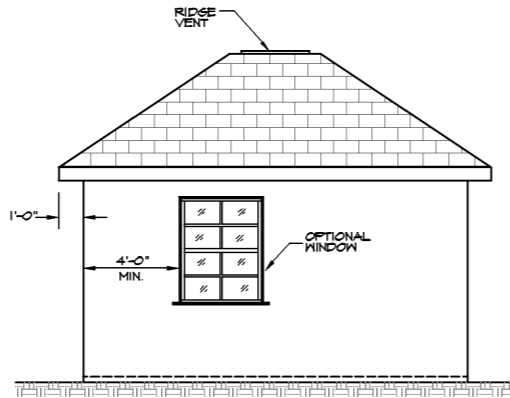


**ROOF PLAN**  
SCALE 1/8" = 1'-0"

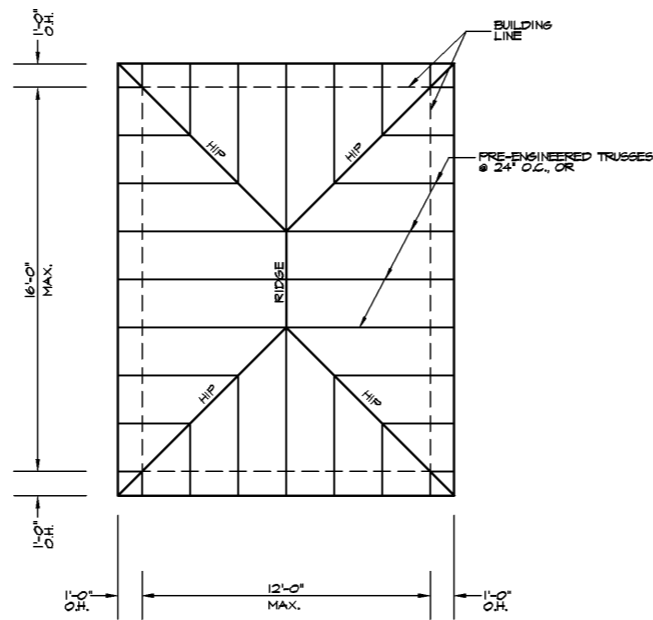
# HIP ROOF OPTION



**FRONT VIEW**  
SCALE: 1/8" = 1'-0"



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



**ROOF PLAN**  
SCALE 1/8" = 1'-0"

## DESIGN PARAMETERS:

- APPLICABLE CODES:**
- 2020 FLORIDA BUILDING CODE, RESIDENTIAL, SEVENTH EDITION
  - 2020 FLORIDA BUILDING CODE, MECHANICAL, SEVENTH EDITION
  - 2020 FLORIDA BUILDING CODE, PLUMBING, SEVENTH EDITION
  - 2020 FLORIDA BUILDING CODE, ENERGY CONSERVATION, SEVENTH EDITION
  - 2020 FLORIDA BUILDING CODE, ACCESSIBILITY, SEVENTH EDITION
  - FLORIDA FIRE PROTECTION CODE, (2020) SEVENTH EDITION
  - 2014 NATIONAL ELECTRICAL CODE
  - NATIONAL FIRE PROTECTION CODE, NFPA 101 (LIFE SAFETY)
- BUILDING OCCUPANCY CLASSIFICATION:**
- GROUP A - ASSEMBLY
  - GROUP B - BUSINESS
  - GROUP D - DAY CARE CENTER
  - GROUP E - EDUCATIONAL
  - GROUP F - FACTORY INDUSTRIAL
  - GROUP H - HAZARDOUS
  - GROUP I - INSTITUTIONAL
  - GROUP M - MERCANTILE
  - GROUP R - RESIDENTIAL
  - GROUP U - UTILITY & MISCELLANEOUS
- BUILDING CONSTRUCTION TYPE:**
- TYPE I-A
  - TYPE I-B
  - TYPE II-A
  - TYPE II-B
  - TYPE III-A
  - TYPE III-B
  - TYPE V-B
- RISK CATEGORY:**
- I
  - II
  - III
  - IV

- WIND LOADS:**  
(WIND LOADS ARE BASED ON CH. 26 THRU 30 OF ASCE 7)
- WIND SPEED:**
- 150 MPH=ULTIMATE DESIGN WIND SPEED (3-SECOND GUST)
  - 116 MPH=NOMINAL DESIGN WIND SPEED (FASTEST MILE)
- SURFACE ROUGHNESS CATEGORY:**
- B
  - C
  - D
- EXPOSURE CATEGORY:**
- B
  - C
  - D
- WINDBORNE DEBRIS REGION:**
- YES
  - NOT APPLICABLE FOR SHEDS
- INTERNAL PRESSURE COEFFICIENTS:**
- 0.00 (OPEN)
  - +0.18, -0.18 (ENCLOSED)
  - +0.55, -0.55 (PARTIALLY ENCLOSED)
- GEOTECHNICAL INFO:**  
(FOUNDATIONS ARE BASED ON A MINIMUM SOIL BEARING CAPACITY OF 2000 PSF)

Digitally signed by ROBERT W CASE  
Date: 2021.01.14 15:10:50 -05'00'

## WINDOW SCHEDULE

KEY	SIZE	TYPE	OPENING SIZE	MANUFACTURER	GLASS	ACTUAL APPLIED WIND PRESSURES		MANUF. MAX. DESIGN PRESSURES		IMPACT PROTECTION TYPE OF OPENING PROTECTION (COVERING GLAZING)	INSTALLATION NOTES (LIST BELOW)	BUCK DETAIL	STATE OF FLORIDA PRODUCT APPROVAL MASTER NUMBERS
						+	-	+	-				
(A)	VARIES	S.H.	VARIES	SEE STATE APPROVED LIST	4	44	-48	VARIES	VARIES	N/A		SEE 1/SI	VARIES

## DOOR SCHEDULE

KEY	SIZE	TYPE	OPENING SIZE	MANUFACTURER	GLASS	ACTUAL APPLIED WIND PRESSURES		MANUF. MAX. DESIGN PRESSURES		IMPACT PROTECTION TYPE OF OPENING PROTECTION (COVERING GLAZING)	INSTALLATION NOTES (LIST BELOW)	BUCK DETAIL	STATE OF FLORIDA PRODUCT APPROVAL MASTER NUMBERS
						+	-	+	-				
(D1)	3068	SWING	8'0" x 6'8"	SEE STATE APPROVED LIST	4	44	-48	VARIES	VARIES	N/A		SEE 2/SI	VARIES
(D2)	(2) 3068	SWING	6'0" x 6'8"	SEE STATE APPROVED LIST	4	44	-48	VARIES	VARIES	N/A		SEE 2/SI	VARIES
(D3)	VARIES	O.H. DR.	VARIES	SEE STATE APPROVED LIST	4	44	-48	VARIES	VARIES	N/A	B	SEE 2/SI	VARIES

## ROOF COVERING MATERIAL

TYPE	MANUFACTURER	APPROVED MODEL, STYLE, OR DESIGNATION
ASPHALT SHINGLES OR METAL	SEE APPROVED LIST	SEE APPROVED LIST

- CODE COMPLIANCE:**
- ASPHALT SHINGLES SHALL BE IN COMPLIANCE W/ FBC 2020, SEC. 1507.2, & R405.2
  - METAL ROOFING SHALL BE IN COMPLIANCE W/ FBC 2020, SEC. 1507.4 & R405.4

## SOFFIT COVERING MATERIAL

TYPE	MANUFACTURER	APPROVED MODEL, STYLE, OR DESIGNATION
VARIES	SEE APPROVED LIST	SEE APPROVED LIST

- CODE COMPLIANCE:**
- SOFFIT COVERING SHALL BE IN COMPLIANCE W/ FBC 2020, SEC. R301.9, & R704.1

### INSTALLATION NOTES:

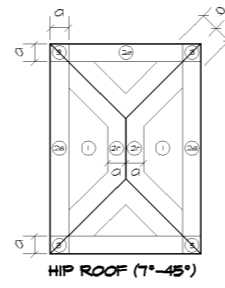
- MEANS OF EGRESS
- TEMPERED WINDOW
- O.H. GARAGE DOOR
- EGRESS PER FBC 1008.1.3.6, 1025.4, & R310.4

### LEGEND:

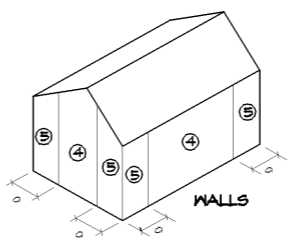
- Dx = DOOR DESIGNATION
- SLx = SKYLITE DESIGNATION
- Wx = WINDOW DESIGNATION

### SIZE DESIGNATIONS

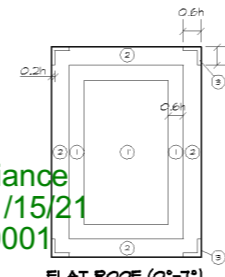
- W = WIDTH
- H = HEIGHT



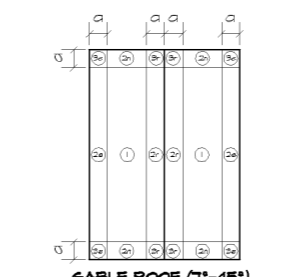
HIP ROOF (7°-45°)



WALLS



FLAT ROOF (0°-7°)



GABLE ROOF (7°-45°)

## 2020 FBC (7TH EDITION) COMPONENTS & GLAZING TABLES

ROOF SLOPE	HIP ROOF		
	ZONE	POSITIVE (V)	NEGATIVE (V)
7° - 20°	1	+17.8	-46.4
	2r	+17.8	-54.4
	2e, 3	+17.8	-58.6
21° - 27°	1	+17.8	-82.8
	2e, 2r, 3	+17.8	-45.6
	1	+17.1	-34.9
28° - 45°	2e	+17.1	-37.0
	2r	+17.1	-48.8
	3	+17.1	-47.5
WALL	4	+26.4	-28.7
	5	+26.4	-34.5

FBC 2020 (HIP)

## 2020 FBC (7TH EDITION) COMPONENTS & GLAZING TABLES

FLAT / GABLE ROOF			
ROOF SLOPE	ZONE	POSITIVE (V)	NEGATIVE (V)
0° - 7°	1, 1g	+10.5	-39.1
	2	+10.5	-51.8
	3	+10.5	-66.5
8° - 20°	1, 2e	+17.8	-51.0
	2n, 2r, 3e	+17.8	-64.3
	3r	+17.8	-75.9
21° - 27°	1, 2e	+17.8	-39.5
	2n, 2r, 3e	+17.8	-55.0
	3r	+17.8	-62.8
28° - 45°	1, 2e, 2r	+22.5	-39.5
	2n, 3r	+22.5	-45.6
	4	+26.4	-28.7
WALL	5	+26.4	-34.5

FBC 2020 (GABLE)

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

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

12' WIDE MASONRY STORAGE BUILDING  
SCALE: AS NOTED  
DATE: JANUARY 1, 2020  
SHEET  
**A1**

LC20-01-A1

**GENERAL NOTE:**

PRE-ENGINEERED ROOF TRUSSES REQUIRE NO COLLAR TIES.

PRE-ENGINEERED ROOF TRUSSES WITH GABLE ROOFS REQUIRE BLOCKING.

PRE-ENGINEERED ROOF TRUSSES WITH HIP ROOFS REQUIRE NO BLOCKING.

PROVIDE PRE-CAST LINTELS OVER ALL OPENINGS

GABLE END MAY BE CONSTRUCTED AS A RAKE TIE BM. OR MAY BE WOOD FRAMED W/ (4) 2"x4" KING POST @ EACH END OF RIDGE BEAM

PAN FLASHING UNDER WINDOWS AND DOORS ON FRAME CONSTRUCTION. DETAILS TO BE SHOWN ON PLANS, INSPECTION WILL BE LOOKING FOR RT03.3

PROVIDE TWO LAYERS OF WATER RESISTIVE BARRIER BEHIND EXTERIOR WALL COVERING PER 2020 FBC, RT03.7.3. FOR WOOD FRAMES GABLE ENDS

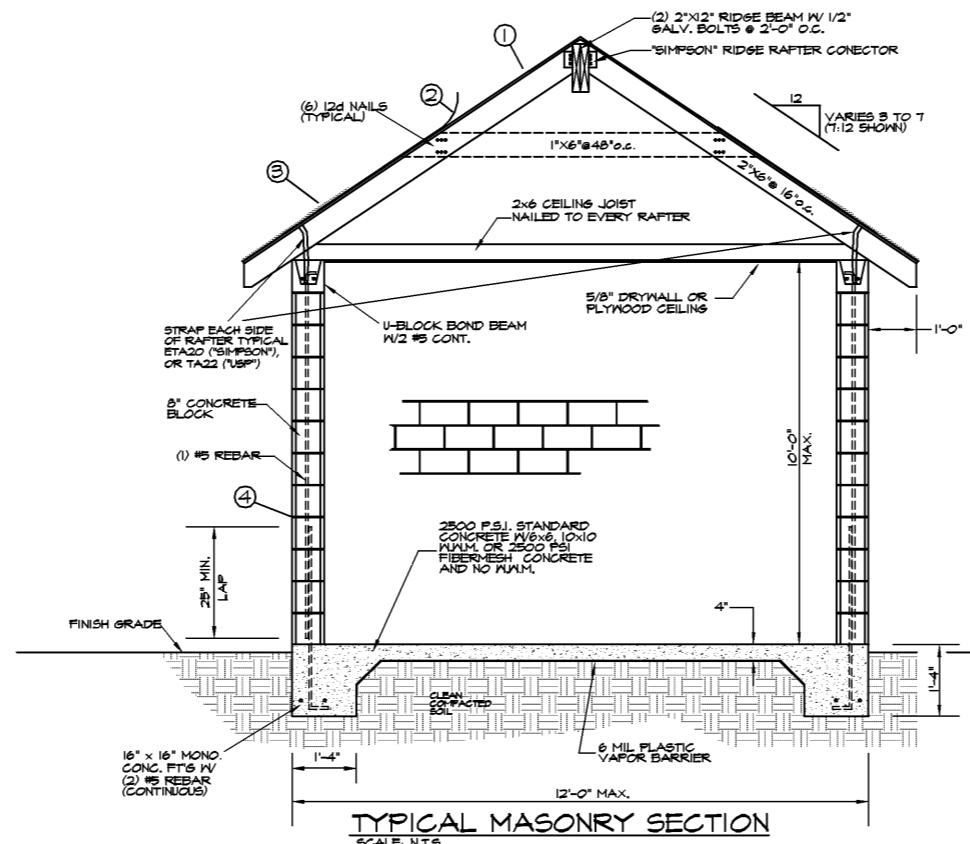
PAN FLASHING UNDER WINDOWS AND DOORS ON FRAME CONSTRUCTION. DETAILS TO BE SHOWN ON PLANS, INSPECTION WILL BE LOOKING FOR RT03.3

PER SEC. R301.2.1.2 OF THE 2020 FLORIDA BUILDING CODE, STORAGE SHEDS THAT ARE NOT DESIGNED FOR HUMAN HABITATION AND HAVE A FLOOR AREA OF 720 SQ. FT. OR LESS AND ARE LOCATED IN EXPOSURE CATEGORY "B" ARE NOT REQUIRED TO COMPLY WITH THE MANDATORY WIND-BORNE DEBRIS IMPACT STANDARD OF THIS CODE.

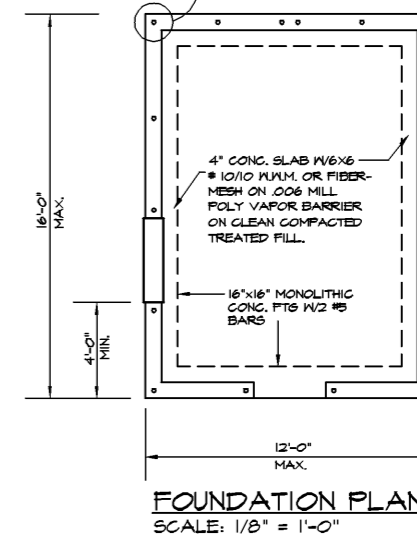
FOR EXPOSURE CATEGORIES "C" AND "D" IMPACT RESISTANT GLAZING MUST BE UTILIZED FOR ALL DOORS AND WINDOWS

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

PROVIDE (2) FILLED CELLS ON EITHER SIDE OF DOORS GREATER THAN 6" IN WIDTH



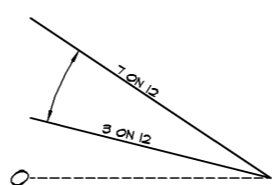
INDICATES (1) #5 VERTICAL STEEL DONNEL TIED FROM TIE BEAM STEEL TO FOOTING STEEL. FILL CELL SOLID WITH CONCRETE. LOCATE @ ALL CORNERS, AT EACH SIDE OF ALL OPENINGS, @ 4'-0" O.C. MAX. THEREAFTER.



**FEMA NOTE:**  
 WHEN BLDG. IS LOCATED WITHIN A FEMA FLOOD ZONE AREA, HYDROSTATIC VENTING IS REQ'D. HYDROSTATIC VENTING SHALL BE SO ARRANGED TO PERMIT THE AUTOMATIC PASSAGE OF STORMWATER. ALL VENTING SHALL BE LOCATED A MAXIMUM OF 1'-0" ABOVE F.F. 1 SQ. IN. OF VENTING SHALL BE REQ'D. FOR EA. SQ. FT. OF FLOOR AREA.

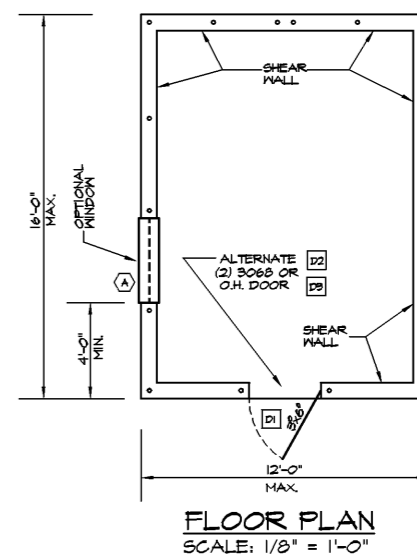
PLANS ARE NOT TO BE UTILIZED IN ANY FEMA "V" ZONE DESIGNATION.

**NOTE TO MASON CONTRACTOR:**  
 THE MASON CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL MASONRY OPENINGS WITH PROPER MANUFACTURER'S SPEC. PRIOR TO CONSTRUCTION.



**OPTIONAL ROOF PITCHES**

- ① 5/8" CDX PLYWOOD
- ② (2) LAYERS OF 15# FELT PAPER OR SELF-ADHERING POLYMER MODIFIED BITUMINOUS SHEET MEETING ASTM 1970
- ③ ASPHALT SHINGLES OR GALV. STL METAL ROOFING
- ④ OPTIONAL STUCCO FINISH



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



# STORAGE BUILDING

## FOOTINGS, WALLS, & BOND BEAMS

- Concrete masonry units shall be hollow or solid unit masonry in accordance with ASTM C 90 or C 145 and shall have minimum net area compressive strength of 1900 psi.
- Mortar shall be either Type M or S in accordance with ASTM C 270.
- Grout shall have a maximum coarse aggregate size of 3/8 inch placed at a 8 to 11 inch slump and have minimum specified compressive strength of 2000 psi at 28 days when tested in accordance with ASTM C 1019, or shall be in accordance with ASTM C 476.
- Concrete shall have a minimum specified compressive strength of 2500 psi at 28 days.
- Reinforcing steel shall be minimum Grade 40 and identified in accordance with ASTM A 615, A 616, A 617, or A 706.
- Joint reinforcement, anchors, ties, and wire fabric shall conform to the following standards:  
ASTM A 82 for joint reinforcement and wire anchors and ties.  
ASTM A 36 for plate, headed and bent bar anchors.  
ASTM A 366 for sheet metal anchors and ties.
- Metal accessories for use in exterior wall construction and not directly exposed to the weather shall be galvanized in accordance with ASTM A 153, Class B-2. Metal accessories for use in interior wall construction shall be mill galvanized in accordance with ASTM A 641, Class 1.
- 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. Bed joints shall be 3/8 inch (3/8 1/8 inch) thick. Head joints shall be 3/8 inch (+ 3/8 inch or - 1/4 inch) thick.
- 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.
- Masonry walls shall be running bond or stack bond construction.
- When masonry units are laid in stack bond or running bond, 9-gage (minimum) horizontal joint reinforcement, in addition to required vertical reinforcement, shall be placed in bed joints at not more than 16 inches on center.
- Longitudinal wires of joint reinforcement shall be fully embedded in mortar or grout with minimum cover of 5/8 inch when exposed to earth or weather and 1/2 inch when not exposed to earth or weather.
- Reinforcing steel shall be No. 5 bars.
- Splices shall be lap splices.
- Noncontact lap splices may be used provided reinforcing bars are not spaced farther apart than 5 inches.
- Splice lengths shall be minimum of 25 inches.
- Reinforcement may be bent in the shop or in the field provided:  
All reinforcement shall be bent cold, and  
The diameter of the bend, measured on the inside of the bar, is not less than six bar diameters, and  
Reinforcement partially embedded in concrete shall not be field bent, except where bending is necessary to align dowel bars with a vertical cell, bars partially embedded in concrete shall be permitted to be bent at slope of not more than 1 inch of horizontal displacement to 6 inches of vertical bar length.
- For foundations minimum concrete cover over reinforcing bars shall be 3 inches.
- Footings for stemwall foundations shall be a minimum of 10" thick by 16" wide, with two (2) #5 reinforcing bars.
- Footing for monolithic slab on grade foundations shall be a minimum of 16" thick by 16" wide, with two (2) #5 reinforcing bars.
- In narrow footing where insufficient width 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.
- For cast-in-place bond beams the minimum concrete cover for reinforcing shall be 1 1/2 inches.
- Reinforcement bars embedded in grouted masonry cells shall have a minimum clear distance of 1/2 inch between reinforcing bars and any face of a cell.
- Reinforcing bars used in masonry walls shall have a masonry cover (including grout) or not less than 2 inches.
- Cleanout openings shall be provided for cells containing spliced reinforcement when the grout pour exceeds 5 feet in height.
- Where cleanout openings are required, an opening shall be provided in the bottom course of the masonry cell to be filled.
- Cleanout openings shall have minimum area of 12 square inches and a minimum opening dimension of 3 inches.
- Masonry protrusions extending 1/2 inch or more into cells or cavities to be grouted shall be removed for grout pours over 5 ft.
- Spaces to be grouted shall be free of mortar droppings, debris, loose aggregates, and any material deleterious to masonry grout.
- A soil or waste pipe of a building drain passing under a footing or through a foundation wall shall be provided with a relieving arch, or there shall be built into the masonry wall an iron pipe sleeve two pipe sizes greater than the pipe passing through.
- The top and bottom of all footings shall be level. The bottom of all footings, except monolithic slab-on-grade interior footings, shall be a minimum of 12" below finished ground line.
- The outer bar of foundation steel shall be continuous around corners using corner bars or by bending the bar in accordance with notes herein, in both cases, the minimum bar lap shall be 25 inches.
- Foundation stemwalls shall be 8 inches thick, and shall have same vertical reinforcing as the wall above.
- Footing dowels bars shall be provided for all required vertical wall reinforcement in the following location:  
At all corners,  
At each side of each opening,  
At all other required vertical wall reinforcement  
At all hip girder bearing points.
- Footing dowel bars at each location shall be same size and quantity as the vertical wall reinforcement above.
- All footing dowel bars shall have a standard 90 degree hook and shall be embedded a min. of 6" into footings.
- Concrete slab-on-grade shall be cast in place and shall be 3 1/2 inches thick minimum. Concrete shall have a minimum specified compressive strength of not less than 2500 psi at 28 days.
- The minimum thickness of exterior masonry walls shall be 7 5/8 inches.
- A reinforced bond beam (tie beam) shall be provided at the top of each exterior wall.
- Bond beams shall be 8"x8" "U"-Blocks.
- Bond beam reinforcement shall be two No. 5 bars except where noted.
- Reinforcement shall be located in the top and bottom of 16 inch bond beams.
- Reinforcement shall be continuous around corners. See structural details.
- Where more than one bar is required, only one of the bars must be continuous around corners.
- For vertical reinforcement one No. 5 bar in a grouted cell shall be provided in each corner, including interior corners and corners created by changes in wall direction by offsetting of walls such as at projected bays and inset porches.

- Vertical reinforcement one No. 5 bar shall be provided on each side of openings.
- In addition to vertical reinforcement required at corners, at openings, and at hip girder bearing points, vertical reinforcement consisting of one No. 5 bar shall be provided every 6 feet on center maximum. (U.N.O.)
- All vertical wall reinforcement shall be terminated in the bond beam at the roof level with a standard hook. The hook may be formed by bending the vertical wall reinforcement in accordance with notes herein or by lap splicing to a standard hook. The hook shall extend to the upper most horizontal reinforcement of the bond beam and shall be embedded a minimum of 5 inches into the bond beam. see detail sheets.
- Bond beams over all openings shall consist of an 8" "U"-block with (2) #5 continuous above an 8" pre-cast lintel with (1) #5 additional rebar; unless noted otherwise, due to large truss girder bearing and / or uplift loads.
- Bond beams shall have top and bottom reinforcement continuous over openings.
- Bond Beams which have additional reinforcement over openings which is in addition to that required over the wall shall extend past the opening a minimum of 8".
- Stemwall foundation height shall not exceed 3'-0" from finished grade to top of masonry.
- Columns shall be constructed of standard masonry units.
- Maximum column height (to the top of the bond beam) shall be 10 ft.
- Columns shall contain a minimum of four vertical bars, one in each corner.
  - Vertical column reinforcement shall be four No. 3 bars for 8x8 inch columns and four No. 5 bars for all other column sizes.
  - Clearance from the vertical bar to the masonry faceshell shall be 1/2 inch. Minimum cover for cast in place columns shall be 1 1/2 inches over the column ties.
- Connection of columns to the foundation below and to the bond beam at the top shall be as follows:
  - 8x8 inch column: one No. 5 standard 90 degree hook into the support at the bottom and into the bond beam at the top.
  - 8x16 inch column: two No. 5 standard 90 degree hooks (one in each cell) both at the bottom and at the top.
  - 12x12 inch column and 16x16 inch column:  
Bottom: Four No. 5 standard 90 degree hooks (one at each vertical bar) extending from the foundation and spliced with the vertical column reinforcement;  
Top: For corner columns, three No. 5 standard 90 degree hooks into the bond beam, minimum, each spliced to a vertical column bar. For column located other than at a corner, two No. 5 standard 90 degree hook into the bond beam shall be spliced to separate vertical column bars.
- Lateral ties of a minimum 1/4 inch diameter shall be used to enclose vertical column reinforcement as follows:
  - Maximum vertical spacing of lateral ties shall be 12".
  - Lateral ties may be placed in mortar joints (provided they are no larger than 1/4 inch diameter).
  - The bottom lateral ties shall be located vertical not more than 1/2 a lateral tie spacing above the top of the footing.
  - The top lateral tie shall not be more than 1/2 a lateral tie spacing below the lowest horizontal reinforcement in the beam above.
- A stemwall floating slab foundation shall not be permitted under the unenclosed walls of a building.
- All concrete is to be mixed, transported, and placed in accordance with the latest ACI Specifications and Recommendations.
- Foundations have been designed for an allowable soil bearing pressure of 2000 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.
- Provide granular fill, clay materials are unacceptable. Existing soil under footing and slabs shall be compacted to 95% of AASHTO T-99.
- Fill shall be placed and compacted in one foot lifts.
- A concrete slab-on-grade used in conjunction with exterior stemwall foundations shall have 6x6 No. 10 welded wire fabric at mid-height or, synthetic fiber reinforcement, in the slab and the slab shall be keyed into or tied to the foundation.
- Welded wire fabric shall conform to ASTM A-185 and free of oil and rust. It shall be installed in lengths as long as possible and lapped a minimum of six inches.
- Provide (1) #5 electrical ground to foundation steel.
- A 6 mil minimum polyethylene dampproofing vapor barrier shall be provided, per FBC R320.1.4 and R506.2.3.
- 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 6" 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.

## ROOF SYSTEMS

- Trusses shall be designed in accordance with the TPI Design Specification for Metal Plate Connected Wood Trusses.
  - Parallel chord wood trusses shall be in accordance with TPI Design Specification for Metal Plate Connected Parallel Chord Wood trusses.
  - Metal plate connected wood trusses shall be spaced no more than 24 inches on center and designed for live loads and wind loads for an enclosed building based on Section 1609 of the Seventh Edition of the 2020 Florida Building Code.
  - Girder trusses shall be designed to function also as drag struts. Truss design submittals and erection instructions shall show both uplift and lateral connection load requirements at ends of girder truss.
  - Top chords of trusses shall be of Group II species lumber.
  - Roof sheathing shall be 5/8-inch Exposure 1 C-D sheathing grade plywood (wood structural panels), or equivalent.
  - The sheathing shall be installed in accordance with the structural details. Long dimension shall be perpendicular to framing and end joints shall be staggered.
  - Sheathing shall be fastened to roof framing with 8d common or 8d hot dipped galvanized box nails at 6 inches o.c. at edges and 6 inches o.c. at intermediate framing except 8d ring-shank nails shall be used for the outside 5 feet along the entire perimeter of roof (pursuant to the Florida Building Code).
  - Anchor each truss/rafter at each end with rated connectors capable of resisting the uplift and horizontal loads specified. Refer to structural details and windload connector schedule.
  - The connector shall be embedded in or attached to the bond beam in accordance with the manufacturer's specifications.
  - The connector shall be fastened to the truss in accordance with the manufacturer's specifications. See windload connectors schedule.
  - The wood truss shall be treated for moisture protection in accordance with an approved moisture barrier.
- By Glenn Burnett Date: 01/15/21  
ASPHALT SHINGLES TO 25' COVERING
- Roof coverings shall be applied in accordance with the applicable provisions of FBC Sec. 1507 and the manufacturer's installation instructions.
  - 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.B.
- Unless otherwise noted, required underlayment shall conform with ASTM D 226, type I, or ASTM D 4869, type I.
- Self-adhering polymer modified bitumen sheet shall comply with ASTM 1970.
- Asphalt shingles shall have self-seal strips or be interlocking, and comply with ASTM D 225 or ASTM D 3462.
- 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.
- Asphalt shingles shall be secured to the roof with not less than four fasteners per strip shingle or two fasteners per individual shingle.
- For roof slopes from 3:12 up to 4:12, underlayment shall be a minimum of two layers applied as follows:
  - Starting at the eave, a 19-inch strip of underlayment shall be applied parallel with the eave and fastened sufficiently to stay in place.
  - 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.
- 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

- In those cases where a gable endwall is not built using full-height studs continuous 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.
- Where a gypsum wallboard ceiling 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 5/8", pt 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 GNB-54 1 1/2 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 10d nails at 6 inches on center. See detail sheets.

## FASTENERS & CONNECTORS

- Approved connectors, anchors and other fastening devices not included in the Florida Building Code shall be installed in accordance with the manufacturer's recommendations.
- Where fasteners are not otherwise specified fasteners shall be provided in accordance with Table 2304.9.1 of the Seventh Edition of the 2020 Florida Building Code. Nails, screws, or bolts shall be able to resist the forces in this Code.
- 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 1 oz per sq ft, or hot dipped galvanized with a minimum coating of 1.8 oz per sq ft of steel meeting the requirements of ASTM A 90 Triple Spot Test.

## STUCCO

Application of stucco (portland cement plaster) shall be in accordance with ASTM C 926, application of portland cement based plaster, pursuant to FBC Sec. RT03.6.

## GENERAL

- This building/structure has been designed in accordance with the Seventh Edition of the 2020 Florida Building Codes, and Section 1609 for design pressures generated by a three second gust design wind velocity of 150 mph, (116 mph fastest mile wind velocity). Structural calculations; including gravity loads, as necessary to confirm compliance with the Seventh Edition of the 2020 Florida Building Code, have been performed.
- The owner, his agent, or general contractor is responsible for field supervision, construction administration, review and approval of all shop drawings, verification on-site of all dimensions and elevations, and strict compliance with these construction documents as approved by Lee County.
- These plans are intended to be mastered. The repetitive use of these plans for permitting is approved.
- 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.
- Contractor shall notify the owner in writing prior to construction of any discrepancy between plans and on-site dimensions and elevations.

WINDLOAD CONNECTORS SCHEDULE

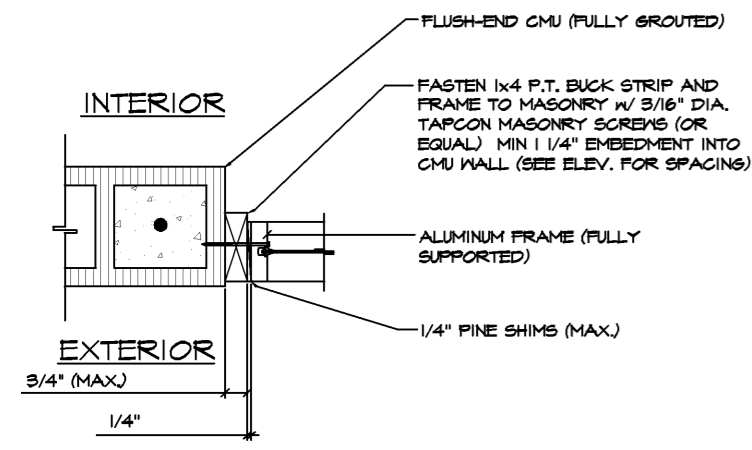
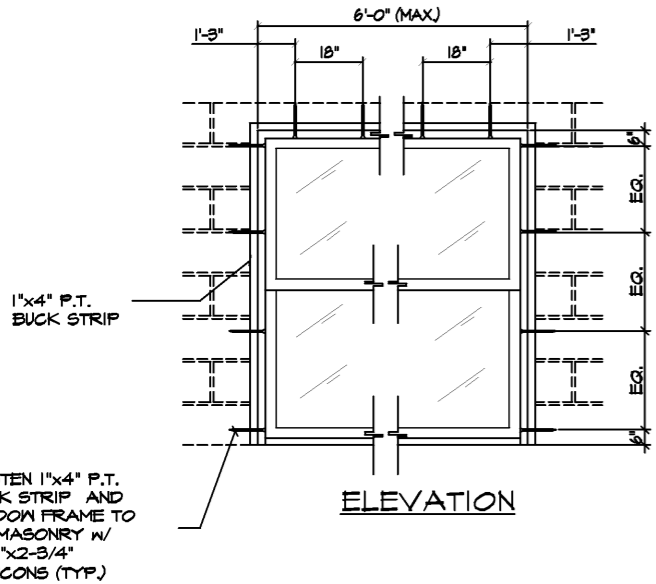
LABEL	MANUFACTURER	DESCRIPTION	FASTENERS
	USP	SIMPSON	
(1)	(2) TDX5	(2) H2A/5	WOOD TO WOOD UPLIFT CONN. ASSY. (4) 3/4" MB
(2)	HTA24	HETA24	TRUSS/RAFTER ANCHOR 10-10d x 1-1/2"
(3)	TP4X	SPH4	TOP/BOTTOM PLATE ANCHORS 10-10d
(4)	HC10	H10	HURRICANE CLIP 9-10d - 9-10d
(5)	RT22T	HTS24	TRUSS/RAFTER TIES 18-16d (24-16d W/ SIMPSON STRAP)
(6)	TDX5	H2A/5	ANCHOR DOWN (2)5/8"MB - (1)5/8"AB
(7)	RT30F	LTA30	TRUSS/RAFTER TIES 18-16d
(8)	SHA6	N/A	MAS. UPLIFT CONNECTOR (2)3/4"MB - (4)1/2"AB
(9)	HTA20	HETA20	TRUSS ANCHOR, HIGH UPLIFT 16-10d x 1-1/2"
(10)	PA23	PA23	PURLIN ANCHOR 18-16d
(11)	HC10-2	H10-2	HURRICANE CLIP 9-10d - 9-10d
(12)	USC3F	N/A	TRUSS/RAFTER TIES (8) 16d - (4) 3/4" AB.

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

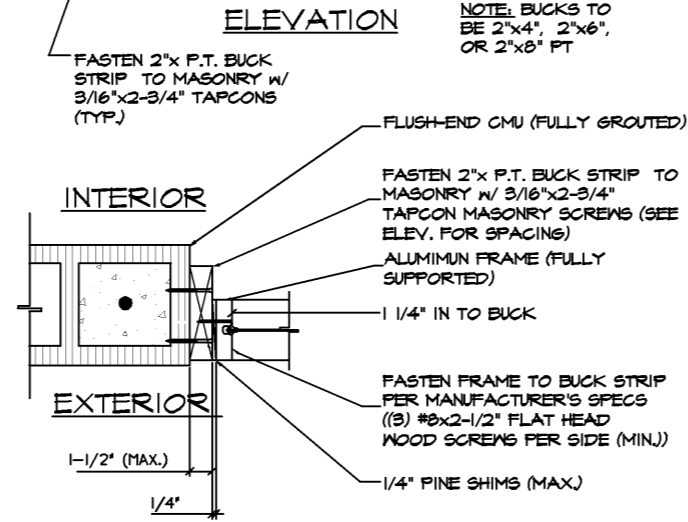
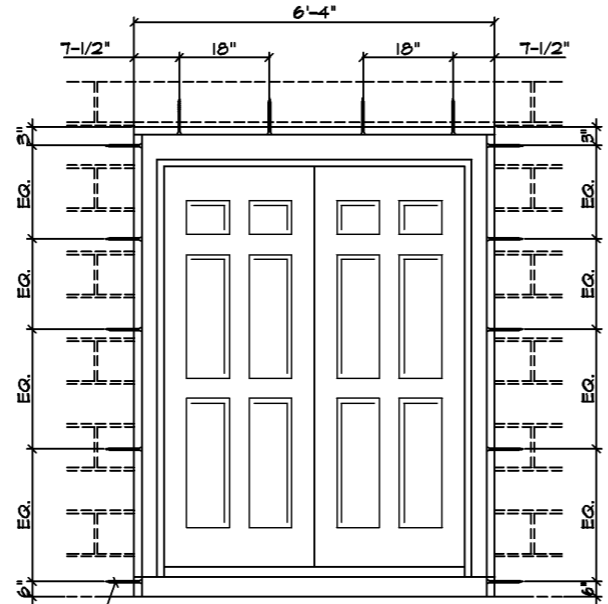
12' WIDE MASONRY STORAGE BUILDING

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

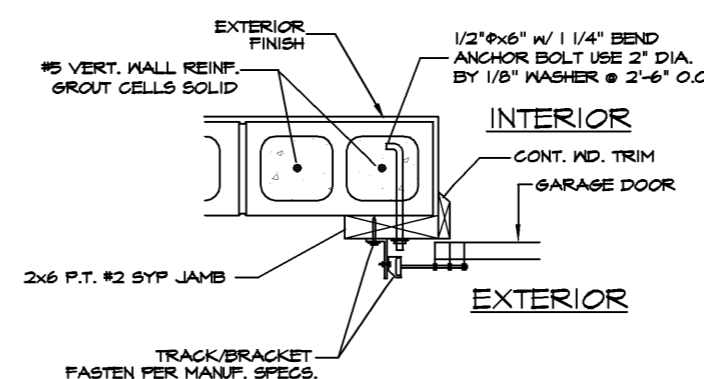
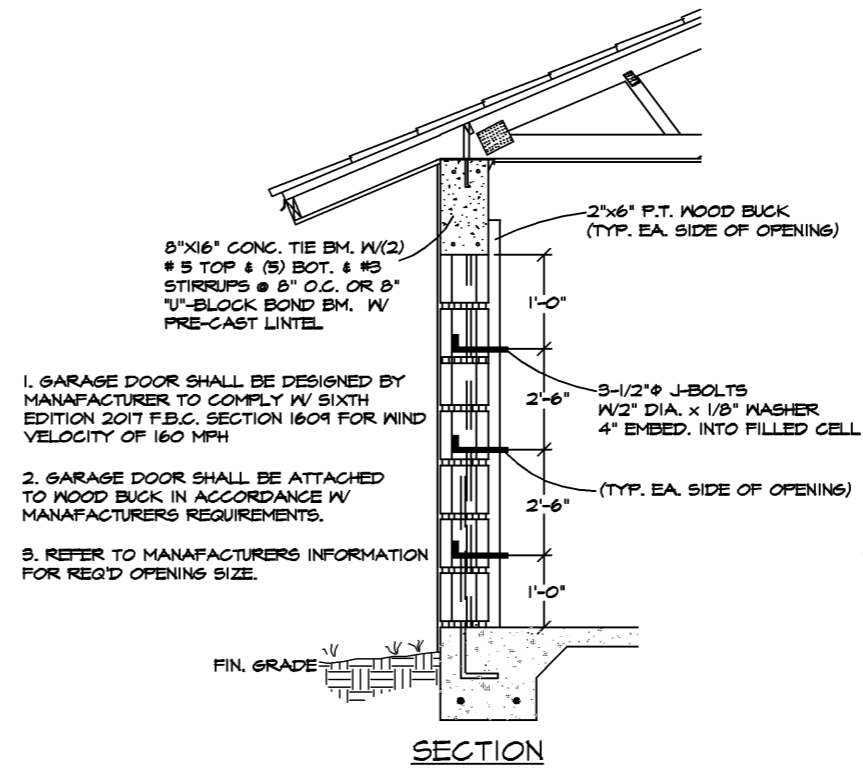
N1



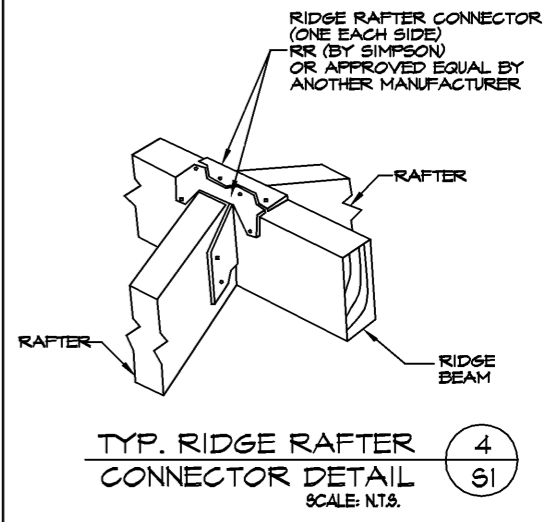
WINDOW TO BLOCK ATTACHMENT DETAIL (1) S1 N.T.S.



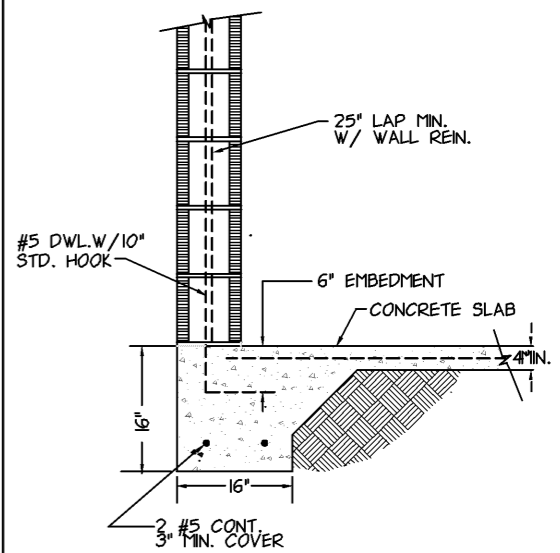
EXTERIOR DOOR TO BLOCK ATTACHMENT DETAIL (2) S1 N.T.S.



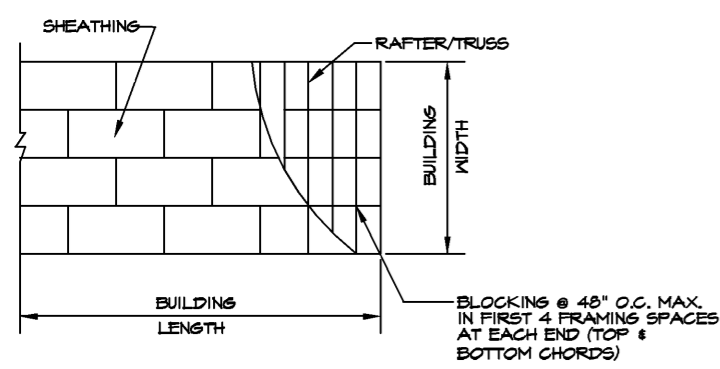
GARAGE DOOR TO BLOCK ATTACHMENT DETAIL (3) S1 N.T.S.



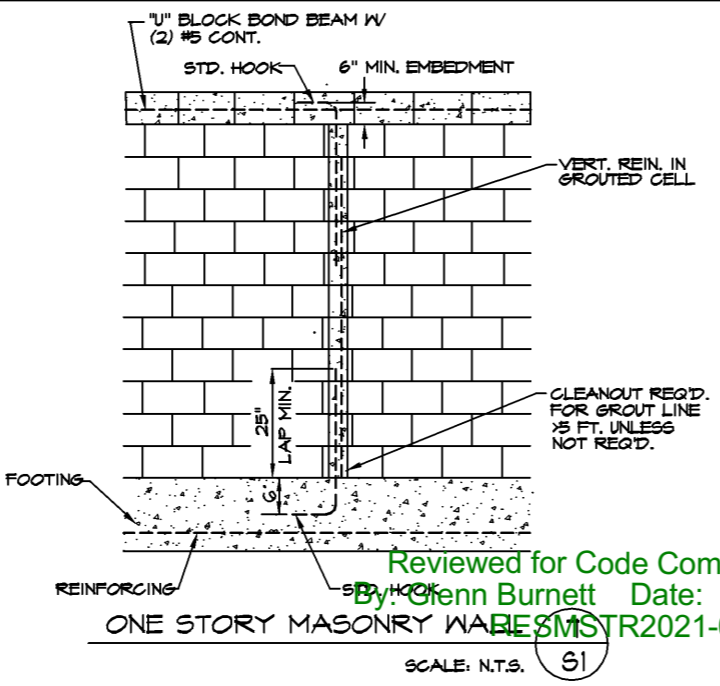
TYP. RIDGE RAFTER CONNECTOR DETAIL (4) S1 SCALE: N.T.S.



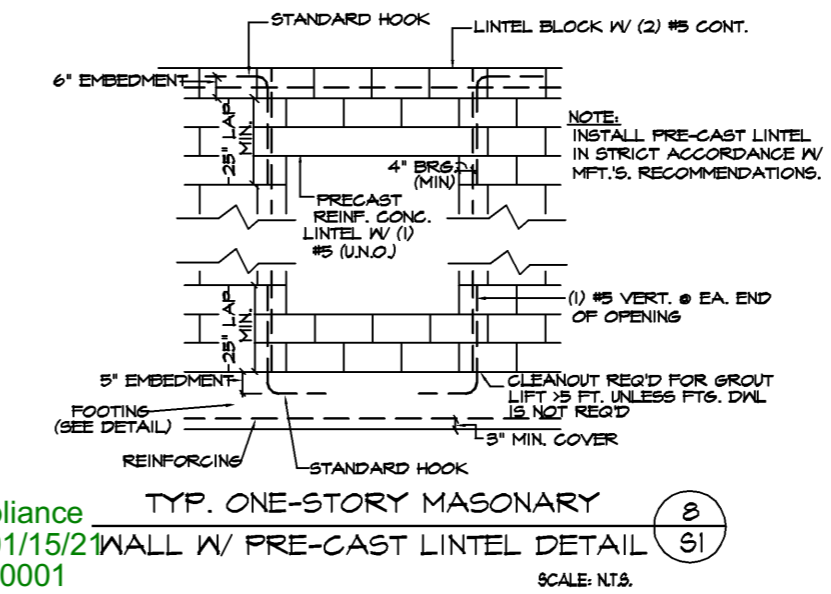
EXTERIOR MONOLITHIC CONC. FOOTING DETAIL (5) S1 N.T.S.



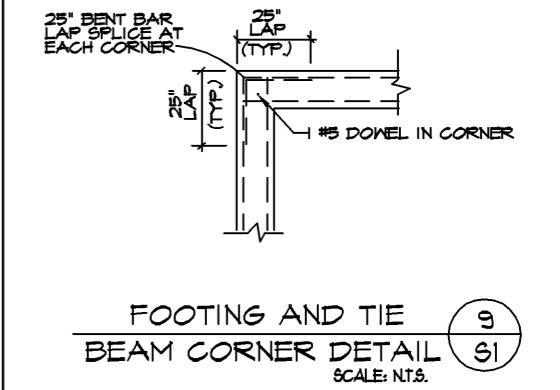
ROOF SHEATHING LAYOUT & ENDWALL BRACING FOR GABLE ENDWALLS (6) S1 N.T.S.



ONE STORY MASONRY WALL W/ PRE-CAST LINTEL DETAIL (7) S1 SCALE: N.T.S.



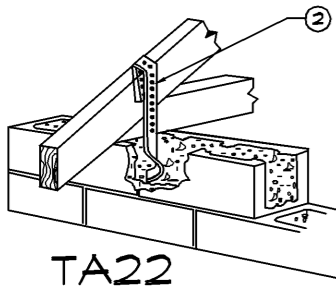
TYP. ONE-STORY MASONRY WALL W/ PRE-CAST LINTEL DETAIL (8) S1 SCALE: N.T.S.



FOOTING AND TIE BEAM CORNER DETAIL (9) S1 SCALE: N.T.S.

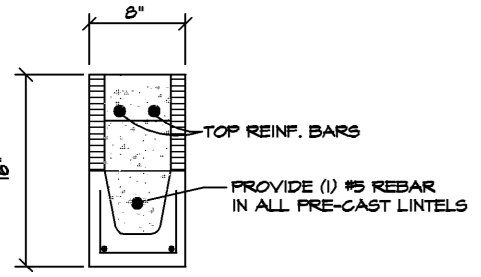
Reviewed for Code Compliance By: Glenn Burnett Date: 01/15/21 RE: SMSTR2021-00001



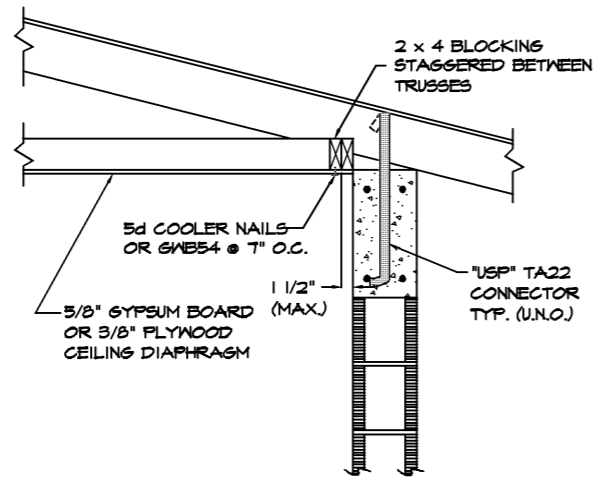


**TA22**  
FOR UPLIFT LOADS UP TO 1000 LBS.

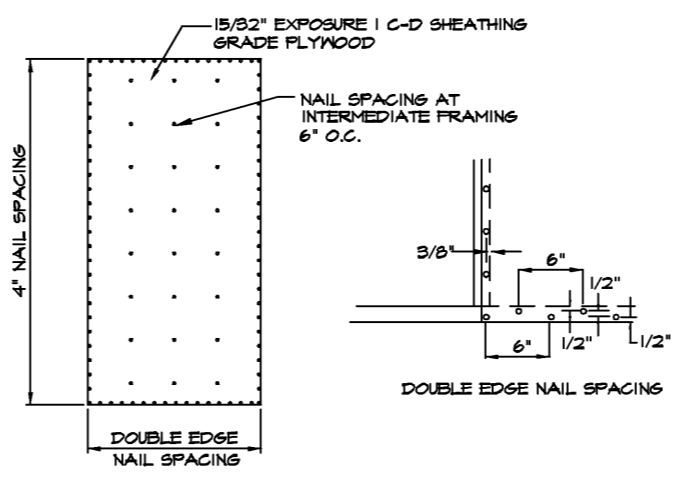
TRUSS / RAFTER ANCHOR @  
MASONRY EXT. BRG. WALLS  
SCALE: N.T.S.



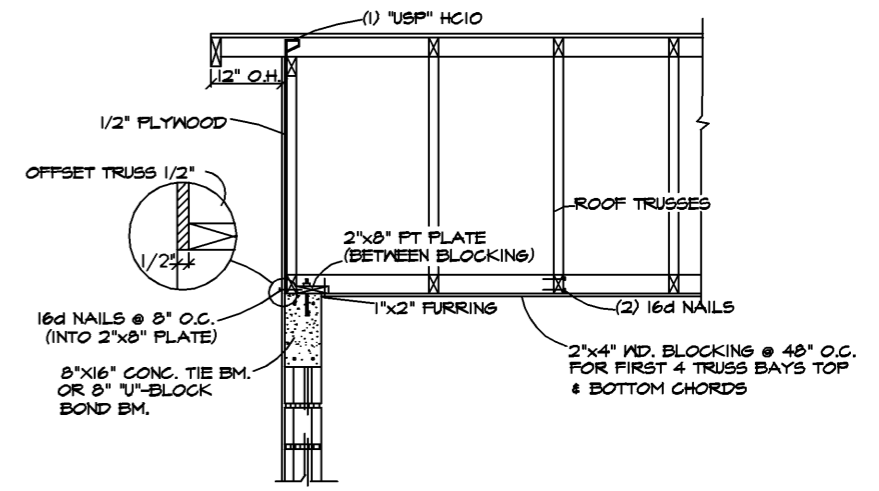
TYP. CONC. BOND BEAM DETAIL W/  
PRE-CAST LINTEL OVER OPENINGS  
SCALE: N.T.S.



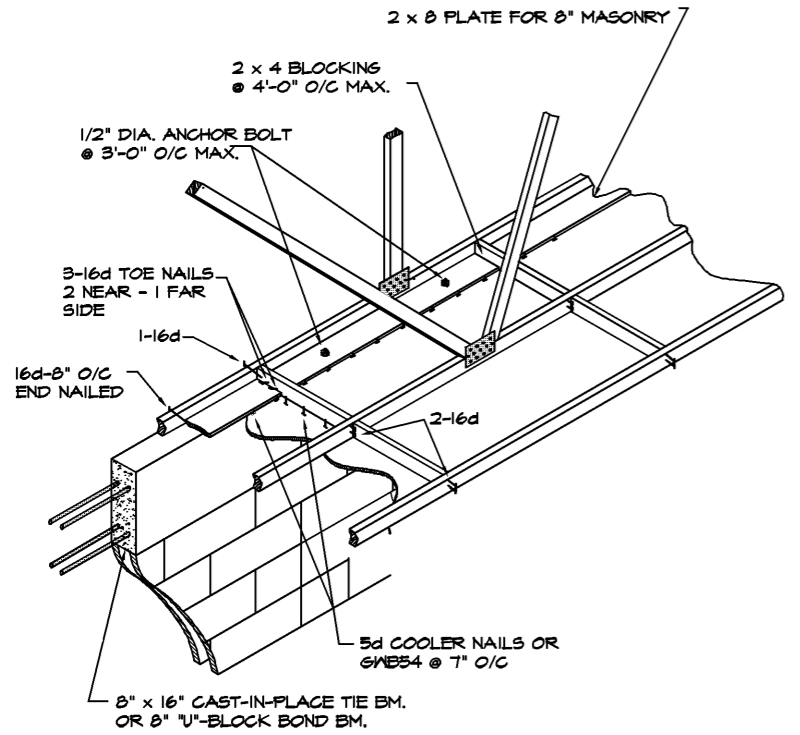
GYPSUM CEILING DIAPHRAGM  
TO SIDEWALL CONNECTION  
SCALE: N.T.S.



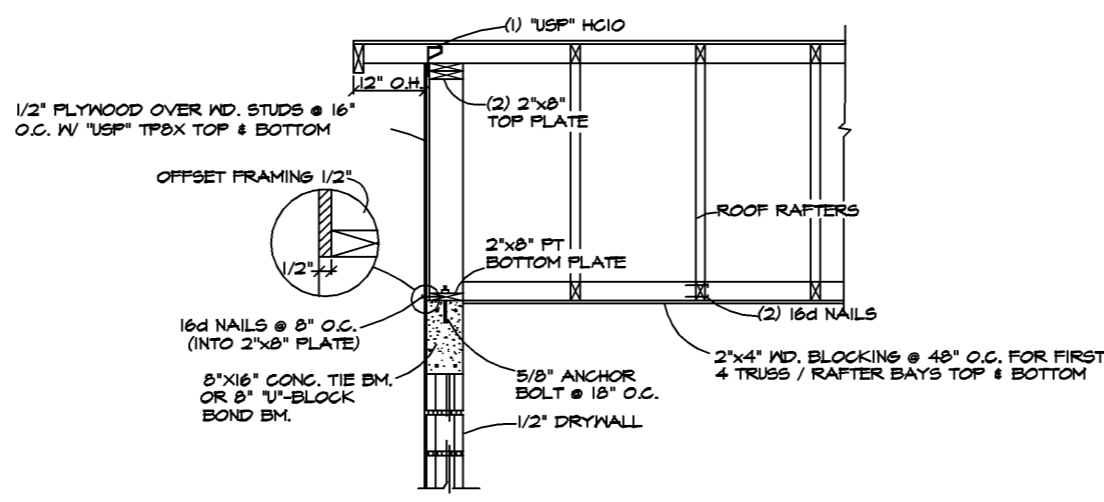
WOOD EXTERIOR WALL PANEL  
ATTACHMENT AT GABLE ENDWALL  
SCALE: N.T.S.



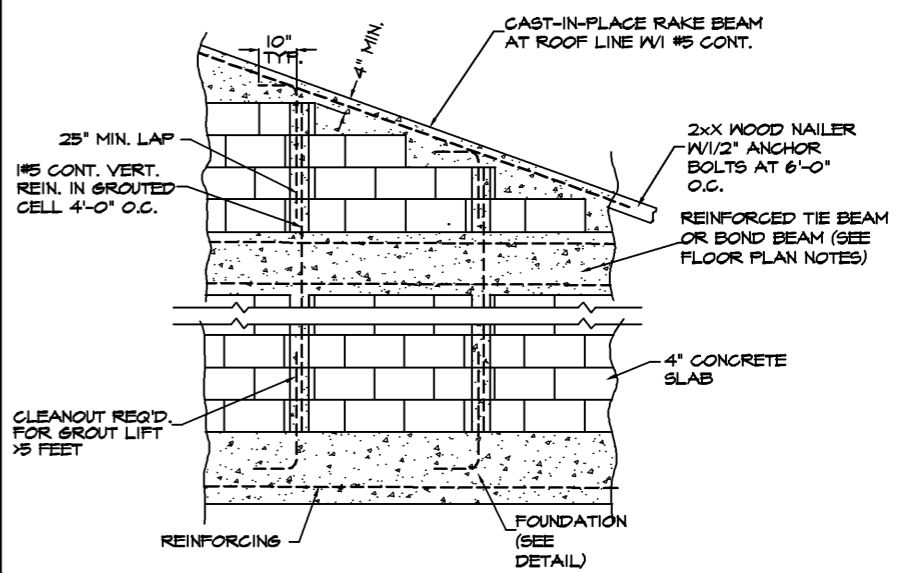
GABLE ENDWALL DETAIL FOR  
TRUSS FRAMING  
SCALE: N.T.S.



DIRECT TRUSS TO MASONRY ENDWALL  
FOR GYPSUM / PLYWOOD CEILING DIAPHRAGM  
SCALE: N.T.S.



GABLE ENDWALL DETAIL FOR  
RAFTER FRAMING  
SCALE: N.T.S.



ALTERNATE CONTINUOUS GABLE ENDWALL  
REINFORCEMENT  
SCALE: N.T.S.

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