QUINCE AVENUE
EUSTIS, FLORIDA 32736

RELEASE DATE:
SEPTEMBER 07, 2023

A CUSTOM DESIGN

ARIAS

COUNTY OF LAKE
STATE OF FLORIDA

ALL FEDERAL, STATE & LOCAL CODES, ORDINANCES, AND REGULATIONS, ETC. SHALL BE CONSIDERED AS PART OF THE SPECIFICATIONS OF THIS BUILDING; AND ARE TO BE ADHERED TO EVEN IF THEY ARE IN VARIANCE WITH THE PLAN.

DESIGNER AND ENGINEER ASSUME NO RESPONSIBILITY OVER ANY PHASE OF CONSTRUCTION OR COMPLETED BUILDING.

TERMITE SPECIFICATIONS

SECTION R318 PROTECTION AGAINST TERMITES

TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE A PREVENTIVE TREATMENT TO NEW CONSTRUCTION (SEE SECTION 202, REGISTERED TERMITICIDE). UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES." PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS

NOTES:
1. METHOD OF TREATMENT SHALL BE APPROVED BY THE GOVERNING JURISDICTION "LIQUID PRODUCT APPROVAL DATA MUST BE ON FILE WITH THE BUILDING DEPARTMENT. BORATE OR BOR-A-COR" PRODUCT METHODS MUST BE DETERMINED AT PERMIT STAGE AND
2. PRESSURE TREATED LUMBER THAT HAS BEEN CUT OR DRILLED THAT EXPOSES UNTREATED PORTIONS OF WOOD ARE REQUIRED TO BE FIELD TREATED TO PREVENT INSECT INFESTATION.
3. OPTIONAL BORATE APPLIED TO ALL FRAME MEMBERS WITHIN 24" A.F.F.

- -NOTICE TO BUILDER AND ALL SUBCONTRACTORS- -

IT IS THE INTENT OF THE ENGINEER LISTED IN THE TITLEBLOCK OF THESE DOCUMENTS THAT THESE DOCUMENTS BE ACCURATE, PROVIDING LICENSED PROFESSIONALS CLEAR INFORMATION. EVERY ATTEMPT HAS BEEN MADE TO PREVENT ERROR. THE BUILDER AND ALL SUBCONTRACTORS ARE REQUIRED TO:
1. REVIEW ALL THE INFORMATION CONTAINED IN THESE DOCUMENTS, PRIOR TO THE COMMENCEMENT OF ANY WORK. THE ENGINEER ARE NOT RESPONSIBLE FOR ANY PLAN ERRORS, OMISSIONS, OR MISINTERPRETATIONS UNDETECTED AND NOT REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION.
2. SHALL STRICTLY OBSERVE ALL APPLICATION CODES DURING THE COURSE OF CONSTRUCTION INCLUDING ALL STATE, CITY, AND COUNTY BUILDING, ZONING, ELECTRICAL, MECHANICAL, PLUMBING AND FIRE CODES. CONTRACTOR SHALL VERIFY ALL CODE REQUIREMENTS PRIOR TO COMMENCEMENT OF WORK.
3. THE ARCHITECT / ENGINEER SHALL NOT BE RESPONSIBLE FOR SAFETY PROCEDURES, THE MEANS AND METHODS OF CONSTRUCTION, TECHNOLOGIES, OR THE CONTRACTION TO CARRY OUT THE WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICTAIONS OR RELATED CODES.
4. THE FRAMING PLAN SHOWN INDICATES THE "TRUSS SYSTEM" AND IS THE RESPONSIBILITY OF THE TRUSS SYSTEM ENGINEER (DESIGN PROFESSIONAL OF RECORD). THE TRUSS DESIGN ENGINEER (DELEGATED ENGINEER) HAS FINAL, RESONSIBILITY FOR EACH INDIVIDUAL TRUSS AND TRUSS PROFILE, AND IS TO SUBMIT A FINAL SET OF TRUSS ENGINEERING SIGNED AND SEALED TRUSS DRAWINGS TO DESIGN PROFESSIONAL OF RECORD FOR REVIEW PRIOR TO FABRICATION
5. ANY DISCRPANCY OR ERROR IN DIMENSIONS OR NOTES WITH IN THIS PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL FOR CLARIFICATION PRIOR TO CONSTRUCTION.
6. ALL CONSTRUCTION MUST BE IN ACCORDANCE TO THE INFORMATION FOUND IN THESE DOCUMENTS. ANY QUESTIONS REGARDING THE INFORMATION FOUND IN THESE PLANS SHOULD BE DIRECTED TO OUR QUALITY ASSURANCE MANAGER AT 321-972-0491 IMMEDIATELY. NO BACK CHARGES WILL BE CONSIDERED FOR REIMBURSEMENT BY THE THE ENGINEER WITHOUT ADVANCED NOTIFICATION AND APPROVAL BY THE ENGINEER. PAYMENTS WILL BE MADE IN ACCORDANCE TO THE TERMS OF THE AGREEMENT.

PER FBC 2020 7TH EDITION, RESIDENTIAL VOLUME R703.7.1:
LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION-RESISTANT MATERIALS. EXPANDED METAL OR WOVEN WIRE LATH SHALL BE ATTACHED WITH 1½"LONG (38MM), 11 GAUGE NAILS HAVING A 7/16" (11.1MM) HEAD OR 1½" LONG (22.2MM), 16 GAUGE STAPLES, SPACED IN ACCORDANCE WITH ASTM C1063 OR C1787, OR AS OTHERWISE APPROVED

CONCRETE CURING AND TESTING

CURING: PROTECT CONCRETE FOR 7 DAYS AGAINST MOISTURE LOSS, RAPID TEMPERATURE CHANGE, MECHANICAL INJURY AND INJURY FROM RAIN OR FLOWING WATER. MAINTAIN CONCRETE IN MOIST CONDITION AT TEMPERATURE ABOVE 50 DEGREES F, THROUGHOUT SPECIFIED CURING PERIOD. PROTECT FROM RAPID TEMPERATURE CHANGE AND RAPID DRYING FOR FIRST 24 HOURS FOLLOWING REMOVAL OF TEMPERATURE PROTECTION. START CURING ACTIVITIES AS SOON AS FREE WATER HAS DISAPPEARED FROM SURFACES OF CONCRETE AFTER PLACING AND FINISHING.

TESTING: CONCRETE TESTING FOR THIS PROJECT SHALL BE PAID FOR BY OWNER, AND SHALL CONSIST OF COMPRESSIVE TESTS MADE BY THE LABORATORY IN ACCORDANCE WITH ASTM C-31, FOLLOW ASTM C31 AND MAKE A SET OF SIX (6) STANDARD CYLINDERS FOR EACH 100 CU. YDS. OR FOR EACH DAYS POUR EXCEEDING 5 CU. YDS. TEST PER ASTM C39 AS FOLLOWS: TWO (2) SPECIMENS TESTED AT SEVEN (7) DAYS, ONE (1) AT 14 DAYS. TWO (2) TESTED AT 28 DAYS, AND ONE (1) HELD IN RESERVE. SLUMP TEST SHALL BE MADE IN ACCORDANCE WITH ASTM C-143 FOR EACH DAYS POUR, FOR EACH LOAD, OR AS DIRECTED BY ARCHITECT/ ENGINEER.

REINFORCING STEEL

REINFORCING STEEL SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615-GRADE 60, EXCEPT THAT NEW BILLET STEEL CONFORMING TO ASTM A615-GRADED 40 MAY BE USED FOR COLUMN TIES AND BEAMS STIRRUPS. ALL DETAILING AND ACCESSORIES SHALL CONFORM TO TYPICAL DETAILS SHOWN IN THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES ACI 315, LATEST EDITION".

ALL CONTINUOUS VERTICAL OR HORIZONTAL BARS IN FOOTINGS, FOUNDATIONS WALLS, SLABS AND OTHER CONCRETE SHALL BE LAP-SPLICED, WHERE NECESSARY OR DESIRABLE, BY WIRING TOGETHER IN CONTACT, LENGTH OF ALL #5 LAPS SHALL BE 40-BAR DIAMETERS OR 2'-1" MINIMUM, WHICHEVER IS GREATER (EXCEPT AS NOTED BY DRAWINGS). ALL BARS AT END OF CONTINUOUS FOOTINGS OR BEAMS SHALL BE CONT. TO FAR SIDES OF INTERSECTING ELEMENTS.

ALL SLABS ON GRADE SHALL BE 4" THICK AND REINFORCED WITH 6 X 6 - WI.4 X WI.4 W.W.F. UNLESS OTHERWISE NOTED. LAP FABRIC 8" AT EDGES AND ENDS AND PROVIDE ADDITIONAL REINFORCING WHERE SHOWN ON DRAWINGS. PLACE MESH IN CENTER OF SLAB. MOISTURE BARRIER BENEATH FLOOR SLABS SHALL BE 6 MIL POLYETHYLENE. USE FLAT SHEETS OF WELDED WIRE FABRIC. ROLLS WILL NOT BE PERMITTED.

FOUNDATIONS

GEOTECHNICAL ENGINEERING EVALUATION AND SUBSURFACE EXPLORATION SHALL PERFORM BY OWNER'S GEOTECHNICAL CONSULTANT.

MAXIMUM ALLOWABLE SOIL PRESSURE IS ASSUMED TO BE 2000 POUNDS PER SQUARE FOOT.
SPREAD FOOTINGS SHALL BEAR ON SOIL COMPACTED TO A DENSITY OF AT LEAST 95 % OF MODIFIED PROCTOR MAXIMUM DENSITY (A.S.T.M. D1557), FOR ALL REQUIRED FILL AND FOR AT LEAST 1'- 0" BELOW FINISHED FLOOR UNLESS MORE STRINGENT REQUIREMENTS ARE RECOMMENDED BY OWNERS GEOTECHNICAL CONSULTANT.

GENERAL STRUCTURAL NOTES

CAST IN PLACE REINFORCED CONCRETE

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI (SLABS) 3000 PSI (COLUMNS AND BEAMS), A SLUMP OF 5" PLUS OR MINUS 1", AND HAVE 2 TO 5% AIR ENTRAINMENT, AND A MAXIMUM WATER/CEMENT RATIO OF 0.63
2. HOOKS SHALL BE PROVIDED AT DISCONTINUOUS ENDS OF ALL TOP BARS OF BEAMS.
3. HORIZONTAL FOOTING BARS SHALL BE BENT 25" AROUND CORNERS OR CORNER BARS WITH A 25" LAP PROVIDED EA WAY.
4. CONCRETE COVER MIN. 3" WHEN EXPOSED TO EARTH OR 1 1/2" TO FORM U.N.O.
5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064A / A1064M. WWF SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE WITHIN THE 6". POLYPROPYLENE FIBERS FOR SLABS ON GRADE TO BE MIN 1.5 LBS OF FIBER PER CUBIC YARD
6. ALL REINFORCING STEEL / STIRRUPS AND TIES SHALL BE NEW DOMESTIC DEFORMED BARS FREE FROM RUST,SCALE & OIL & SHALL MEET ASTM A615/ A615M GRADE 40 U.N.O. REINFORCING FOR FOOTING SHALL BE SUPPORTED ON PRE-CAST CONCRETE PADS, STEEL WIRE OR PLASTIC SUPPORT. TOP REINFORCING SHALL BE POSITIVELY SUPPORTED BY TEMPORARY STRINGERS. DOWELS FOR COLUMNS & FILLED CELLS SHALL BE SECURED IN PLACE BY USING ADDITIONAL CROSS- REINFORCING TIED TO FOOTING REINFORCING. SPLICES IN REINFORCING WHERE PERMITTED SHALL BE AS PER DETAIL MS05/L1.
7. HIGH STRENGTH SIMPSON SET EPOXY-TIE WAS USED IN THE DESIGN OF THIS PRODUCT. IF CONTRACTORS WISH TO USE A DIFFERENT EPOXY, THEY MUST FIRST CONTACT THE ENGINEER OF RECORD FOR WRITTEN APPROVAL.
8. WHERE PROJECT IS TO BE LOCATED IN KNOWN RADON GAS PREVALENT AREAS, APPENDIX "F" OF THE FLORIDA BUILDING CODE 7TH EDITION (2020) IS TO BE IMPLEMENTED. F303.4 CONCRETE STRENGTH IN THESE AREAS ARE TO BE A MINIMUM OF 3000 P.S.I. THEREFORE, ANY AND ALL NOTES ON THESE PLANS THAT INDICATE 2500 P.S.I. SHALL BE REPLACED WITH 3000 P.S.I. FOR THE CONCRETE STRENGTH.

MASONRY

1. HOLLOW LOAD BEARING UNITS SHALL BE NORMAL WEIGHT, GRADE N, TYPE 2, CONFORMING TO ASTM C90-014, WITH A MINIMUM NET COMPRESSIVE STRENGTH OF 1900 PSI (f'm = 1500 PSI)
2. MORTAR SHALL BE TYPE "S", CONFORMING TO ASTM C270-12A.
3. COARSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI SLUMP 8" TO 11". CONTINUOUS MASONRY INSPECTIONS ARE REQUIRED DURING CONSTRUCTION
4. GRADE 40 U.N.O. VERTICAL REINFORCEMENT SHALL BE AS NOTED ON THE DRAWINGS WITH THE CELLS FILLED WITH COARSE GROUT.
5. GRADE 40 U.N.O.VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM AND AT A MAXIMUM SPACING OF 192 DIA OR 10FT WHICH EVER IS LESS. REINFORCING SHALL BE PLACED IN THE CENTER OF THE MASONRY CELL WITH MIN 1/2" CLEARANCE TO INSIDE FACE.
6. REINFORCING STEEL SHALL BE LAPPED PER DETAIL MS05/L1, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
7. GROUT STOPS SHALL BE PROVIDED BELOW BOND BEAM. PLASTIC SCREEN, METAL LATH STRIP OR CAVITY CAPS MAY BE USED TO PREVENT THE FLOW OF GROUT INTO CELLS BELOW. THE USE OF FELT PAPER AS A STOP IS PROHIBITED.
8. TEMPORARY BRACING AND SHORING OF WALL TO PROVIDE STABILITY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
9. TYPICAL FILLED CELL REINFORCING SIZE AND SPACING SHALL BE ABOVE AND BELOW ALL WALL OPENINGS
10. DO NOT APPLY UNIFORM LOADS TO MASONRY WALLS FOR (3) DAYS AND NO CONCENTRATED LOADS FOR (7) DAYS. PER CODE ACI 318-14
11. CONSOLIDATE POURS EXCEEDING 12" IN HEIGHT BY MECHANICAL VIBRATION, AND RECONSOLIDATE BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED. GROUT SHALL BE FLUSH WITH TOP OF WALL.

WOOD

1. ALL EXTERIOR WOOD STUDS WALLS, BEARING WALLS, SHEAR WALLS, AND MISC. STRUCTURAL WOOD FRAMING MEMBERS,(I.E. BLOCKING OR GABLE END BRACING) SHALL BE EITHER AS SPECIFIED IN PLAN OR IN DETAILS. IF CONFLICTS OCCUR BETWEEN PLAN AND DETAILS, THE STRONGEST MATERIAL SHALL BE USED. AT A MINIMUM, ALL WOOD STRUCTURAL FRAMING MEMBERS SHALL BE SPF #2.
2. ALL LUMBER SPECIFIED ON DRAWINGS ARE INTENDED FOR DRY USE ONLY (MOISTURE CONTENT 19% OR LESS), U.N.O. ALL WATERPROOFING AND FIRE SAFETY SYSTEMS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHERS
3. ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1" DIA. SHALL HAVE STUD PROTECTION SHIELDS. ALL HOLES OVER 1" IN DIA. FOR PLUMBING LINES, ETC. SHALL BE REPAIRED WITH SIMPSON HSS2 STUD SHOES,TYP., U.N.O.
4. MANY OF THE NEW PRESSURE TREATED WOODS USE CHEMICALS THAT ARE CORROSIVE TO STEEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE TYPE OF WOOD TREATMENT AND TO SELECT APPROPRIATE CONNECTORS THAT RESIST CORROSION. FOR EXAMPLE, ACQ-C, ACQ-D, CBA-A OR CA-B REQUIRE HOT-DIPPED GALVANIZED OR STAINLESS STEEL FASTENERS. DOT SODIUM BORATE (SBX) DOES NOT.
5. ALL EXPOSED WOOD OR WOOD IN CONTACT WITH EARTH OR CONCRETE TO BE PRESSURE TREATED.
6. UNTREATED WOOD SHALL NOT BE IN DIRECT CONTACT WITH CONCRETE OR MASONRY. SEAT PLATES SHALL BE PROVIDED AT BEARING LOCATIONS WITHOUT WOODEN TOP PLATES.
7. SEE PLAN FOR STUD PACK AND BEAM NAILING PATTERNS
8. ALL ENGINEERED LUMBER TO HAVE THE FOLLOWING MIN VALUES U.N.O.
   PARALLAM COLUMNS: 1.8E Fb = 2400 PSI
   MICROLAM (LVL) BEAMS: 2.0E Fb= 2600 PSI
   GLULAM BEAMS: SP/SP 24F-V5 LAYUP (1.7E FB=2400 PSI) MIN.
9. SEE PLAN NOTE FOR ADDITIONAL ROOF, WALL, SHEAR WALL AND FLOOR SHEATHING REQUIREMENTS ALONG W/ NAILING INFORMATION OTHERWISE:
   9.1. ROOF DECK: PLYWOOD C-C/C-D, EXTERIOR OR OSB
   9.2. FLOOR SHEATHING: T&G A-C GROUP 1 APA RATED (48/24) SHEATHING SHALL FINISH FLUSH TO EXTERIOR WALL FACE.
   9.3. WALL SHEATHING: 7/16" STUCTURAL I OSB EXPOSURE 1 OR 15/32" RATED OSB EXPOSURE 1. A MINIMUM 1/8" SPACE IS RECOMMENDED BETWEEN PANELS AT EDGE AND END JOINTS TO ALLOW FOR EXPANSION. PER R604.3 SHEATHING SHALL NOT BE USED AS WEATHER RESISTANCE BARRIER UNLESS SPECIFIED.

UPLIFT CONNECTORS

1. UPLIFT CONNECTORS SUCH AS HURRICANE CLIPS, TRUSS ANCHORS AND ANCHOR BOLTS ARE ONLY REQUIRED ON MEMBERS IN WALLS THAT ARE EXPOSED TO UPLIFT OR LATERAL FORCES. INTERIOR LOAD BEARING WALLS ARE NOT ALWAYS EXPOSED TO UPLIFT FORCES. THE MEMBERS OF THESE WALLS WOULD NOT NEED TO HAVE CONNECTORS APPLIED. PLEASE COORDINATE THE TRUSS ENGINEER FOR THE LOCATION OF THESE WALLS.AND STRUCTURAL PLANS FOR MORE INFO.

STRUCTURAL STEEL

1. MATERIAL SPECIFICATIONS: WIDE FLANGE SECTIONS: ASTM A992, GRADE 50, Fy=50 KSI TUBE STEEL (HSS): ASTM A500, GRADE B, Fy = 46 KSI PIPE STEEL: ASTM A53, TYPE E OR S, Fy = 35 KSI ALL OTHER STRUCTURAL & MISC. STEEL: A36 Fy=36 KSI STRUCTURAL CONNECTIONS: ALL STRUCTURAL BOLTS TO BE A325N U.N.O
2. STRUCTURAL BOLTS SMALLER THAN 5/8" DIA. TO BE A307 THREADED ROD SHALL CONFORM TO A36 OR A307 ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307 SHOP AND FIELD WELDS: E70XX ELECTRODES STEEL REINFORCEMENT SHOP DRAWINGS TO BE PROVIDED TO ENGINEER OF RECORD BEFORE FABRICATION FOR REVIEW AND APPROVAL
3. STRUCTURAL CONNECTIONS: ALL STRUCTURAL BOLTS TO BE A325N U.N.O. ALL A325N BOLTS SHALL BE BROUGHT TO A "SNUG-TIGHT" CONDITION , AS DEFINED IN THE SPECIFICATION. SLIP CRITICAL (SC) BOLTS MUST BE FULLY TENSIONED PER SPECIFICATION STRUCTURAL BOLTS SMALLER THAN 5/8" DIA. TO BE A307 THREADED ROD SHALL CONFORM TO A36 OR A307 ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307 SHOP AND FIELD WELDS: E70XX ELECTRODES STEEL REINFORCEMENT SHOP DRAWINGS TO BE PROVIDED TO ENGINEER OF RECORD BEFORE FABRICATION FOR REVIEW AND APPROVAL. WELDED CONNECTIONS: ELECTRODES - E70XX UNO (LOW HYDROGEN). FILLET WELDS SHALL BE 3/16" UNO.
4. SUBMIT SHOP DRAWINGS INDICATING ALL SHOP AND ERECTION DETAILS INCLUDING PROFILES, SIZES, SPACING, AND LOCATIONS OF STRUCTURAL MEMBERS, CONNECTION ATTACHMENTS, FASTENERS, LOAD, AND TOLERANCES.
5. STRUCTURAL STEEL SHALL RECEIVE SHOP COAT OF PRIMER (COLOR AS DIRECTED BY ARCHITECT) EXCEPT FOR AREAS WHICH WILL RECEIVE SPRAY-ON FIRE PROTECTION..
6. A CERTIFIED TESTING AGENCY SHALL BE ENGAGED TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS AND SPECIFICATIONS (IF PROVIDED). SUBMIT REPORTS TO ARCHITECT AND ENGINEER.

PRE ENGINEERED WOOD TRUSSES

1. ALL PREFABRICATED WOOD TRUSSES SHALL BE SECURELY FASTENED TO THEIR SUPPORTING WALLS OR BEAMS WITH HURRICANE CLIPS OR ANCHORS PER STRUCTURAL PLAN
2. PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENERS" AS RECOMMENDED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
3. TRUSS MEMBERS AND CONNECTIONS SHALL BE PROPORTIONED (WITH A MAXIMUM ALLOWABLE STRESS INCREASE FOR LOAD DURATION OF 25%) TO WITHSTAND THE LIVE LOADS GIVEN IN THE NOTES AND TOTAL DEAD LOAD.
4. BRIDGING FOR PRE-ENGINEERED TRUSSES SHALL BE AS REQUIRED BY THE TRUSS MANUFACTURER UNLESS NOTED ON THE PLANS.
5. TRUSS ELEVATIONS AND SECTIONS ARE FOR GENERAL CONFIGURATION OF TRUSSES ONLY. WEB MEMBERS ARE NOT SHOWN, BUT SHALL BE DESIGNED BY THE TRUSS MANUFACTURER IN ACCORDANCE WITH THE FRAMING DESIGN LOADS:
6. DESIGN SPECIFICATIONS FOR LIGHT WEIGHT METAL PLATE CONNECTED WOOD TRUSSES PER THE TRUSS PLATE INSTITUTE TPI LATEST EDITION.
7. PRE-ENGINEERED WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH SPECIFIED LOADS AND GOVERNING CODES . SUBMITTALS SHALL INCLUDE TRUSS FRAMING PLANS AND DETAILS SHOWING MEMBER SIZES, BRACING, ANCHORAGE, CONNECTIONS, TRUSS LOCATIONS, AND PERMANENT BRACING AND/OR BRIDGING AS REQUIRED FOR ERECTION AND FOR THE PERMANENT STRUCTURE. EACH SUBMITTAL SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED STRUCTURAL ENGINEER. SUBMIT 3 COPIES FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
8. THE TRUSS MANUFACTURER SHALL DETERMINE ALL SPANS WORKING POINTS, BEARING POINTS, AND SIMILAR CONDITIONS. TRUSS SHOP DRAWINGS SHALL SHOW ALL TRUSSES, ALL BRACING MEMBERS, AND ALL TRUSS TO TRUSS HANGERS.

FIELD REPAIR NOTES

1. MISSED "J" BOLTS FOR WOOD BEARING WALLS MAY BE SUBSTITUTED WITH 1/2" DIA. EPOXY ANCHORS WITH 7" EMBEDMENT. SIMPSON "SET" EPOXY ADHESIVE BINDER FOLLOWING ALL MANUFACTURER'S RECOMMENDATIONS OR SIMPSON 1/2" TITEN HD BOLTS WITH MINIMUM 7" EMBEDMENT. SEE PLAN FOR EMBEDMENT DEPTH AT FLOOR STEPS.
2. FOR MISSED VERT. DOWELS, DRILL A 3/4" DIAMETER HOLE 6" DEEP AT THE LOCATION OF THE OMITTED REBAR AND INSTALL A 32" LONG #5 BAR INTO THE EPOXY FILLED HOLE. USE A TWO PART EMBEDMENT EPOXY (SIMPSON HIGH STRENGTH EPOXY-TIE ANCHORING ADHESIVE) MIXED PER THE MANUFACTURER'S INSTRUCTIONS. ASSURE THAT ALL DUST AND DEBRIS FROM DRILLING ARE REMOVED FROM THE HOLE BY BRUSHING AND USING COMPRESSED AIR PRIOR TO APPLYING THE EPOXY. ALLOW THE EPOXY TO CURE TO THE MANUFACTURER'S SPECIFICATIONS, THEN FILL THE CELL IN THE NORMAL WAY DURING BOND BEAM POUR.
3. FOR MORTAR JOINTS LESS THAN 1/4", PROVIDE (1) #5 VERT. IN CONC. FILLED CELL EACH SIDE OF THE JOINT (BAR DOES NOT HAVE TO BE CONT. TO FOOTING).
4. MISSED LINTEL STRAPS FOR MASONRY CONSTRUCTION MAY BE SUBSTITUTED WITH (1) SIMPSON MTSM16 TWIST STRAP W/ (4) ¼"x 2¼" TITENS TO MASONRY AND (7)-10d NAILS TO TRUSS FOR UPLIFTS LESS THAN 860 LBS (USE (2) MTSM16 FOR UPLIFTS LESS THAN 1720#). IF CORNER STRAP IS MISSED, CONTRACTOR IS TO INSTALL (2) SIMPSON HGAM10 W/ (4) 1/4" x 1 1/2" SDS SCREWS AND (5) 1/4" x 2 1/4" TITENS ONE EACH SIDE OF TRUSS.
5. NO MORE THAN 10 STRAPS MAY BE SUBSTITUTED OR NO MORE THAN 3 IN A ROW WITHOUT APPROVAL FROM EOR. IF GIRDER TRUSS CONNECTIONS ARE MISSED, CONTACT THE EOR FOR SUBSTITUTION.
6. IF MISSED, MSTAM36 OR MSTAM40 STRAP IS MISSED FOR 2ND FLOOR JAMB STUD CONNECTION, CONTRACTOR MAY INSTALL SIMPSON HTT5 W/ (26) 16d x 21/2" NAILS AND 5/8" ANCHOR BOLT SET IN SIMPSON HIGH STRENGTH EPOXY W/ MIN 6" EMBEDMENT AND MIN 3" EDGE DISTANCE. CONTACT EOR IF STRAPS ARE MISSED UNDER GIRDER JAMB STUD LOCATIONS.

STRUCTURAL DESIGN CRITERIA

CODE CRITERIA

- FLORIDA BUILDING CODE 7TH EDITION (2020) RESIDENTIAL.
- FLORIDA FIRE PREVENTION CODE 7TH EDITION (2020)
- FLORIDA BUILDING CODE ACCESSIBILITY 7TH EDITION (2020)
- NFPA 70-14. NATIONAL ELECTRICAL CODES. (NEC 2017) & 6TH FBCR CH. 34-43
- BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE - (ACI 318-14).
- SPECIFICATIONS FOR STRUCTURAL CONCRETE - (ACI 301-10).
- BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES - (ACI 530-13).
- NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - 2015 EDITION.
- WOOD FRAMED CONSTRUCTION MANUAL 2015 EDITION.
- APA PLYWOOD DESIGN SPECIFICATION 2012 EDITION.
- AMERICAN SOCIETY OF CIVIL ENGINEERS: ASCE/SEI 7-16
- ALUMINUM DESIGN MANUAL - 2015 EDITION

GENERAL ROOF LOADING

	SHINGLE ROOF (PSF)	METAL ROOF (PSF)	TILE ROOF (PSF)	HEAVY ROOF (PSF)
TOP CHORD LL TOP CHORD DL	20 10	20 10	20 15	20 25
BOTTOM CHORD LL* BOTTOM CHORD DL	0 10	0 10	0 10	0 10
TOTAL (PSF)	40	40	45	55
BOTTOM CHORD LL (OPT) ATTICS W/ LIMITED STORAGE ATTICS W/ HEAVY STORAGE * ATTICS W/ NO STORAGE (NON-CONCURRENT)	 20 50 10			

NOTE: LL REDUCTIONS ARE ALLOWED PER CODE BUT ONLY WITH WRITTEN APPROVAL FROM EOR OR INDICATED ON PLAN

GENERAL FLOOR LOADING

		COMMENTS:
TOP CHORD LL TOP CHORD DL	40 (PSF) 10 (PSF)	
BOTTOM CHORD LL BOTTOM CHORD DL	0 (PSF) 5 (PSF)	

SPECIAL FLOOR LOADING

		COMMENTS:
GAME ROOM / READING ROOMS	60 (PSF)	d. A SINGLE CONCENTRATED LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP.
BALCONIES/ DECKS	40(PSF)	f. BALUSTERS AND PANELS FILLERS SHALL BE DESIGNED TO WITHSTAND A HORIZONTALLY APPLIED NORMAL LOAD OF 50 POUNDS ON AN AREA EQUAL TO 1 SQ. FT.
BALCONIES OVER 100 SQ:FT	100(PSF)	
LIGHT STORAGE	125(PSF)	
GUARDRAILS AND HANDRAILS	200(LBS)(d)	
GUARDRAIL IN-FILL COMPONENTS	50 (LBS)(f)	
STAIRS / NON SLEEPING ROOMS	40 (PSF)	
SLEEPING ROOMS	30 (PSF)	
LIBRARIES - STACK ROOMS	150(PSF)	

DEFLECTION CRITERIA

			COMMENTS:
ROOF TRUSSES*	LL/360	TL/240	
ROOF RAFTERS	LL/180	TL/120	
ROOF RAFTERS (W/O CLG)	LL/360	TL/240	
FLOOR TRUSSES/ BEAMS **	LL/360	TL/240	
FLOOR I-JOIST***	LL/480	TL/240	

*TL MAX 2" UP TO 40FT SPAN
**TL MAX 3/4"
*** TL MAX 1/2"
****TL MAX 1/4" DIFFERENTIAL BETWEEN ADJACENT TRUSSES

SHEET INDEX

WIND LOADING CRITERIA ASCE 7-16

WIND SPEED (ULTIMATE)	140.0 MPH
WIND SPEED (ALLOWABLE)	108.0 MPH
EXPOSURE CATEGORY	C
BUILDING CATEGORY	II
BUILDING TYPE	V
ENCLOSURE CLASSIFICATION	ENCLOSED
INTERNAL PRESSURE COEFFICIENT	+/- 0.18

NOTE: MEAN ROOF HEIGHT FOR TYPICAL SINGLE STORY BUILDING IS 15FT, AND FOR 2 STORY IS 30 FEET

ASCE 7-16 WALL DESIGN ALLOWABLE COMPONENTS AND CLADDING WIND PRESSURES AND SUCTIONS FOR MEAN ROOF HEIGHT ≤ 60 ft

EFFECTIVE WIND AREA (SQ FEET) — WIND PRESSURE AND SUCTION (PSF): (+) VALUE DENOTES PRESSURE, (-) VALUE DENOTES SUCTION

WALLS	AREA	4	5
	10 - 19.99	(1) (+) 49.4 (-) 53.5	(2) (+) 61.3 (-) 82.0
	20 - 49.99	(3) (+) 47.2 (-) 51.4	(4) (+) 58.5 (-) 76.4
	50 - 99.99	(5) (+) 44.2 (-) 48.4	(6) (+) 54.9 (-) 69.1
	> 100	(7) (+) 42.0 (-) 46.2	(8) (+) 52.1 (-) 63.7

GARAGE DOORS*		SOFFIT
9'-0" x 7'-0"	16'-0" x 7'-0"	
(+) 31.1 (-) 35.0 (9)	(+) 29.8 (-) 33.1 (10)	(+) 35.6 (-) 47.0

FLAT/HIP/GABLE ROOF 0 TO 7 DEGREE	AREA	1	1'	2	3
	10 - 19.99	(11) (+) 20.0 (-) 78.7	(15) (+) 20.0 (-) 45.2	(19) (+) 20.0 (-) 103.7	(23) (+) 20.0 (-) 141.1
	20 - 49.99	(12) (+) 18.8 (-) 73.5	(16) (+) 18.8 (-) 45.2	(20) (+) 18.8 (-) 97.0	(24) (+) 18.8 (-) 128.1
	50 - 99.99	(13) (+) 17.2 (-) 66.6	(17) (+) 17.2 (-) 45.2	(21) (+) 17.2 (-) 88.2	(25) (+) 17.2 (-) 110.5
	> 100	(14) (+) 16.0 (-) 61.46	(18) (+) 16.0 (-) 45.2	(22) (+) 16.0 (-) 81.6	(26) (+) 16.0 (-) 97.0

GABLE ROOF > 20 TO 27 DEGREE	AREA	1	2e	2n	2r	3e	3r
	10 - 19.99	(27) (+) 30.0 (-) 70.3	(31) (+) 30.0 (-) 70.3	(35) (+) 30.0 (-) 112.1	(39) (+) 30.0 (-) 112.1	(43) (+) 30.0 (-) 112.1	(47) (+) 30.0 (-) 144.5
	20 - 49.99	(28) (+) 30.0 (-) 70.3	(32) (+) 30.0 (-) 70.3	(36) (+) 30.0 (-) 98.1	(40) (+) 30.0 (-) 98.1	(44) (+) 30.0 (-) 98.1	(48) (+) 30.0 (-) 117.9
	50 - 99.99	(29) (+) 30.0 (-) 59.6	(33) (+) 30.0 (-) 59.6	(37) (+) 30.0 (-) 79.8	(41) (+) 30.0 (-) 79.8	(45) (+) 30.0 (-) 79.8	(49) (+) 30.0 (-) 82.9
	> 100	(30) (+) 30.0 (-) 51.7	(34) (+) 30.0 (-) 51.7	(38) (+) 30.0 (-) 65.9	(42) (+) 30.0 (-) 65.9	(46) (+) 30.0 (-) 65.9	(50) (+) 30.0 (-) 82.9

GABLE ROOF > 27 TO 45 DEGREE	AREA	1	2e	2n	2r	3e	3r
	10 - 19.99	(51) (+) 45.2 (-) 82.9	(55) (+) 45.2 (-) 82.9	(60) (+) 45.2 (-) 91.1	(64) (+) 45.2 (-) 82.9	(68) (+) 45.2 (-) 128.4	(72) (+) 45.2 (-) 91.1
	20 - 49.99	(52) (+) 40.2 (-) 70.3	(56) (+) 40.2 (-) 70.3	(61) (+) 40.2 (-) 81.5	(65) (+) 40.2 (-) 70.3	(69) (+) 40.2 (-) 113.8	(73) (+) 40.2 (-) 81.5
	50 - 99.99	(53) (+) 33.5 (-) 53.6	(57) (+) 33.5 (-) 53.6	(62) (+) 33.5 (-) 68.7	(66) (+) 33.5 (-) 53.6	(70) (+) 33.5 (-) 94.5	(74) (+) 33.5 (-) 68.7
	> 100	(54) (+) 28.4 (-) 41.0	(59) (+) 28.4 (-) 41.0	(63) (+) 28.4 (-) 59.1	(67) (+) 28.4 (-) 41.0	(71) (+) 28.4 (-) 79.8	(75) (+) 28.4 (-) 59.1

HIP ROOF > 20 TO 27 DEGREE	AREA	1	2e	2r	3e
	10 - 19.99	(76) (+) 36.8 (-) 66.1	(80) (+) 36.8 (-) 91.1	(84) (+) 36.8 (-) 91.1	(88) (+) 36.8 (-) 91.1
	20 - 49.99	(77) (+) 31.8 (-) 58.5	(81) (+) 31.8 (-) 81.5	(85) (+) 31.8 (-) 81.5	(89) (+) 31.8 (-) 81.5
	50 - 99.99	(78) (+) 25.1 (-) 48.6	(82) (+) 25.1 (-) 68.7	(86) (+) 25.1 (-) 68.7	(90) (+) 25.1 (-) 68.7
	> 100	(79) (+) 20.0 (-) 41.0	(83) (+) 20.0 (-) 59.1	(87) (+) 20.0 (-) 59.1	(91) (+) 20.0 (-) 59.1

HIP ROOF > 27 TO 45 DEGREE	AREA	1	2e	2r	3e
	10 - 19.99	(92) (+) 34.9 (-) 70.3	(96) (+) 34.9 (-) 84.0	(100) (+) 34.9 (-) 114.2	(104) (+) 34.9 (-) 111.6
	20 - 49.99	(93) (+) 30.4 (-) 62.6	(97) (+) 30.4 (-) 66.5	(101) (+) 30.4 (-) 94.6	(105) (+) 30.4 (-) 84.8
	50 - 99.99	(94) (+) 24.5 (-) 52.4	(98) (+) 24.5 (-) 43.4	(102) (+) 24.5 (-) 68.9	(106) (+) 24.5 (-) 49.4
	> 100	(95) (+) 20.0 (-) 44.5	(99) (+) 20.0 (-) 41.0	(103) (+) 20.0 (-) 49.4	(107) (+) 20.0 (-) 49.4

ASCE 7-16 WIND PRESSURE AND SUCTION DIAGRAMS

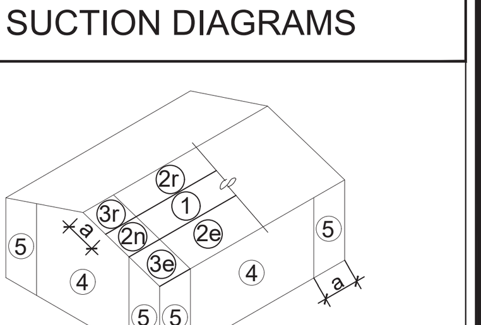


DIAGRAM GABLE

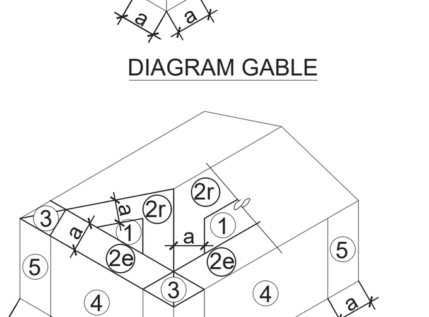


DIAGRAM HIP

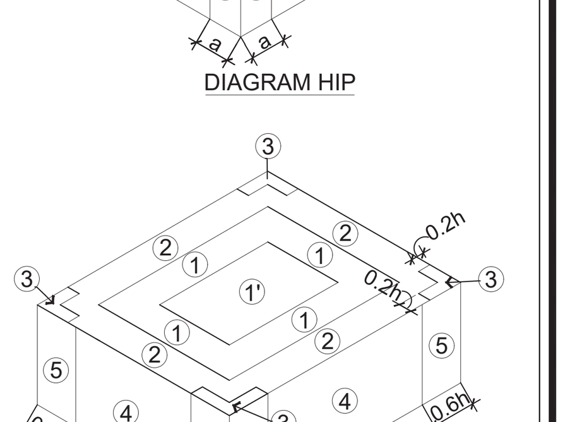


DIAGRAM FLAT/HIP/GABLE

GENERAL PRESSURE NOTES

NOTES:
1. ABOVE SHOWN PRESSURES ARE ULTIMATE WIND PRESSURES TO BE APPLIED AS REQUIRED.
2. "a" = END ZONE IS ONLY WITHIN 6'-0" OF ALL EXTERIOR BUILDING CORNERS. * INDICATED PRESSURES CAN BE INTERPOLATED FOR OTHER DOOR SIZES, OTHERWISE USE LOAD ASSOCIATED WITH THE LOWER EFFECTIVE AREAS.
3. DESIGNATED AREAS WHERE THE ULTIMATE WIND SPEED IS 140 MPH OR GREATER AND IS CONSIDER TO BE IN THE WIND-BOURNE DEBRIS AREA. CONTRACTOR TO PROVIDED ADDITIONAL INFO AS REQUIRED FOR PERMITTING.

REVISIONS	BY

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :
SCALE : NOTED
DRAWN : EML
JOB :
SHEET 1
OF 13 SHEETS

SITE PLAN

SCALE: 3/32" = 1'-0"

NEW HOME DESIGN

ARIAS RESIDENCE

QUINCE AVE.

EUSTIS FLORIDA 32736

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
DESIGNS

DATE:

SCALE: NOTED

DRAWN: EML

JOB:

SHEET 2

OF 13 SHEETS

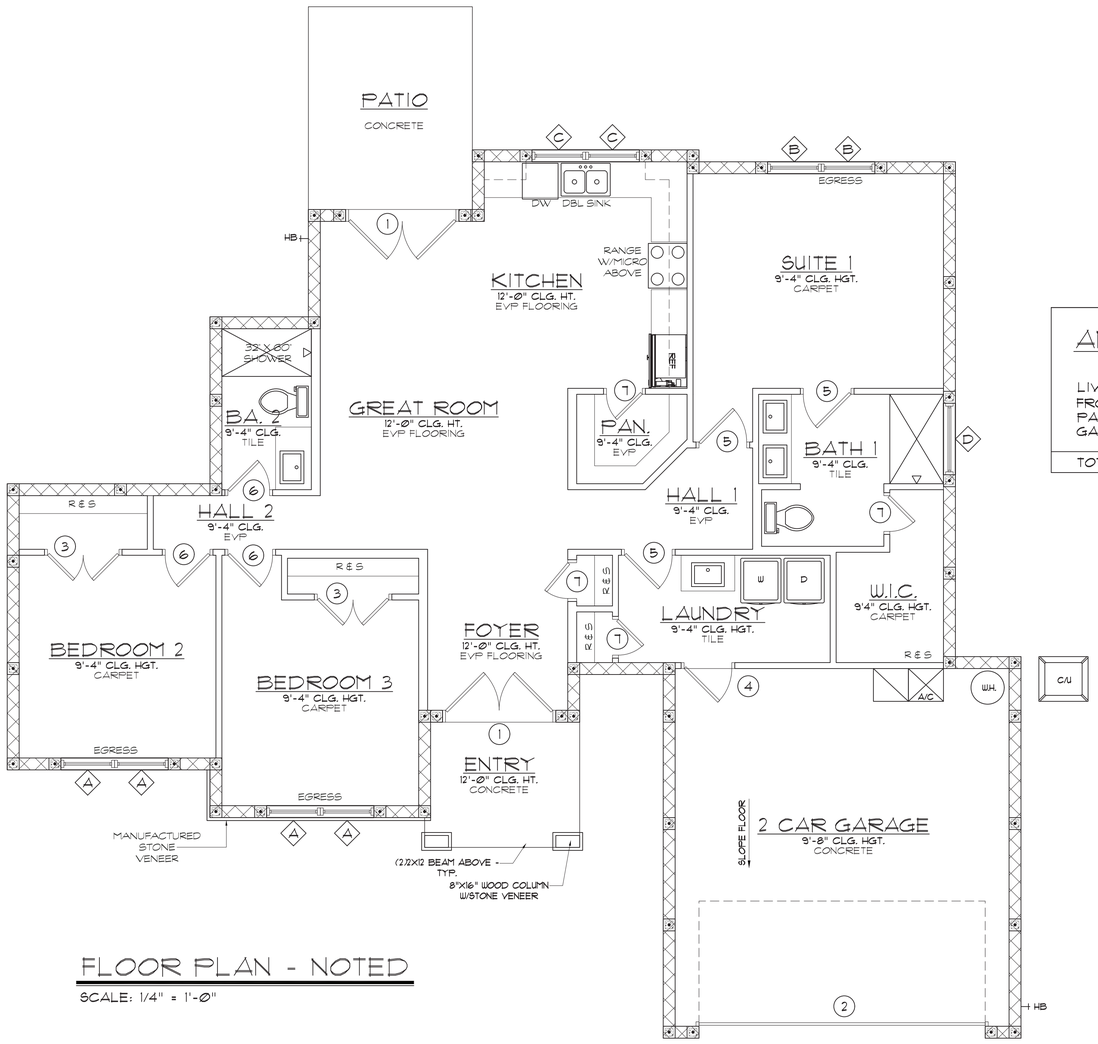
REVISIONS BY

DWELLING / GARAGE SEPARATION (TABLE R302.6)

SEPARATION	MATERIAL
FROM RESIDENCE AND ATTICS	NOT LESS THAN ½ INCH GYPSUM BOARD OR EQUIVALENT TO THE GARAGE SIDE
FROM HABITABLE ROOMS ABOVE GARAGE	NOT LESS THAN ⅝ INCH TYPE X GYPSUM BOARD OR EQUIVALENT
STRUCTURE(S) SUPPORTING FLOOR/CEILING ASSEMBLIES USED FOR SEPARATION REQUIRED BY THIS SECTION	NOT LESS THAN ½ INCH GYPSUM BOARD OR EQUIVALENT
GARAGES LOCATED LESS THAN 3 FEET FROM A DWELLING UNIT ON THE SAME LOT	NOT LESS THAN ½ INCH GYPSUM BOARD OR EQUIVALENT APPLIED TO THE INTERIOR SIDE OF EXTERIOR WALLS THAT ARE WITHIN THIS AREA.

PLAN NOTES:

1. OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL HAVE A 20 MIN. FIRE RATED DOOR OR SOLID WOOD DOOR NOT LESS THAN 1 AND ⅜ INCHES IN THICKNESS OR SOLID OR HONEYCOMB DOOR. DOOR SHALL BE EQUIPPED WITH AUTOMATIC CLOSER.
2. PROVIDE 2X BLOCKING AT MIDPOINT ON ALL INTERIOR STUD WALLS.



FLOOR PLAN - NOTED

SCALE: 1/4" = 1'-0"

ANALYSIS

LIVING:	1682
FRONT PORCH:	87
PATIO:	117
GARAGE:	431
TOTAL UNDER ROOF:	2200

WINDOW SCHEDULE

TAG	WIDTH	HGT.	QTY.	NOTES
A	3'-0"	6'-0"	4	SINGLE HUNG
B	3'-0"	5'-0"	2	SINGLE HUNG
C	3'-0"	4'-0"	2	SINGLE HUNG
D	4'-0"	1'-0"	1	FIXED TRANSOM

DOOR SCHEDULE

EXTERIOR

TAG	WIDTH	HGT.	QTY.	NOTES
1	6'-0"	8'-0"	2	FULL GLASS
2	16'-0"	8'-0"	1	OVERHEAD GARAGE DOOR

INTERIOR

TAG	WIDTH	HGT.	QTY.	NOTES
3	4'-0"	8'-0"	2	DOUBLE SWING
4	2'-8"	8'-0"	1	SWING-20 MIN RATED
5	2'-8"	8'-0"	2	SWING
6	2'-6"	8'-0"	3	SWING
7	2'-0"	8'-0"	4	SWING

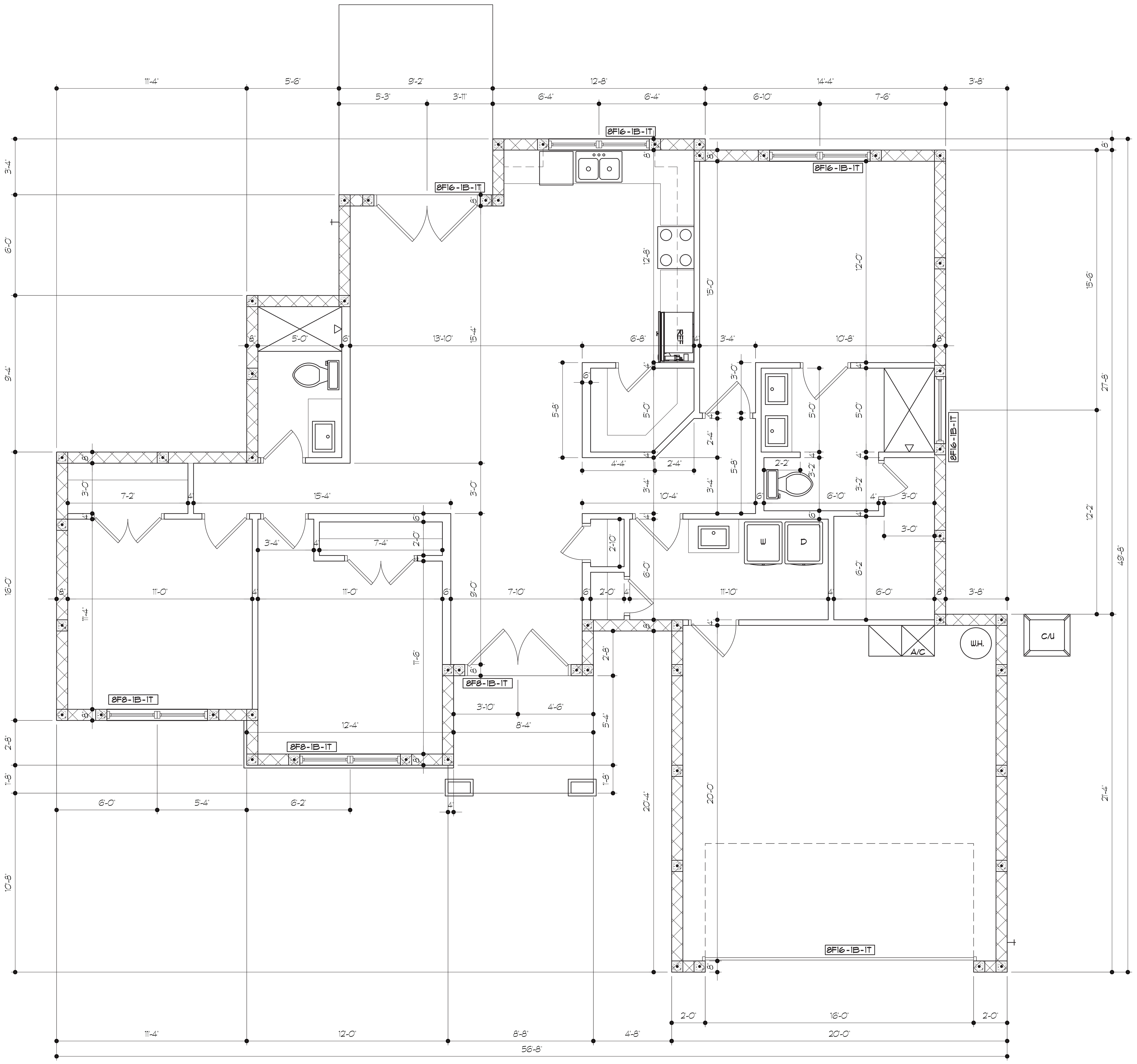
REVISIONS	BY

Lucia RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE:
SCALE: NOTED
DRAWN: EML
JOB:
SHEET 3
OF 13 SHEETS



FLOOR PLAN - DIMENSIONED AND LINTEL PLAN

SCALE: 1/4" = 1'-0"

REVISIONS	BY

Lucia DESIGNS
RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com

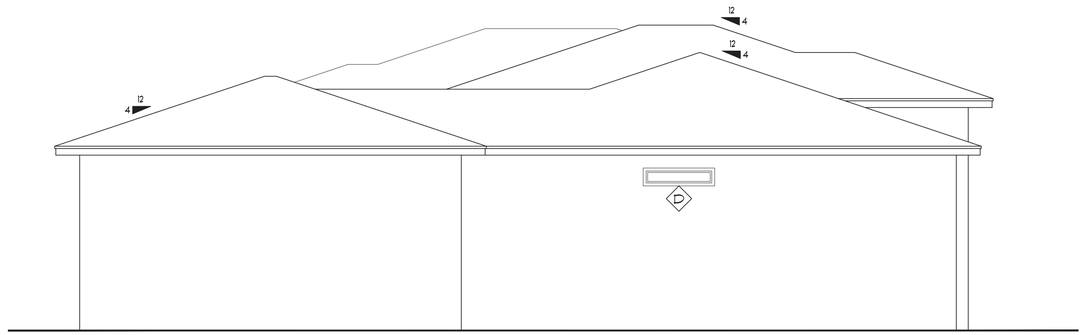
LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :
SCALE : NOTED
DRAWN : EML
JOB :

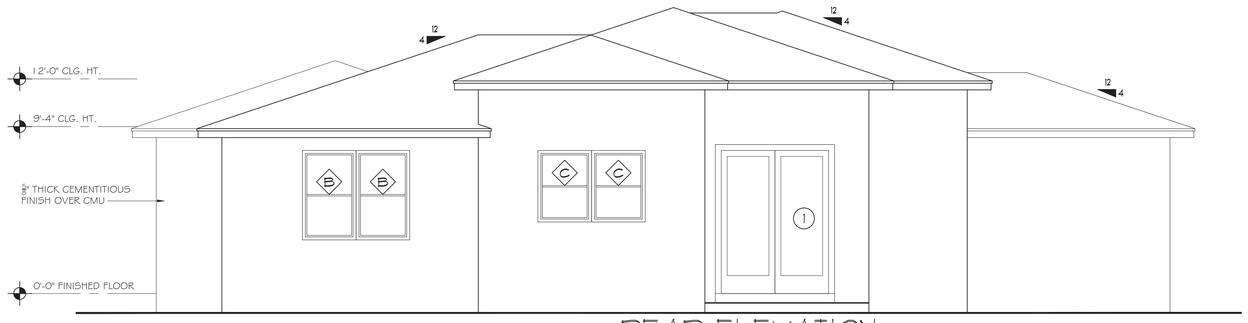
FRONT ELEVATION

SCALE: 1/4" = 1'-Ø"



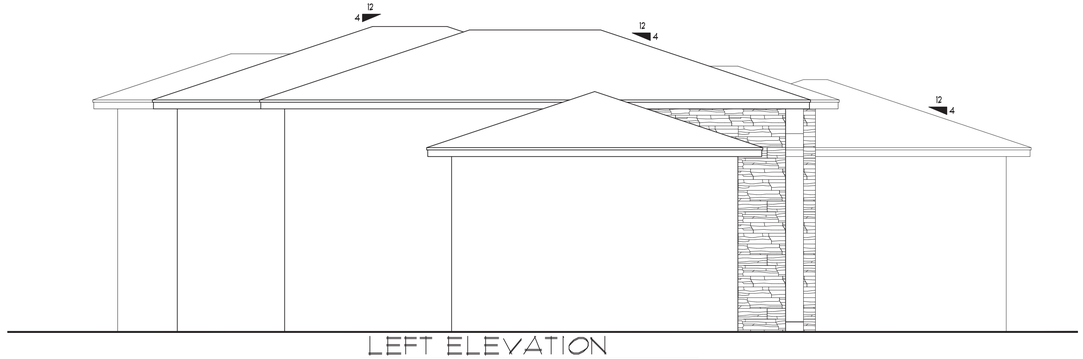
RIGHT ELEVATION

SCALE: 1/4" = 1'-Ø"



REAR ELEVATION

SCALE: 1/4" = 1'-Ø"



LEFT ELEVATION

SCALE: 1/4" = 1'-Ø"

REVISIONS	BY

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
Lucia DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :

SCALE : NOTED

DRAWN : EML

JOB :

SHEET 5

OF 13 SHEETS

ATTIC VENTILATION - GARAGE

THE TOTAL NET-FREE VENTILATION AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE ATTIC SPACE TO BE VENTILATED. THE TOTAL VENTILATION MAY BE REDUCED TO 1/300 PROVIDED AT LEAST 50% BUT NOT MORE THAN 80% OF THE REQUIRED VENTILATION BE LOCATED IN THE UPPER PORTION OF THE AREA TO BE VENTILATED, OR AT LEAST 3' ABOVE THE SOFFIT VENTILATION INTAKE.

2200 SQUARE FEET OF TOTAL ATTIC / 150 =

14.66 SQUARE FEET OF NET-FREE VENTILATION REQUIRED

ROOF TRUSS LAYOUT - HOUSE

SCALE: ¼"=1'-0"

REVISIONS	BY

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
Lucia DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :

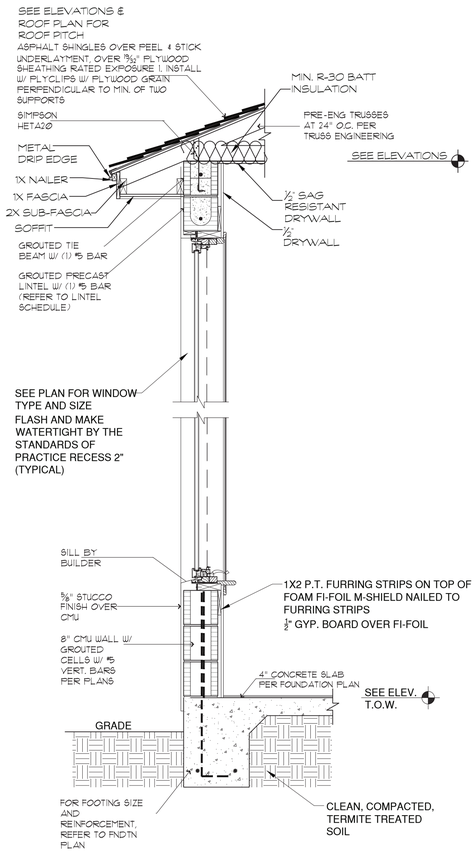
SCALE : NOTED

DRAWN : EML

JOB :

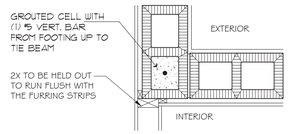
SHEET 6

OF 13 SHEETS



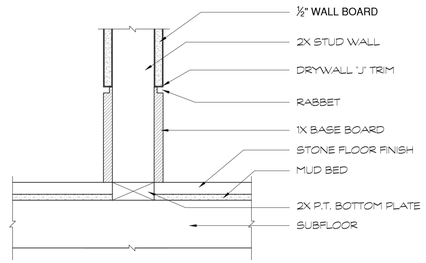
TYPICAL SINGLE STORY WALL SECTION

SCALE: 3/4" = 1'-0"



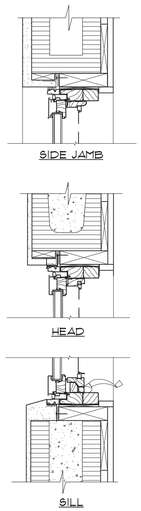
INTERIOR CORNER DETAIL

N.T.S.



BASE BOARD DETAIL " A "

NOT TO SCALE



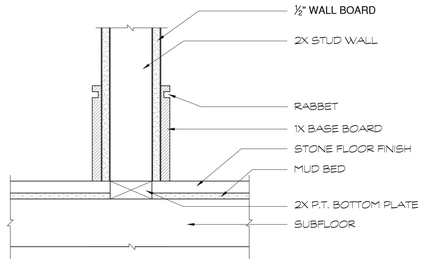
PREPARATION OF WINDOW OPENING :
- INSTALL PRESSURE TREATED WOOD BUCK TO PERIMETER OF OPENING USING TAPCON 3/16" X 3 1/2" OR EQUAL PROVIDING 500 LBS. SHEAR STRENGTH WITHIN 6" FROM CORNERS & 16" ON CENTER.
- APPLY A CONTINUOUS BEAD OF CAULKING TO SEAL WOOD BUCK TO MASONRY OPENINGS.
- ENSURE THAT A CLEARANCE OF 1/4" PER SIDE IS LEFT FOR SHIMMING
- FILL CELLS WITH CONCRETE AND REBAR AS REQUIRED BY LOCAL CODE AND POUR SILL BLOCK SMOOTH FOR ATTACHMENT OF SILL BUCK (BY OTHERS)

INSTALLATION OF WINDOW :
- REFER TO INSTALLATION INSTRUCTIONS FOR THE SPECIFIC PRODUCT BEING INSTALLED.
- SET WINDOW IN OPENING, SHIMMING, LEVELING AND SQUARING TO ENSURE PROPER OPERATION.
- INSTALL # 8 WAFER HEAD OR S.M.S. 1 1/4" OR WOOD SCREW THROUGH ALL PREDRILLED HOLES IN THE INSTALLATION FIN TO SECURE UNIT.
- ENSURE THAT THE INSTALLATION FIN IS SEALED TO THE WOOD 2 X BUCK WITH A CONTINOUS BEAD OF CAULKING.
- FILL VOID BETWEEN WINDOW AND BUCK WITH INSULATION BEING CAREFUL NOT TO BOW THE FRAME (BY OTHERS).
- WATER PROTECT FINS AND MASONRY WITH NPI OR EQUAL, COVERING FROM ALUMINUM CLAD TO MASONRY.
- WATERPROTECT MASONRY SILL AND UP SIDES 6" WITH SELF LEVELING URETHANE.
- LEAVE 1/4" GAP BETWEEN EXTERIOR OF WINDOW AND FINISH MATERIALS FOR CAULK JOINT TO ALLOW FOR MATERIALS EXPANSION.

WINDOW DETAIL

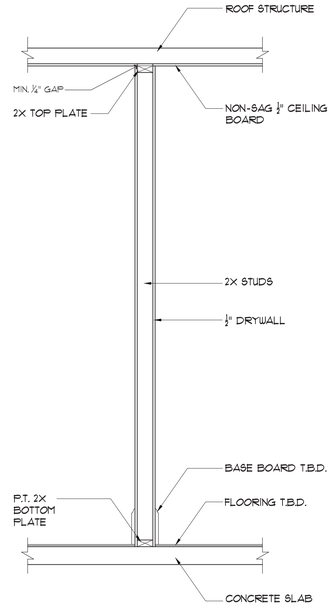
COMPOSITE FRAME WINDOW

N.T.S. - DRYWALL RETURNS



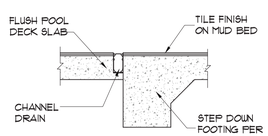
BASE BOARD DETAIL " B "

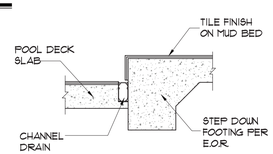
NOT TO SCALE



INTERIOR NON-BEARING WALL

SCALE: 3/4" = 1'-0"

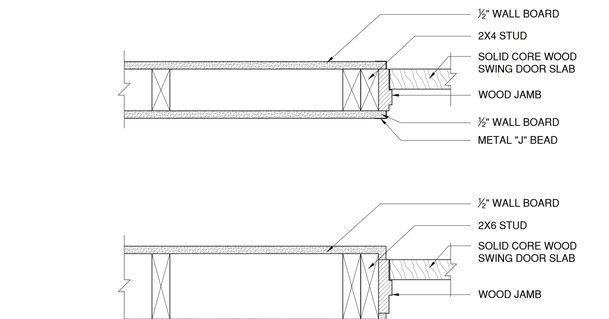




1. ALL DIMENSIONS ARE TO BE FIELD VERIFIED. 2. SEE DRAIN MANUFACTURE FOR INSTALLATION DETAILS AND DIMENSIONS.

CHANNEL DRAIN DETAILS

SCALE: 1" = 1'-0"



INTERIOR DOOR JAMB FINISH DETAIL

NOT TO SCALE

REVISIONS	BY

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
Lucia DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

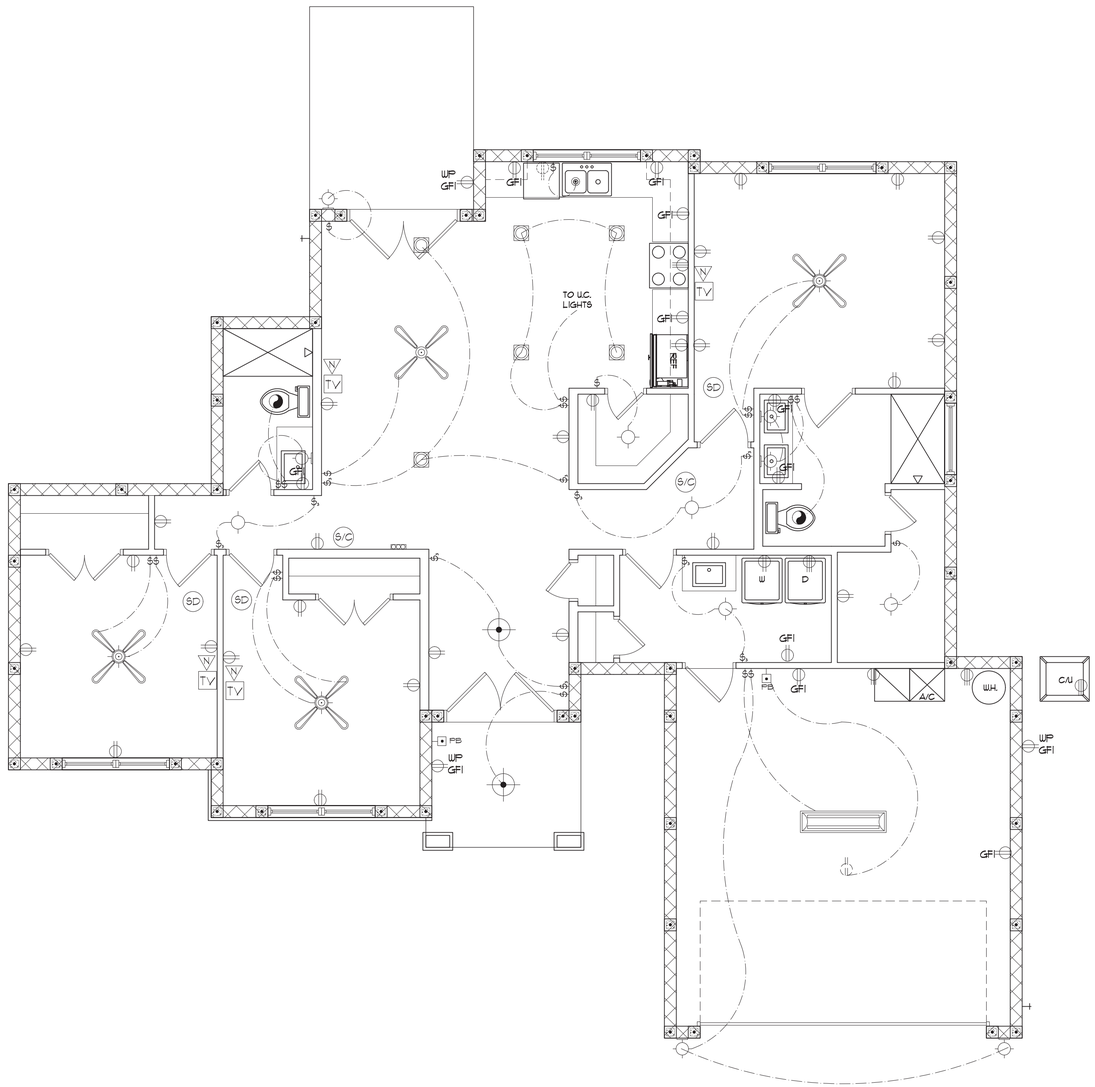
NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :
SCALE : NOTED
DRAWN : EML
JOB :
SHEET
OF 13 SHEETS

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
$	SWITCH
$3	THREE WAY SWITCH
$4	FOUR WAY SWITCH
$D	DIMMER SWITCH
	110v OUTLET
GFI	110v OUTLET, GFCI
WP GFI	110v OUTLET, WEATHER PROOF GFCI
	110v OUTLET, CEILING
	110v OUTLET, BELOW
	110v OUTLET, SWITCHED
	220v OUTLET
	FLOOR OUTLET
	SURFACE MOUNTED INCANDESCENT LIGHT
	WALL SCONCE
	LARGE PENDANT FIXTURE
	PENDANT FIXTURE
	INGROUND UPLIGHT
	LIGHT/FAN COMBO UNIT
	BATH FAN
	RECESSED LED LIGHT
	DIRECTIONAL RECESSED LED LIGHT
	RECESSED LED LIGHT - VAPOR PROOF
	LED BACKLIGHTING
	HEADER LIGHT FIXTURE
	SQUARE PENDANT LIGHT FIXTURE
	RECESSED RISER LIGHT
	RECESSED WALL MOUNTED OUTDOOR LIGHT
	2' X 4' LED LIGHT
SD	SMOKE DETECTOR
S/C	COMBO SMOKE/CARBON MONOXIDE DETECTOR
TV	TV OUTLET
	NETWORK JACK
	ELECTRICAL PANEL
	ELECTRICAL METER
PB	PUSH BUTTON
	INTERCOM
	GARBAGE DISPOSAL
	CHIMES
EC	ELEVATOR CALL BUTTON
AKP	ALARM KEY PAD
JB	JUNCTION BOX
LPC	LAMP HOLDER - PULL CHAIN
	FLOOD LIGHTS
	CEILING FAN

ELECTRICAL PLAN IS INTENDED FOR BID PURPOSES ONLY. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, LATEST EDITION, BY A LICENSED ELECTRICAL CONTRACTOR WHO SHALL BE RESPONSIBLE FOR THE INSTALLATION & SIZING OF ALL ELECTRICAL, WIRING & ACCESSORIES.



ELECTRICAL PLANS

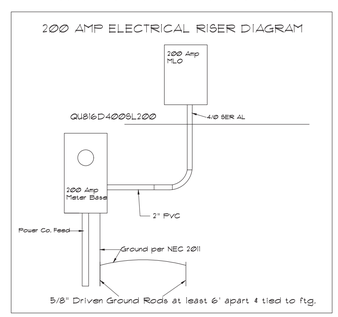
SCALE: 1/4" = 1'-Ø"

ELECTRICAL NOTES

1. UNLESS OTHERWISE SPECIFICALLY STATED HEREIN, THE ELECTRICAL PLAN(S) ARE ONLY FOR GENERAL DESIGN INTENT AND HAVE BEEN COMPILED TO MEET PERMIT REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION. ACTUAL QUANTITY, TYPE, AND PLACEMENT OF OUTLETS, SWITCHES, FIXTURES, AND ALL OTHER RELATED ELECTRICAL EQUIPMENT SHALL BE DETERMINED BY THE CONTRACTOR AND OWNER. INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES.
2. CONTRACTOR SHALL VERIFY WITH POWER COMPANY THE LOCATION OF SERVICE AND SHALL LOCATE METER AND PANEL AS REQUIRED.
3. ALL WIRES SHALL BE THW COPPER, UNLESS NOTED OTHERWISE.
4. WHERE REQUIRED BY OTHER CODES, SERVICE AND FEEDER CONDUCTORS SHALL BE COPPER OF EQUAL AMPACITY.
5. ALL BRANCH CIRCUITS IN RACEWAY OR NON-METALLIC SHEATHED CABLE.
6. COORDINATE RACEWAY INSTALLATIONS WITH OTHER TRADES PRIOR TO CONSTRUCTION.
7. VERIFY ALL CONDUCTORS AND BREAKERS WITH EQUIPMENT MANUFACTURERS SPECIFICATIONS.
8. PROVIDE DISCONNECT SWITCH SIZE AS REQUIRED BY LOAD AND UNITS.
9. PROVIDE NON-FUSIBLE GENERAL DUTY SAFETY SWITCHES AT A/C EQUIPMENT, AND AT PUMPS NOT VISIBLE FROM CIRCUIT BREAKER PANEL AND AS PER MANUFACTURER'S RECOMMENDATIONS.
10. PROVIDE GROUND FAULT INTERRUPT (GFI) BREAKERS FOR ALL BATHROOM, GARAGE AND EXTERIOR OUTLETS AS SHOWN.
11. ELECTRICAL FIXTURES, TRIM AND APPLIANCES SHALL BE 'UL' APPROVED AND SELECTED BY OWNER.
12. PROVIDE PRE-WIRED TELEPHONE AND TELEVISION (CABLE TV) OUTLETS.
13. WIRE KITCHEN AND FAMILY ROOM SEPARATELY.
14. ELECTRICAL SERVICE SIZE SHALL BE DESIGNED BY THE ELECTRICAL CONTRACTOR. THIS PLAN SHALL BE USED AS A GUIDE, POWER REQUIREMENTS SHALL BE DETERMINED BY TOTAL LOAD OF THE HOUSE.
15. PROVIDE AFCIs (ARC FAULT INTERRUPTERS) IN ALL DWELLING UNIT BEDROOMS PER NEC.
16. INSTALL SMOKE DETECTORS IN EACH SLEEPING ROOM, INSTALL COMBO, SMOKE & CO2 DETECTORS AT TOP AND BOTTOM OF STAIRS AND WITHIN 10'-0" OF SLEEPING ROOMS. ALL DETECTORS ARE TO BE INTERCONNECTED AND HAVE BATTERY BACKUPS.

- ALL DETECTORS SHALL BE SMOKE/CARBON MONOXIDE COMBO.
- ALL NON-GFI OUTLETS TO BE ON ARC FAULT INTERRUPTERS & TAMPER PROOF
- GFI OUTLETS OUTDOORS, GARAGES AND KITCHEN/BATHS

200 AMP ELECTRICAL RISER DIAGRAM



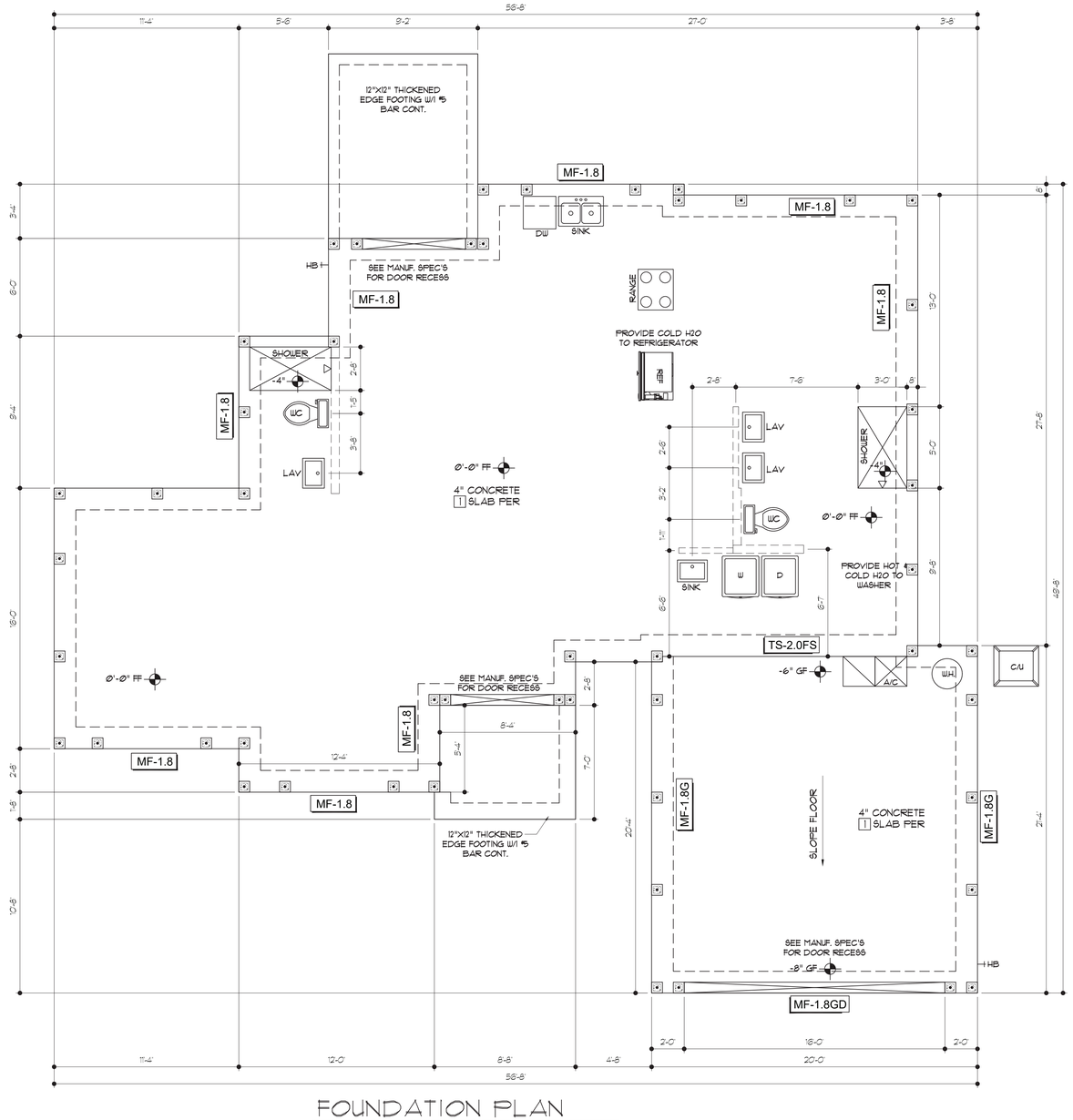
REVISIONS	BY

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
Lucia DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :
SCALE : NOTED
DRAWN : EML
JOB :
SHEET 8
OF 13 SHEETS



FOUNDATION PLAN

SCALE: 1/4" = 1'-Ø"

SAWCUT OR CONTROL JOINTS SHALL BE LOCATED NOT TO EXCEED 400 SQ FT AND 15'-Ø" MAXIMUM SPACING

⊠	8"X8" SOLID GROUTED CELL (3,000 PSI) WITH (1) #5 VERTICAL REBAR FROM FOOTING UP TO TIE BEAM
FS	FILL SOLID GROUTED CELLS UNLESS OTHERWISE NOTED, STEEL REINFORCING NOT REQUIRED
EJ	1/2" PRE-MOLDED EXPANSION JOINT FILLER

V.I.F. = VERIFY IN FIELD BY BUILDER AND INFORM ENGINEER

UNLESS OTHERWISE NOTED, DIMENSIONS ARE TO OUTSIDE OF SLAB FOR ADDITIONAL DIMENSIONING REFER TO ARCHITECTURAL SET OF PLANS

NOTE:
CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ANY CONSTRUCTION

1 4" CONCRETE SLAB ON GRADE (3,000 PSI) REINF. W/ 6x6 10/10 WLM OR FIBERMESH ON 6 MIL. VAPOR BARRIER OVER CLEAN, WELL COMPACTED MIN. 2,000 PSF) AND TERMITE TREATED SOIL WITH POISON CONTROL SYSTEM

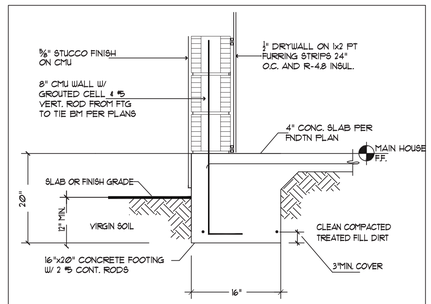
REVISIONS	BY

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
Lucia DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

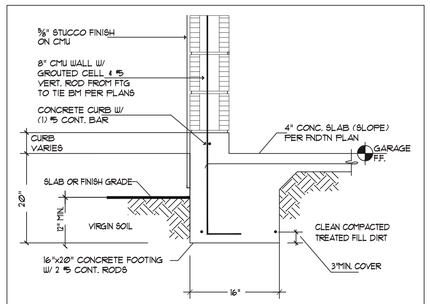
NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :
SCALE : NOTED
DRAWN : EML
JOB :
SHEET 9
OF 13 SHEETS

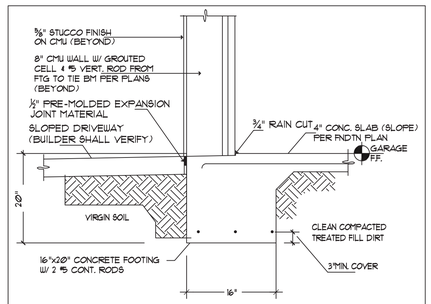


MF-1.8 TYPICAL MOMOLITHIC FOOTING

SCALE: 3/4" = 1'-Ø"

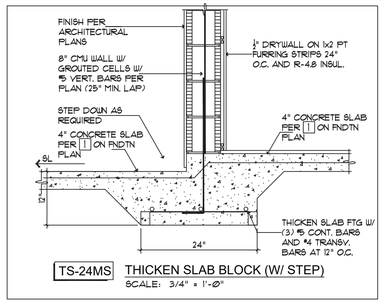


MF-1.8G MOMOLITHIC FOOTING GARAGE



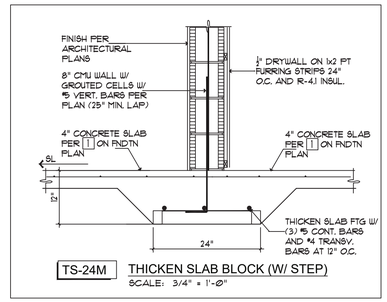
MF-1.8GD MOMOLITHIC FTG GARAGE DR

SCALE: 3/4" = 1'-Ø"



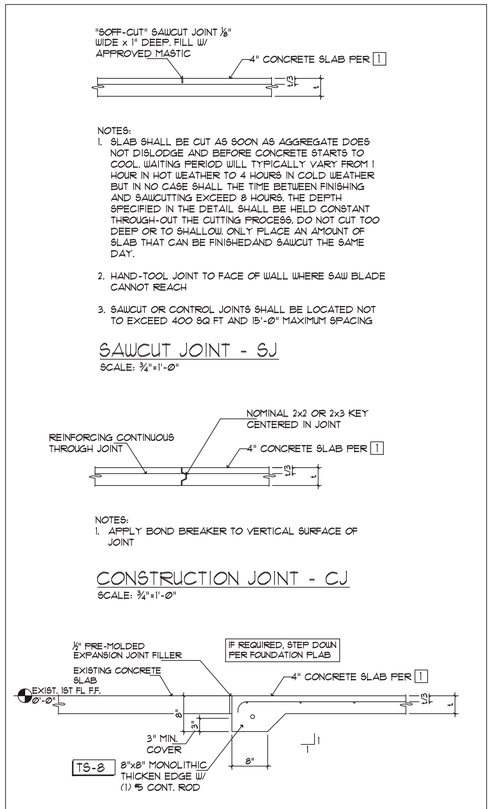
TS-24MS THICKEN SLAB BLOCK (W/ STEP)

SCALE: 3/4" = 1'-Ø"



TS-24M THICKEN SLAB BLOCK (W/ STEP)

SCALE: 3/4" = 1'-Ø"



SAWCUT JOINT - SJ

SCALE: ¾"=1'-Ø"

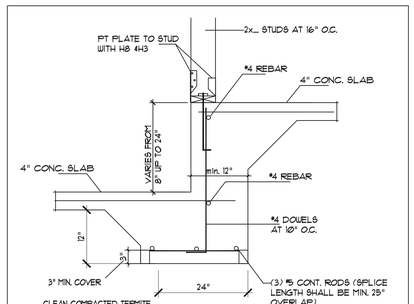
CONSTRUCTION JOINT - CJ

SCALE: ¾"=1'-Ø"

TS-8

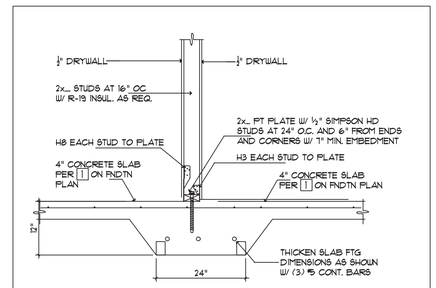
EXPANSION JOINT - EJ

SCALE: ¾"=1'-Ø"



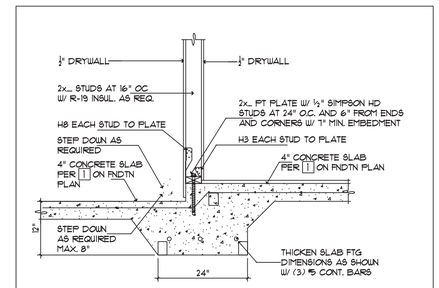
TS-2.0FS2 24"x16" THICKEN SLAB FRAME (W/ STEP)

SCALE: 3/4" = 1'-Ø"



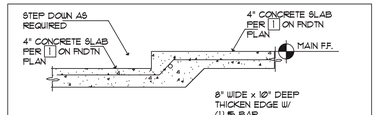
TS-2.0F THICKEN SLAB FRAME

SCALE: 3/4" = 1'-Ø"



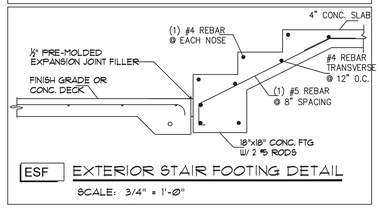
TS-2.0FS THICKEN SLAB FRAME (W/ STEP)

SCALE: 3/4" = 1'-Ø"



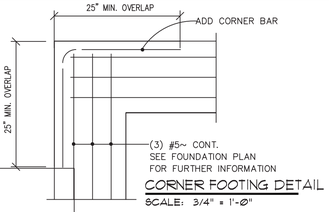
TS-8 THICKEN SLAB (NON BEARING)

SCALE: 3/4" = 1'-Ø"



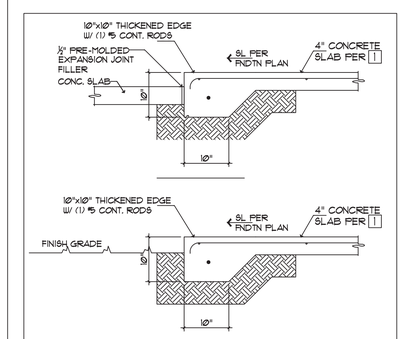
ESF EXTERIOR STAIR FOOTING DETAIL

SCALE: 3/4" = 1'-Ø"



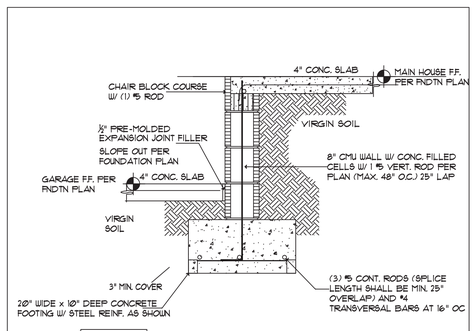
CORNER FOOTING DETAIL

SCALE: 3/4" = 1'-Ø"



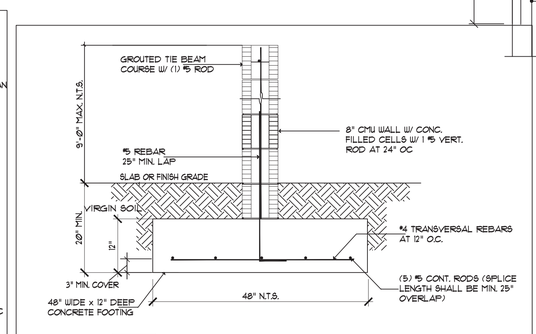
TS-10 10"x10" THICKENED EDGE

SCALE: 3/4" = 1'-Ø"



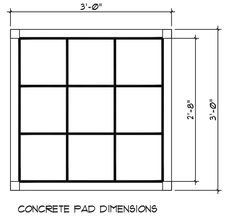
WF-2.0HG STEM WALL FOOTING AT HOUSE / GARAGE

SCALE: 3/4" = 1'-Ø"



SWF SCREEN WALL FOOTING

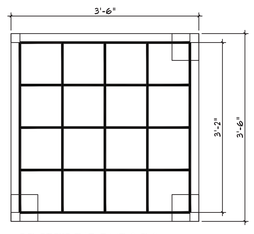
SCALE: 3/4" = 1'-Ø"



CONCRETE PAD DIMENSIONS AS SHOWN, 12" DEEP WITH (4) #5 REBARS EA WAY ON BOTTOM

F-36x36

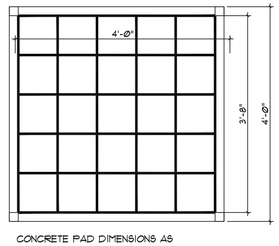
SCALE: 3/4" = 1'-Ø"



CONCRETE PAD DIMENSIONS AS SHOWN, 16" DEEP WITH (5) #5 REBARS EA WAY ON BOTTOM

F-42x42

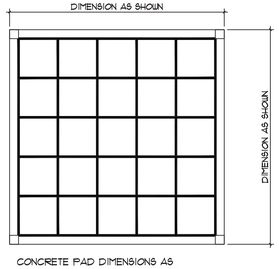
SCALE: 3/4" = 1'-Ø"



CONCRETE PAD DIMENSIONS AS SHOWN, 16" DEEP WITH (6) #5 REBARS EA WAY ON BOTTOM

F-48x48

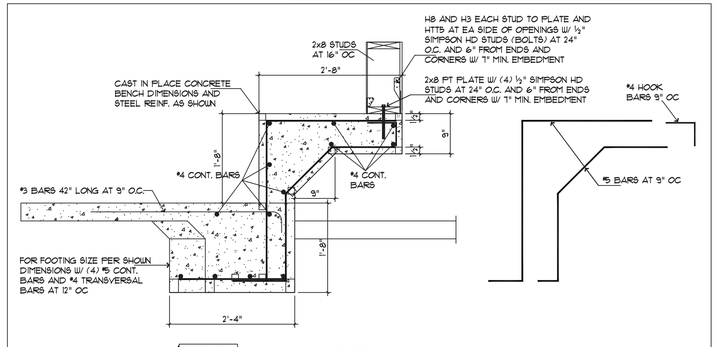
SCALE: 3/4" = 1'-Ø"



CONCRETE PAD DIMENSIONS AS SHOWN, 16" DEEP WITH #5 REBARS AT 9" O.C. EA WAY ON BOTTOM

F-DIM-1

SCALE: 3/4" = 1'-Ø"



MFB-28 MONOLITHIC FOOTING CONCRETE BEANCH

SCALE: 3/4" = 1'-Ø"

REVISIONS	BY

Luis Arias DESIGNS
RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :

SCALE : NOTED

DRAWN : EML

JOB :

SHEET 1

OF 13 SHEETS

SAFE LOAD TABLES

FOR GRAVITY, UPLIFT & LATERAL LOADS

8" PRECAST & PRESTRESSED U-LINTELS

CAST-CRETE — GRAVITY

LENGTH \ TYPE	8U8	8F8-0B / 8F8-1B	8F12-0B / 8F12-1B	8F16-0B / 8F16-1B	8F20-0B / 8F20-1B	8F24-0B / 8F24-1B	8F28-0B / 8F28-1B	8F32-0B / 8F32-1B
2'-10"(34") PRECAST	2302	3166	4473	6039	7526	9004	10472	11936
		3166	4473	6039	7526	9004	10472	11936
3'-6" (42") PRECAST	2302	3138	3377	4689	6001	7315	8630	9947
		3166	4473	6039	7526	9004	10472	11936
4'-0" (48") PRECAST	2029	2325	2496	3467	4438	5410	6384	7358
		2646	4473	6039	7526	9004	10472	11936
4'-6" (54") PRECAST	1651	1787	1913	2657	3403	4149	4896	5644
		2170	4027	6039	7526	9004	10472	9668
5'-4" (64") PRECAST	1184	1223	1301	1809	2317	2826	3336	3846
		1665	2889	5057	6096	5400	6424	7450
5'-10"(70") PRECAST	972	1000	1059	1474	1889	2304	2721	3137
		1459	2464	4144	5458	4437	5280	6122
6'-6"(78") PRECAST	937	1255	2101	3263	2746	3358	3971	4585
		1255	2101	3396	5260	7134	8995	6890
7'-6" (90") PRECAST	767	1029	1675	2385	1994	2439	2886	3333
		1029	1675	2610	3839	5596	6613	5047
9'-4" (112") PRECAST	573	632	1049	1469	1210	1482	1754	2027
		768	1212	1818	2544	3469	4030	3127
10'-6"(126") PRECAST	456	482	802	1125	915	1122	1328	1535
		658	1025	1514	2081	2774	3130	2404
11'-4" (136") PRECAST	445	598	935	1365	1854	2355	1793	2075
		598	935	1365	1854	2441	3155	4044
12'-0"(144") PRECAST	414	545	864	1254	1689	2074	1570	1818
		555	864	1254	1693	2211	2832	3590
13'-4"(160") PRECAST	362	427	726	1028	1331	1635	1224	1418
		485	748	1076	1438	1855	2343	2920
14'-0"(168") PRECAST	338	381	648	919	1190	1462	1087	1260
		455	700	1003	1335	1714	2153	2666
14'-8" (176") PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
		465	765	1370	2045	2610	3185	3765
15'-4" (184") PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
		420	695	1250	1855	2370	2890	3410
17'-4" (208") PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
		310	530	950	1400	1800	2200	2600
19'-4" (232") PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
		240	400	750	1090	1400	1720	2030
21'-4" (256") PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
		183	330	610	940	1340	1780	2110
22'-0"(264") PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
		160	300	570	870	1250	1660	1970
24'-0"(288") PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
		130	240	470	720	1030	1350	1610

8" PRECAST & PRESTRESSED U-LINTELS

CAST-CRETE — UPLIFT / LATERAL

LENGTH \ TYPE	8F8-1T / 8F8-2T	8F12-1T / 8F12-2T	8F16-1T / 8F16-2T	8F20-1T / 8F20-2T	8F24-1T / 8F24-2T	8F28-1T / 8F28-2T	8F32-1T / 8F32-2T	LATERAL 8U8	LATERAL 8F8
2'-10"(34") PRECAST	2727	2878	4101	5332	6569	7811	9055	2021	2021
	2727	2784	3981	5190	6407	7630	8857		
3'-6" (42") PRECAST	2165	2289	3260	4237	5219	6204	7192	1257	1257
	2165	2215	3165	4125	5091	6061	7036		
4'-0" (48") PRECAST	1878	1989	2832	3680	4532	5387	6245	938	938
	1878	1925	2750	3583	4422	5264	6110		
4'-6" (54") PRECAST	1660	1762	2507	3257	4010	4767	5525	727	727
	1660	1705	2435	3171	3913	4658	5406		
5'-4" (64") PRECAST	1393*	1484	2110	2741	3375	4010	4648	505	505
	1393	1437	2050	2670	3293	3920	4549		
5'-10"(70") PRECAST	1272*	1357	1930	2505	3084	3665	4247	418	418
	1272	1315	1875	2441	3010	3583	4157		
6'-6"(78") PRECAST	1141*	1200	1733	2250	2769	3290	3812	707	887
	1141	1182	1684	2192	2703	3216	3732		
7'-6" (90") PRECAST	959*	912	1475	1914	2354	2797	3240	591	657
	990	1029	1466	1907	2351	2797	3245		
9'-4" (112") PRECAST	801*	612	980	1269	1560	1852	2144	454	630
	801	755	1192	1550	1910	2271	2634		
10'-6"(126") PRECAST	716*	498	793	1027	1261	1496	1731	396	493
	716	611	1039	1389	1711	2034	2358		
11'-4" (136") PRECAST	666*	439	696	899	1104	1309	1515	363	556
	666	535	905	1295	1595	1896	2198		
12'-0"(144") PRECAST	607*	400	631	816	1001	1186	1372	340	494
	631	486	818	1209	1514	1799	2086		
13'-4"(160") PRECAST	500*	340	532	686	841	997	1153	302	398
	573	409	682	1004	1367	1637	1897		
14'-0"(168") PRECAST	458*	316	493	635	778	922	1065	286	360
	548	378	629	922	1254	1567	1816		
14'-8"(176") PRESTRESSED	243	295	459	591	724	857	990	N.R.	357
	243	352	582	852	1156	1491	1742		
15'-4"(184") PRESTRESSED	228	278	430	553	677	801	925	N.R.	327
	228	329	542	791	1072	1381	1676		
17'-4" (208") PRESTRESSED	188	236	361	464	567	670	774	N.R.	255
	188	276	449	649	874	1121	1389		
19'-4" (232") PRESTRESSED	165	207	313	401	490	578	667	N.R.	204
	165	239	383	550	736	940	1160		
21'-4" (256") PRESTRESSED	145	186	278	356	433	512	590	N.R.	172
	142	212	336	477	635	807	993		
22'-0"(264") PRESTRESSED	140	180	268	343	418	493	568	N.R.	161
	137	205	322	457	607	771	947		
24'-0"(288") PRESTRESSED	127	165	244	312	380	447	515	N.R.	135
	124	186	290	408	538	680	833		

*REDUCE VALUE BY 25% FOR GRADE 40 FIELD REBAR

8" PRECAST W/ 2" RECESS DOOR U-LINTELS

CAST-CRETE — GRAVITY

LENGTH \ TYPE	8RU6	8RF6-0B / 8RF6-1B	8RF10-0B / 8RF10-1B	8RF14-0B / 8RF14-1B	8RF18-0B / 8RF18-1B	8RF22-0B / 8RF22-1B	8RF26-0B / 8RF26-1B	8RF30-0B / 8RF30-1B
4'-4" (52") PRECAST	1489	1591	3053	2982	3954	4929	5904	6880
		1827	3412	4982	6472	7947	9416	10878
4'-6" (54") PRECAST	1357	1449	2782	2714	3600	4487	5375	6264
		1702	3412	4982	6472	7947	9416	10878
5'-8" (68") PRECAST	785	832	1602	1550	2058	2566	3075	3585
		1153	2162	4074	6472	6516	5814	6839
5'-10"(70") PRECAST	735	779	1500	1449	1924	2400	2876	3352
		1103	2051	3811	6472	6516	5450	6411
6'-8" (80") PRECAST	822	907	1677	2933	2576	3223	3872	4522
		907	1677	2933	4100	6730	8177	6707
7'-6" (90") PRECAST	665	761	1377	2252	1958	2451	2944	3439
		764	1377	2329	3609	5492	6624	5132
9'-8" (116") PRECAST	371	420	834	1253	1071	1342	1614	1886
		535	928	1497	2179	2618	3595	2875

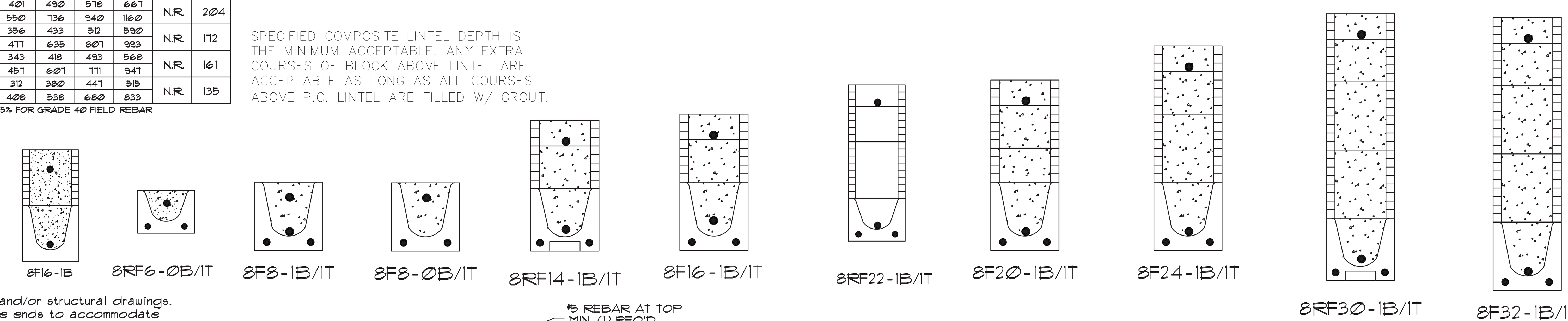
8" PRECAST W/ 2" RECESS DOOR U-LINTELS

CAST-CRETE — UPLIFT / LATERAL

LENGTH \ TYPE	8RF6-1T / 8RF6-2T	8RF10-1T / 8RF10-2T	8RF14-1T / 8RF14-2T	8RF18-1T / 8RF18-2T	8RF22-1T / 8RF22-2T	8RF26-1T / 8RF26-2T	8RF30-1T / 8RF30-2T	LATERAL 8RU6	LATERAL 8RF6
4'-4" (52") PRECAST	1244	1573	2413	3260	4112	4967	5825	932	932
	1244	1519	2339	3170	4008	4850	5696		
4'-6" (54") PRECAST	1192	1507	2311	3121	3937	4756	5577	853	853
	1192	1455	2240	3036	3837	4643	5453		
5'-8" (68") PRECAST	924*	1172	1795	2423	3055	3689	4325	501	501
	924	1132	1741	2357	2978	3603	4230		
5'-10"(70") PRECAST	896*	1138	1742	2352	2965	3581	4198	469	469
	896	1099	1690	2288	2891	3497	4106		
6'-8" (80") PRECAST	778	882	1513	2042	2573	3107	3642	830	1100
	778	956	1468	1987	2509	3035	3563		
7'-6" (90") PRECAST	688	697	1325	1810	2280	2753	3227	710	941
	688	849	1302	1762	2225	2690	3157		
9'-8" (116") PRECAST	533*	433	808	1123	1413	1704	1995	516	614
	533	527	1009	1369	1728	2088	2450		

*REDUCE VALUE BY 15% FOR GRADE 40 FIELD REBAR

SPECIFIED COMPOSITE LINTEL DEPTH IS THE MINIMUM ACCEPTABLE. ANY EXTRA COURSES OF BLOCK ABOVE LINTEL ARE ACCEPTABLE AS LONG AS ALL COURSES ABOVE P.C. LINTEL ARE FILLED W/ GROUT.



PRE-CAST LINTEL ENGINEERING PER CAST-CRETE.

MATERIALS

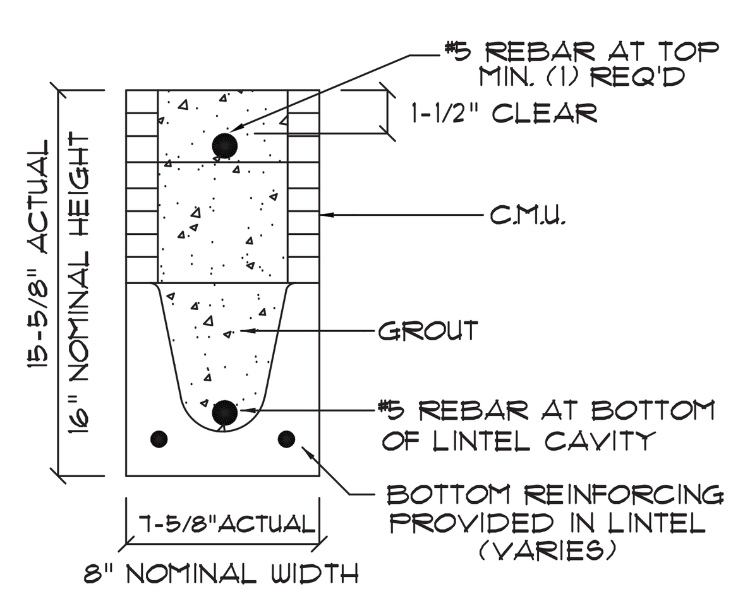
1. f'c precast lintels = 3500 psi.
2. f'c prestressed lintels = 6000 psi.
3. f'c grout = 3000 psi w/ maximum 3/8" aggregate.
4. Concrete masonry units (CMU) per ASTM C90 w/ minimum net area compressive strength = 1900 psi.
5. Rebar provided in precast lintel per ASTM A615 GR60. Field rebar per ASTM A615 GR40 or GR60.
6. Prestressing strand per ASTM A416 grade 270 low relaxation.
7. 7/32 wire per ASTM A510.
8. Mortar per ASTM C270 type M or S.

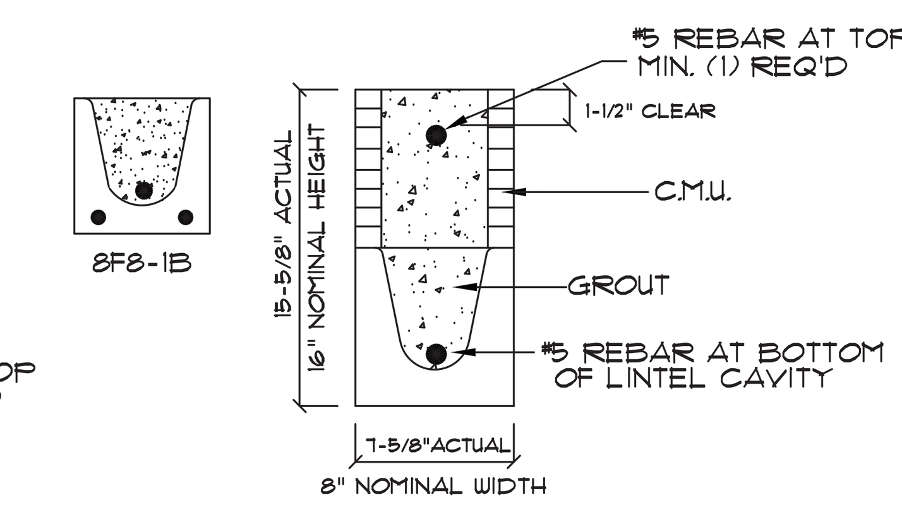
GENERAL NOTES

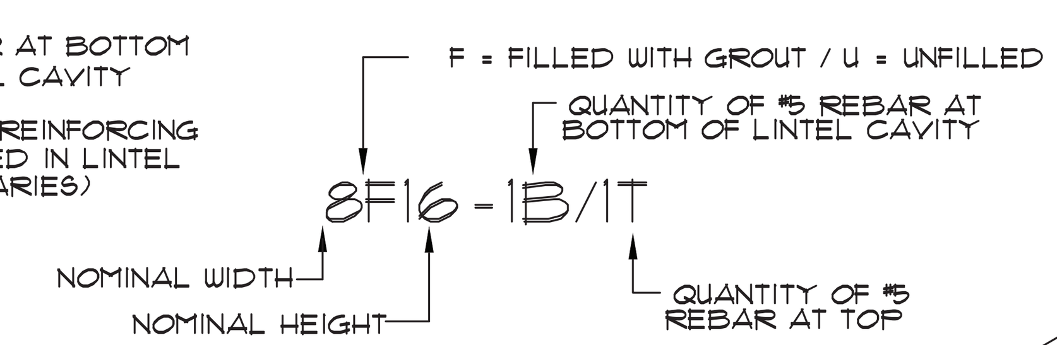
1. Provide full mortar head and bed joints.
2. Shore filled lintels as required.
3. Installation of lintel must comply with the architectural and/or structural drawings.
4. Lintels are manufactured with 5-1/2" long notches at the ends to accommodate vertical cell reinforcing and grouting.
5. All lintels meet or exceed L/360 vertical deflection, except lintels 17'-4" and longer with a nominal height of 8" meet or exceed L/180.
6. Bottom field added rebar to be located at the bottom of the lintel cavity.
7. 7/32" diameter wire stirrups are welded to the bottom steel for mechanical anchorage.
8. Cast-in-place concrete may be provided in composite lintel in lieu of concrete masonry units.
9. Safe load ratings based on rational design analysis per ACI 318 and ACI 530

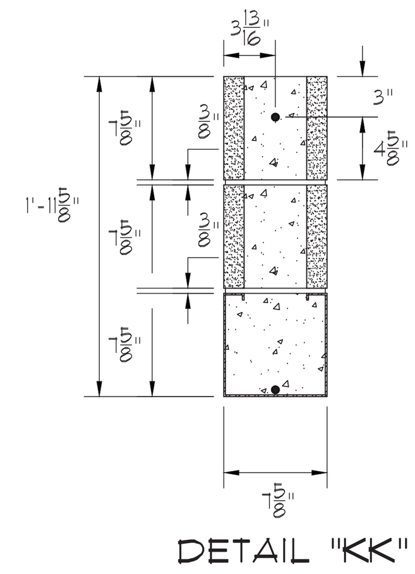
SAFE LOAD TABLE NOTES

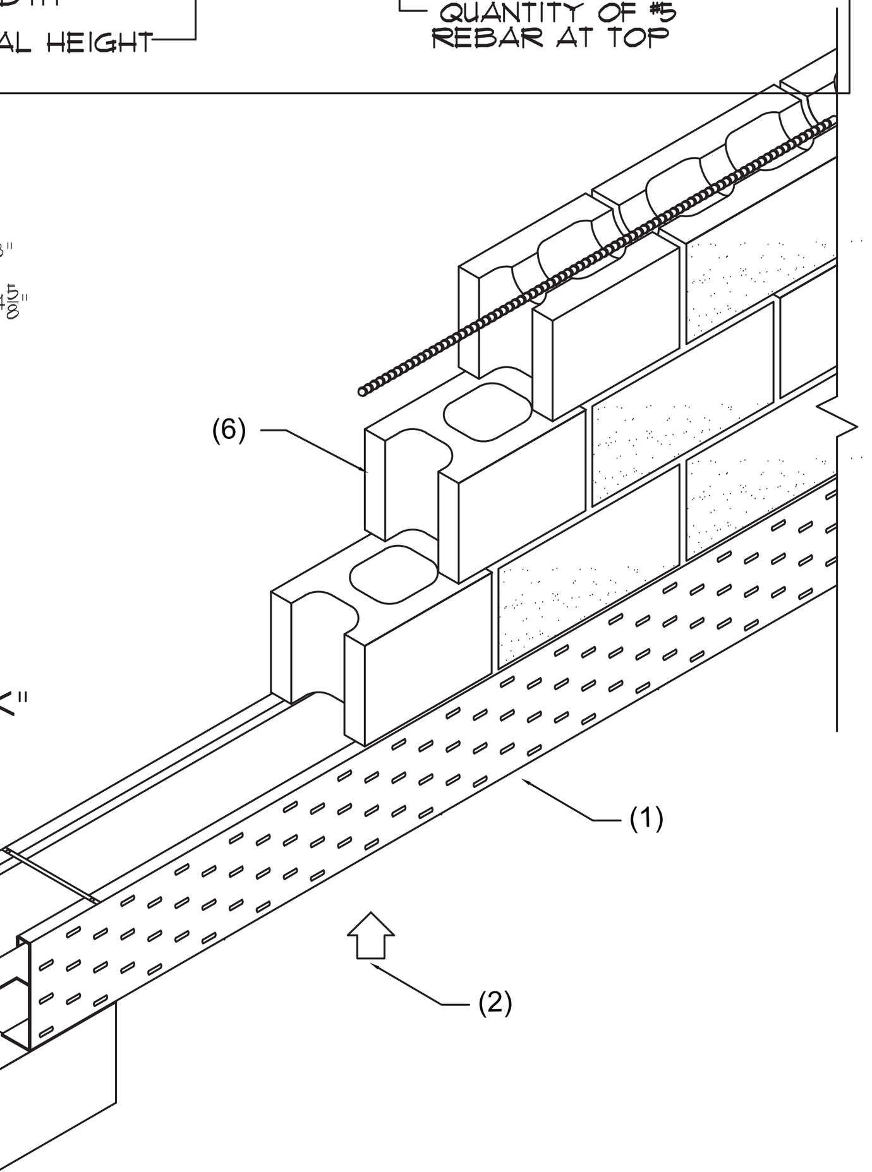
1. All values based on minimum 4" bearing. Exception: Safe loads for unfilled lintels must be reduced by 20% if bearing length is less than 6-1/2". Safe loads for all recessed lintels based on 8" nominal bearing.
2. N.R. = Not Rated.
3. Safe loads are total superimposed allowable load on the section specified.
4. Safe loads based on grade 40 or grade 60 field rebar.
5. Additional lateral load capacity can be obtained by the designer by providing addional reinforced masonry above the precast lintel.
6. One #7 rebar may be substituted for two #5 rebars in 8" lintels only.
7. The designer may evaluate concentrated loads from the safe load tables by calculating the maximum resisting moment and shear at d-away from the face of support.
8. For composite lintel heights not shown, use safe load from next lower height.
9. All safe loads in units of pounds per linear foot.











POWER STEEL BOX AND WIRE LINTELS

POWER LINTEL PSbox8 (7-5/8") 24" COMPOSITE

SUPERIMPOSED GRAVITY LOAD - POUNDS PER LINEAR FOOT (LBS/FT)

MARK NO.	NOMINAL CLEAR SPAN	TOTAL LINTEL LENGTH	FILLED W/ #5 TOP DETAIL "K"	FILLED W/ #5 T&B DETAIL "KK"
L-1	1'-6"	2'-10"	--	--
L-2	2'-2"	3'-6"	--	--
L-3	2'-8"	4'-0"	--	--
L-4	3'-2"	4'-6"	6746	6746
L-5	4'-0"	5'-4"	5305	5305
L-6	4'-6"	5'-10"	4696	4696
L-7	5'-2"	6'-6"	4068	4068
L-8	6'-2"	7'-6"	3380	3380
L-9	7'-0"	8'-4"	2957	2957
L-10	8'-0"	9'-4"	2566	2566
L-11	9'-2"	10'-6"	2218	2218
L-12	10'-0"	11'-4"	2019	2019
L-13	11'-2"	12'-6"	1790	1790
L-14	12'-0"	13'-4"	1653	1653
L-15	12'-8"	14-0"	1557	1557
L-16	13'-4"	14'-8"	1471	1471
L-17	14'-0"	15'-4"	1393	1393
L-18	16'-0"	17'-4"	1197	1197
L-19	18'-0"	19'-4"	1201	1336
L-20	18'-8"	20'-0"	1104	1282
L-21	20'-8"	22'-0"	869	1037
L-22	22'-8"	24'-0"	693	832
L-23	24'-0"	25'-4"	625	918
L-24	26'-0"	27'-4"	507	757
L-25	28'-0"	29'-4"	413	629
L-26	30'-0"	31'-4"	337	525

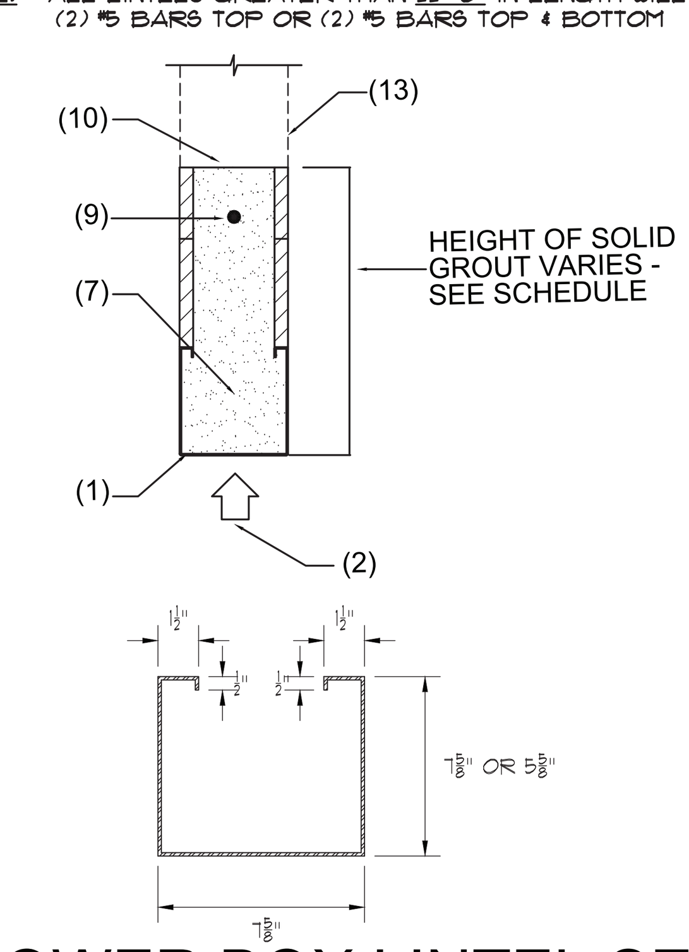
NOTE: ALL LINTELS GREATER THAN 22'-8" IN LENGTH WILL REQUIRE (2) #5 BARS TOP OR (2) #5 BARS TOP & BOTTOM

POWER LINTEL PSbox8 (7-5/8") 24" COMPOSITE

TOTAL SAFE UPLIFT LOAD - POUNDS PER LINEAR FOOT (LBS/FT)

MARK NO.	NOMINAL CLEAR SPAN	TOTAL LINTEL LENGTH	FILLED W/ #5 TOP DETAIL "K"	FILLED W/ #5 T&B DETAIL "KK"
L-1	1'-6"	2'-10"	--	--
L-2	2'-2"	3'-6"	9645	9645
L-3	2'-8"	4'-0"	7856	7856
L-4	3'-2"	4'-6"	6632	6632
L-5	4'-0"	5'-4"	5272	5272
L-6	4'-6"	5'-10"	4698	4698
L-7	5'-2"	6'-6"	4105	4105
L-8	6'-2"	7'-6"	3456	3456
L-9	7'-0"	8'-4"	3057	3057
L-10	8'-0"	9'-4"	2459	2459
L-11	9'-2"	10'-6"	1897	1897
L-12	10'-0"	11'-4"	1611	1611
L-13	11'-2"	12'-6"	1312	1312
L-14	12'-0"	13'-4"	1150	1150
L-15	12'-8"	14-0"	1043	1043
L-16	13'-4"	14'-8"	951	951
L-17	14'-0"	15'-4"	872	872
L-18	16'-0"	17'-4"	692	692
L-19	18'-0"	19'-4"	618	618
L-20	18'-8"	20'-0"	582	582
L-21	20'-8"	22'-0"	494	494
L-22	22'-8"	24'-0"	428	428
L-23	24'-0"	25'-4"	577	577
L-24	26'-0"	27'-4"	507	507
L-25	28'-0"	29'-4"	452	452
L-26	30'-0"	31'-4"	407	407

NOTE: ALL LINTELS GREATER THAN 22'-8" IN LENGTH WILL REQUIRE (2) #5 BARS TOP OR (2) #5 BARS TOP & BOTTOM



TYPICAL POWER BOX LINTEL SECTION

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

REVISIONS	BY

DATE :
SCALE : NOTED
DRAWN : EML
JOB :
SHEET 11 OF 13 SHEETS

CONNECTOR SCHEDULE
SIMPSON

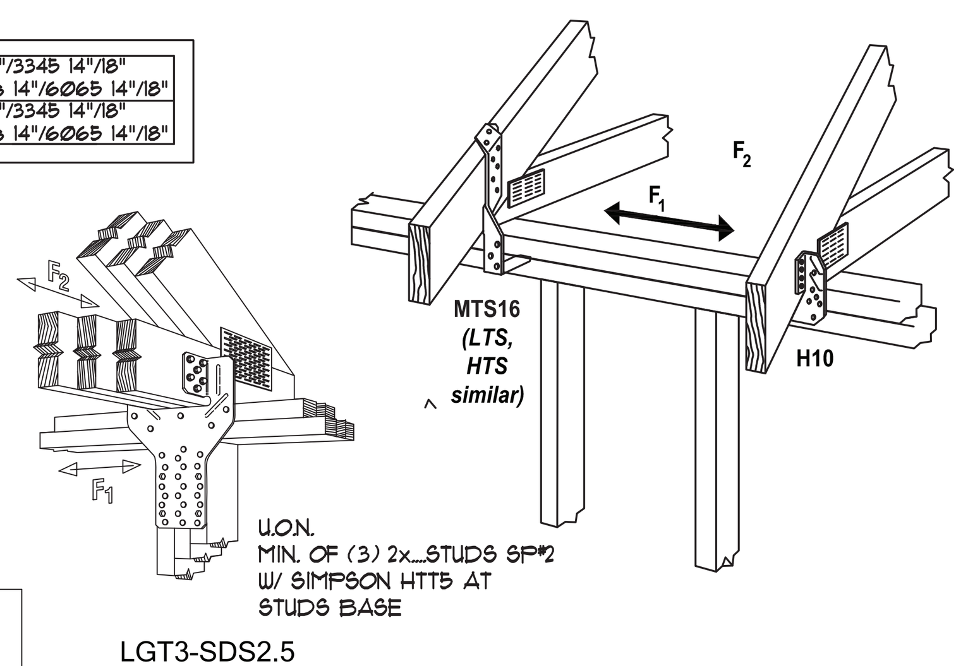
#	CONNECTOR	FASTENERS	UPLIFT(lbs.)
1	META18	(9) 10d X 1.5	1450
2	HETA20	1 PLY(9) 10d X 1.5 2/3 PLY(8) 16d	1,810
3	MTS16 or MTS12	(14) 10d	860
4	H2.5A	5-8d and 5-8d. nails	uplift 535 lat. 110
5	HD8A	7/8" Ø ANCHOR BOLT (3) 7/8"Ø BOLTS THRU	7910
6	HTS20	24- 10d x 1&1/2"	1245
7	HHETA20	1 PLY 10 - 10d x 1.5 2/3 PLY 9 - 16d	2,235
8*	HGT-2/3/4	(2) ¾" ANCHOR BOLTS (12" EMBEDMENT) TO GROUTED CMU WITH (16) 10d. NAILS	10530
9	SP-1	6 - 10d	585
10	SP-2	6 - 10d	890
11	SP-4	6-10d x 1&1/2"	735
12	CS16-R CUT LENGTH TO FIT	22 - 10d.	1650
13	H10A 1 PLY	9-10d x1½" to rafter/truss 9-10d x 1½" to plates	uplift 1,015 lat. 505/285
14	LSTA24	18 - 10d	1295
15	LSTA30	22 10d	1670
16	LSTA36	26 - 10d	1715
17	MSTA36	26 - 10d	1995
18	HUCQ612-SDS2.5	14-SDS1/4"x2 1/2" to face 6-SDS1/4"x2 1/2" to joist	grav 5560 uplift 3025
19	HUS26	14 - 16d	1550
20	HGUS48	36 -16d	2650
21	HHUS5.50/10	30-16d. nails to carrying bm and 10-16d. nails to carried beam	grav. 6,830 uplift 2,845
22	HTT4	18-SD#10x1 ½" + ⅝" ANCHOR BOLT	4455
23	HTT5	26-16d x 2½" ⅝" ANCHOR BOLT	5090
24	ABU44Z	12-16d + 5/8"A. Bolt	2200
25	ABU66Z	12-16d. NAILS AND ⅝"x7" ANCHOR BOLT	2,475
26	HUCQ412-SDS2.5	14-SDS1/4"x2 1/2" to face 6-SDS1/4"x2 1/2" to joist	grav 5560 uplift 3025
27	MST27	30 - 16d	2790
28	HGA10	(4) 1/4" diax3" screws per flange or (4) ¼"x4" tapcons to CMU or concrete	695 uplift 1000 lat.
29	H10A-2 2 PLY	9-10d x1½" to rafter/truss 9-10d x 1½" to plates	uplift 1,070 lat. 700/225

CONNECTORS TO EXISTING GROUTED CMU
SIMPSON

#	CONNECTOR	FASTENERS	UPLIFT(lbs.)
30	MTSM16	(7) 10d. x 1.5 NAILS & (4) ¼"ϕ X 2 1/4" TAPCONS	830
31	HTSM20	(7) 10d. x 1.5 NAILS & (4) ¼"ϕ X 2 1/4" TAPCONS	830
32	MSTAM24	(9) 10d. NAILS & (5) 1/4" Ø X 2 1/4" TAPCONS	1465
33	MSTAM36	(13) 10d. NAILS & (8) 1/4" Ø X 2 1/4" TAPCONS	1870
34	MSTAM40	(27) 16d. NAILS & (16) 3/16" Ø X 2 1/4" TAPCONS	2475
35	CS16-R CUT LENGTH TO FIT	(11) 10d. NAILS & (7) 3/16" Ø X 2 1/4" TAPCONS	1650
36	HUCQ612-SDS2.5	14-titen screws1/4"x2 1/2"CMU 6-SDS1/4"x2 1/2" to joist	grav 5560 uplift 3025
37	HUCM410 MASONRY HANGER	(18) ¼" Ø X 2 1/4"TAPCONS	grav 4500 uplift 1810
38	HGUM5.50/11	(8) ⅝"ϕ x5" TITEN HD ANCHORS TO GROUTED CMU AND 24- ¼"x2½" SDS SCREWS TO BEAM	grav 14,940 uplift 42,300
39	MBHA MASONRY HANGER	(1) 3/4" Ø THREADED ROD @ TOP AND @ FACE	grav 5330 uplift 3475
40	HGA10	(4) 1/4" diax1 1/2" screws to wood & (4) 1/4" Ø X 2 1/4" TAPCONS	260 uplift 1000 lat.
41	MBHU3.56 CMU MBHU3.56 CONCRETE	2-3/4"x5" titen hd anchors 12-1/4"x2½" SDS screws	cmu 2210 less 14"/3345 14"/18" conc. 4005 less 14"/6065 14"/18"
42	MBHU5.50 CMU MBHU5.50 CONCRETE	2-3/4"x5" titen hd anchors 12-1/4"x2½" SDS screws	cmu 2210 less 14"/3345 14"/18" conc. 4005 less 14"/6065 14"/18"
43	HGUM5.50-SDS MASONRY HANGER	(8) ⅜"x5"TITEN HD ANCHOR & (24) ¼"x2½" SDS SCREWS	grav 14,940 uplift 4,230
44	HUCM612 (max) MASONRY HANGER	(22) ¼"ϕ x3¾" TITEN SCREWS	grav 4,920 uplift 1,795

CONNECTOR SCHEDULE
SIMPSON

#	CONNECTOR	FASTENERS	UPLIFT(lbs.)
50	LGT2	(16) 16d SINKERS TO STUDS (16) 16d SINKERS TO GIRDER	1785 uplift F1 700 / F2 170
51	LGT3	(21) 16d SINKERS TO STUDS (12) SDS 1/4x2 1/2 TO GIRDER	3170 uplift F1 795 / F2 410
52	MGT	5/8 BOLT TO GROUTED CMU (22) 10d NAILS TO GIRDER	3965 uplift
53	A35	(12) 8d x 1 1/2 NAILS	270 uplift 170 lateral
54	HGUM5.25/11	8-5/8"x5" TITEN HD ANCHORS/ 24-1/4"x2½" SCREWS	15,000 GRAVITY 10,000 UPLIFT
55	LS70	TOTAL OF (10) 10d. NAILS FOR ONE SIDE APPLICATION, RESTRAINT ROTACION BY BLOCKING FROM OPPOSITE SIDE	270 uplift 170 lateral
56	LGT3	(12) ¼"x2½" SDS TO GIRDER (4) ⅜"x5" TITEN HD TO CMU	3285 uplift
57	ABU66 (MAX.)	(16) 0.162"x3½" NAILS TO POST AND BEAM	UPLIFT 2,815 LAT. 2,075



UNLESS NOTED OTHERWISE :

- WHERE CONNECTOR NOT NOTED FOR TRUSS TO FRAME USE ⟨13⟩/ TRUSS TO NEW CMU USE ⟨2⟩ TRUSS TO EXIST. CMU USE ⟨30⟩
- ALL INTERIOR BEAMS USE ⟨6⟩ X 2 ON FRAME AND ⟨2⟩ X 2 ON BLOCK
- ALL CONVENTIONALLY FRAMED MEMBERS USE 4 - 10d. TOE NAILS AT EACH END OF MEMBERS
- USE HUS26 AS 1 PLY HANGER AND HGUS48 AS 2 PLY HANGER
- MINIMUM OF 6" EMBEDMENT FOR ANCHOR BOLTS TO SLAB

TYPICAL MASONRY (1) EMBEDDED TRUSS ANCHOR HETA20, SHALL BE MINIMUM 18 GAUGE W/ FASTENERS 9-10d. x1½" NAILS - 1,810 Lbs UPLIFT

TYPICAL MASONRY (2) EMBEDDED TRUSS ANCHORS HETA20 APPLIED TO A MULTIPLE PLY GIRDER TRUSS, ONE FROM EACH SIDE, SHALL BE MINIMUM 18 GAUGE W/ FASTENERS 12-10d. NAILS - 2,500 Lbs UPLIFT

TYPICAL CONNECTIONS AND DETAILS

(a) (2) STUDS /⟨15⟩ X 2 OR⟨6⟩ X 2 @ TOP AND ⟨22⟩ @ BASE - TYP. @ 1 STORY

(b) (3) STUDS /⟨15⟩ X 2 OR⟨6⟩ X 2 @ TOP & ⟨23⟩ @ BASE - TYP. @ 1 STORY

(c) (2) STUDS /⟨15⟩ X 2 OR⟨6⟩ X 2 @ TOP & ⟨15⟩ X 2 OR⟨6⟩ X 2 @ LOWER BEAM OR RIMBOARD

(c1) (3) STUDS /⟨15⟩ X 3 OR⟨6⟩ X 3 @ TOP & ⟨17⟩ X 3 OR⟨6⟩ X 3 @ OR HTT5 AT LOWER BEAM OR RIMBOARD OR GROUTED CMU OR SLAB

(d) (4) STUDS /⟨15⟩ X 3 OR⟨6⟩ X 3 @ TOP & ⟨12⟩ X 3 - 52" LONG @ FLOOR AND ⟨5⟩ @ BASE
OPTIONAL CONNECTIONS AT BASE:
TO TOP OF CMU W/⟨5⟩/ TO TOP OF FLOOR BEAM OR GIRDER W/⟨15⟩x 3 OR⟨6⟩x 3

(d1) (5) STUDS /⟨15⟩ X 3 OR⟨6⟩ X 3 @ TOP & ⟨12⟩ X 3 - 52" LONG @ FLOOR AND ⟨5⟩ @ BASE
OPTIONAL CONNECTIONS AT BASE:
TO TOP OF CMU W/⟨5⟩/ TO TOP OF FLOOR BEAM OR GIRDER W/⟨15⟩x 3 OR⟨6⟩x 3

(e) (2) STUDS /⟨29⟩ + ⟨4⟩@ TOP & HTT5 AT MASONRY OR⟨14⟩x 2 OR ⟨6⟩x 2 @ BASE

(f) (3) STUDS /⟨15⟩ X 3 OR⟨6⟩ X 3 @ TOP & ⟨16⟩ X 3 @ FLOOR AND⟨5⟩ @ BASE

(g) (2) STUDS /⟨15⟩ X 2 OR⟨6⟩ X 2 @ TOP & ⟨33⟩ X 2 TO GROUTED CMU

(h) (3) STUDS /⟨15⟩ X 3 OR⟨6⟩ X 3 @ TOP & ⟨33⟩ X 3 TO GROUTED CMU

(h1) 5¼"X5¼" PARALLAM POST W/ HD8A AT BASE AND CCQ66SDS2.5

(j) 2nd FLOOR STUDS TO FLOOR SYSTEM WITH MSTA36 AT 32" O.C. OR CS16-R 52" LONG AT 32" O.C. AND AT CORNERS, ENDS AND TWO AT EACH SIDE OF OPENINGS

(j2) 2nd/3rd FLOOR STUDS TO FLOOR SYSTEM WITH MSTA36 AT 32" O.C. AND (2) AT CORNERS, ENDS AND AT EACH SIDE OF OPENINGS
2x....BASE PLATE W/ 1/2" BOLTS THROUGH STEEL BEAM TOP FLANGE AT 24" O.C. (IF APPLICABLE)

(k) 2x6 OR 2x8 OR 2x10 LEDGER BOARD W/ (3) ¼"x4½" WOOD SCREWS AT 16" O.C. AT FRAME WALL OR ¼"x4½" WOOD SCREWS AT 6" TO ALL TRUSS MEMBERS OR ⅝"x6" SIMPSON TITEN ANCHORS AT 12" O.C. TO GROUTED CMU

(k1) 2x12 OR 2x10 LEDGER BOARD W/ (3) 12d. x 3¼" NAILS AT 16" O.C. AT FRAME WALL OR (2) 12d. NAILS AT 16" O.C. TO STUDS AND 12d. NAILS AT 12" O.C. TO PLATE OR 10d. x 3" NAILS AT 6" TO ALL LAPPED TRUSS MEMBERS OR (3) STAGGERED ROWS OF 12d. NAILS AT 24" O.C. TO BEAM
FOR CONNECTION TO GROUTED CMU APPLY (2) ROWS OF ⅝" SIMPSON TITEN ANCHORS AT 18" O.C.-MIN. 5" EMBED

(k2) CONT. 1 3/4" x FLOOR DEPTH LVL RIMBOARD WITH HETA20 AT 24" O.C. TO GROUTED CMU and MSTA36 OR CS16-R 52" LONG AT 32" O.C. TO 2nd FLOOR FRAME
OPTIONAL 2x4 TOP AND BOTTOM RIBBON W/ HETA20 AT 24" O.C. AND A35 AT BOTTOM 2x4 RIBBON TO EACH TRUSS

(k3) DOUBLE 2x8 OR 2x10 OR 2x12 LEDGER BOARD AS FOLLOW: FOR CONNECTION TO GROUTED CMU APPLY (2) ROWS OF ⅝" SIMPSON TITEN ANCHORS AT 18" O.C.-MIN. 5" EMBED
CONNECT TO FRAME W/ TWO STAGGERED ROWS OF 5/8"x8" LAG BOLTS AT 16" O.C.
IF REQUIRED, BUILD UP DOUBLE LEDGER W/ 2x4 PLATE FASTEN DOWN WITH TWO STAGGERED ROWS OF 12d. NAILS AT 12" O.C. TO LEDGERS

(m) 5¼"x5¼" PARALLAM OR LAM POST W/⟨23⟩ AT BASE AND ⟨51⟩AT TOP

(m1) 6"x6" P.T. POST W/⟨17⟩ x 2 OR⟨6⟩x 2 POST/EA BEAM OR GIRDER AND ABU66 AT BASE

(n) 4"x4" P.T. POST W/⟨14⟩ X 2 OR⟨6⟩ x 2 POST/BEAM OR GIRDER AND ⟨24⟩ @ BASE TO MASONRY OR⟨14⟩ x 2 TO WOOD (TYP.)

(o) 4"x4" P.T. POST W/⟨16⟩ X 3 POST/BEAM ⟨23⟩ @ BASE (TYP.)

(p) 8"x8" P.T. POST W/⟨27⟩ x 2 POST/BEAM ⟨5⟩ @ BASE (TYP.)

(q) 3½"x7" PARALLAM OR LAM POST W/⟨23⟩ AT BASE AND⟨23⟩ x 2 AT TOP TO GIRDER OR BEAM

(r) 7"x7" OR 7"x5¼"PARALLAM POST W/⟨5⟩AT BASE AND ⟨27⟩x 2 +⟨28⟩ x 2 AT TOP TO BEAM

(s) 5 1/4"x5 1/4" PARALLAM POST W/ (3) MSTA36 + (1) HGA10 AT TOP TO BEAM. IF FLOOR CONNECTION IS REQUIRED, APPLY HTT5 FROM TOP AND BOTTON. CONNECTION AT BASE W/ HTT5

(t) 3½"x5¼" PARALLAM OR LAM POST W/⟨23⟩ AT BASE AND COLUMN CAP CCQ46SDS2.5 WITH STRAPS ROTATED 90°

(t1) 3½"x3½" LAM POST W/ (2) MSTA36 + (1) HGA10 AT BASE TO GIRDER OR BEAM AND CONNECTION AT TOP WITH LGT2 FROM FROM THE FRONT ONE HGA10 FROM ONE SIDE

(u) 3½"x3½" OR 3½"x5¼" VERSA LAM POST SITS ON CMU W/ HTT5 AT BASE AND AC4R (max.) (LCE4Z CORNER) POST CAP TO BEAM
CONNECT TO 2 PLY GIRDER W/ LGT2 AND 3 PLY LGT3

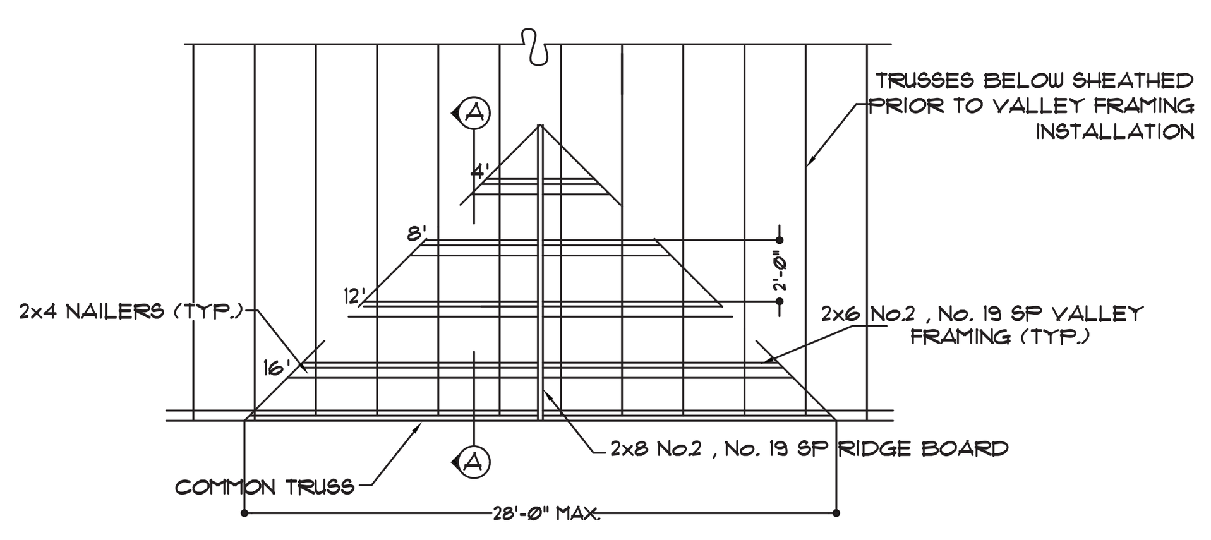
(v) 4x6 POST WITH ABU46Z AT BASE AND (2) LSTA36 OR (2) MTS20 AT TOP TO BEAM OR GIRDER TRUSS

(w) 5¼"x5¼" OR 5¼"x7"PARALLAM OR LAM POST W/⟨23⟩ AT BASE AND⟨23⟩ x 2 AT TOP TO GIRDER OR BEAM

(x) DBL 2x12 BLOCKING IN BETWEEN TRUSSES W/HUC412 AT EACH END. APPLY ¾" PLYWOOD GUSSET TO TRUSS FOR HANGER FULL NAILING CONNECTION

(y) 7"x7" PARALLAM POST W/ HD8A AT BASE AND (3) MSTA36 OR DOUBLE HD8A AT TOP

(z) 3½"x5¼" OR 5¼"x5¼" VERSA LAM POST W/ HTT5 FROM THE TOP AND FROM UNDERNEATH FOR POST TO GIRDER OR BEAM. LAM POST DOWN TO LVL BEAM W/ (3) MSTA36 + (2) HGA10 OR TO CONCRETE W/ HTT5



NOTE:

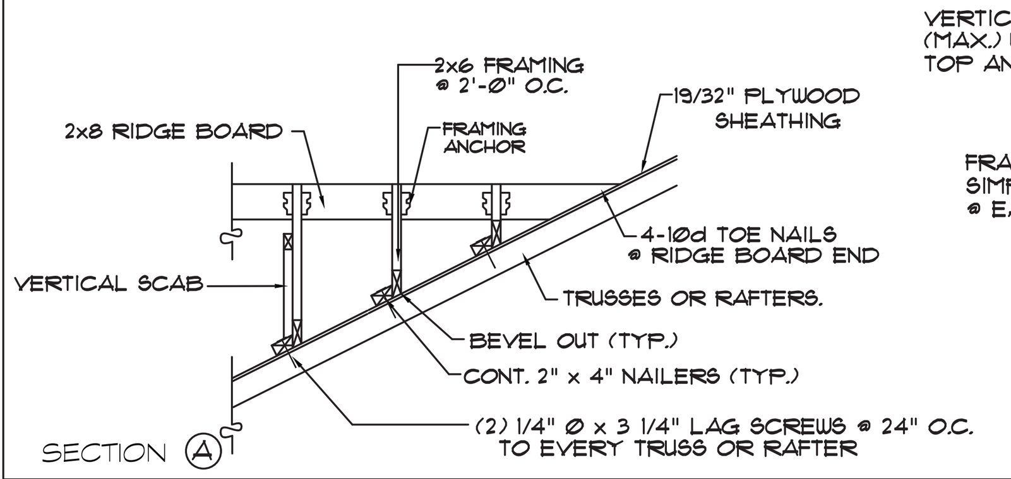
1- TRUSSES TO BE SHEATHED PRIOR TO VALLEY FRAMING

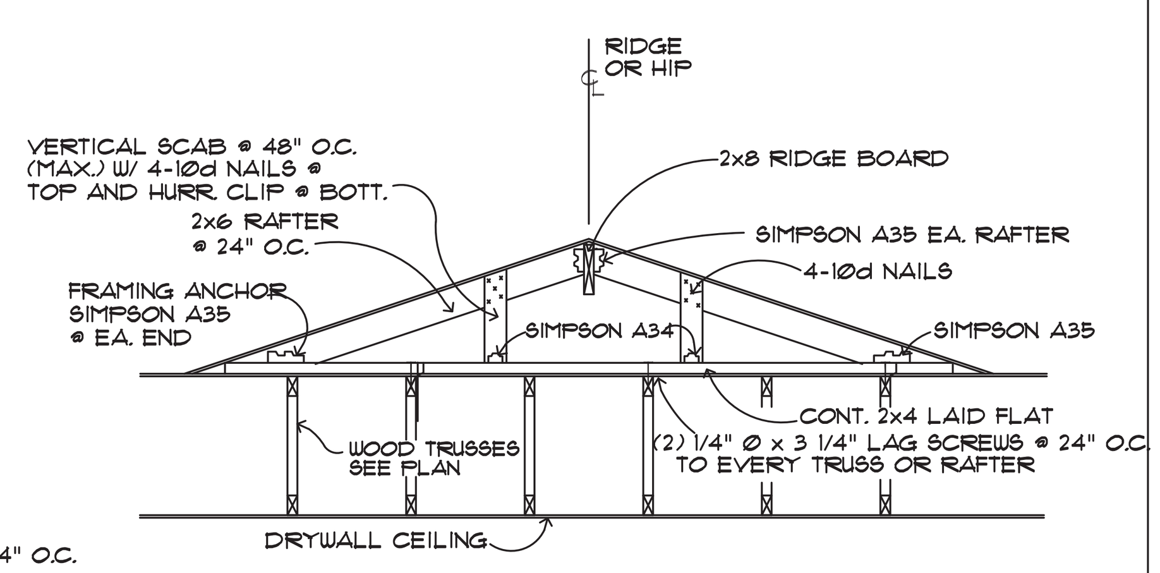
2- CONN. 2x4 NAILER TO ROOF W/2- 1/4" Ø X 3 1/4" LAG SCREWS @ 48" O.C. - TO EVERY OTHER TRUSS OR RAFTER

3- CONN. 2x6 VALLEY FRAMING TO CONT. 2x4 @ ONE END AND 2x8 RIDGE BOARD @ OTHER END USING SIMPSON A-35 FRAMING ANCHOR (OR EQUIV.)

4- ATTACH 2x4 VERT. SCAB TO 8', 12' AND 16' VALLEY FRAMING SPACED @ 48" O.C. MAX. AND CONN. W/4 16d NAILS @ TOP AND HURR. CLIP A34 @ BOTTOM

5- VALLEY SECTION SHEATED AFTER FRAMING





FIELD FRAMED VALLEY DETAIL

ROOF NAILING SCHEDULE

NAILING ZONES SHINGLE, METAL AND TILE

Where the sheathing thickness is greater than 15/32 inches, sheathing shall be fastened with ASTM F1667 RSRS-03 (2 ½" ×Ø.131") nails or ASTM F1667 RSRS-04 (3" ×Ø.120") nails. RSRS-01, RSRS-03 and RSRS-04 are ring shank nails meeting the specifications in ASTM F1667.

FOR 15/32" OR LESS SHEATHING, ASTM F1667 RSRS-01 (2 ⅜" ×Ø.113") nails.

FLAT/HIP/GABLE ROOF 0 TO 7 DEGREE

ZONE (1') -------- : 6" O.C. EDGE AND 6" O.C. IN FIELD
ZONE (1) ------- : 6" O.C. EDGE AND 6" O.C. IN FIELD
ZONES (2) AND (3) : 4" O.C. EDGE AND 4" O.C. IN FIELD

GABLE SYSTEMS

ZONES (1) AND (2e) : 6" O.C. EDGE AND 6" O.C. IN FIELD
ZONES (2n) AND (2r) : 6" O.C. EDGE AND 6" O.C. IN FIELD
ZONES (3e) AND (3r) : 4" O.C. EDGE AND 4" O.C. IN FIELD

HIP SYSTEMS

ZONE (1) -------- : 6" O.C. EDGE AND 6" O.C. IN FIELD
ZONE (2e) ------- : 6" O.C. EDGE AND 6" O.C. IN FIELD
ZONES (2r) AND (3e) : 4" O.C. EDGE AND 4" O.C. IN FIELD

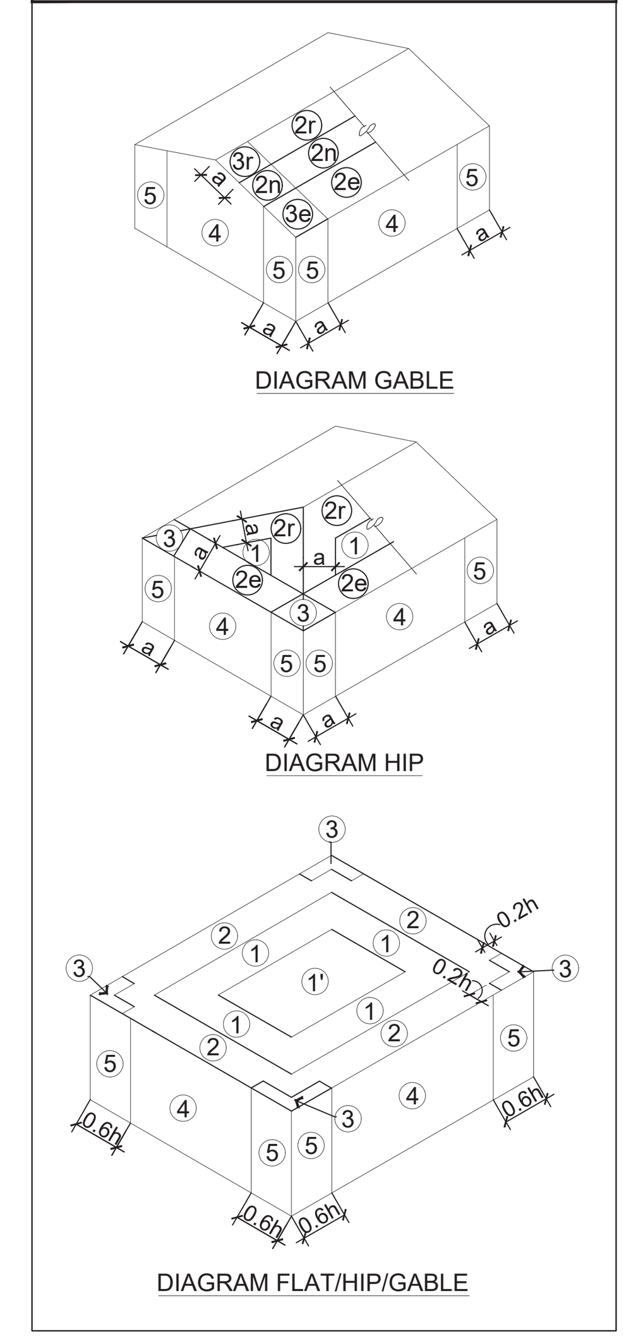
1x12 / 1x10 BOARD — (3) 10d. NAILS PER BOARD EDGES & FIELD ALL ZONES

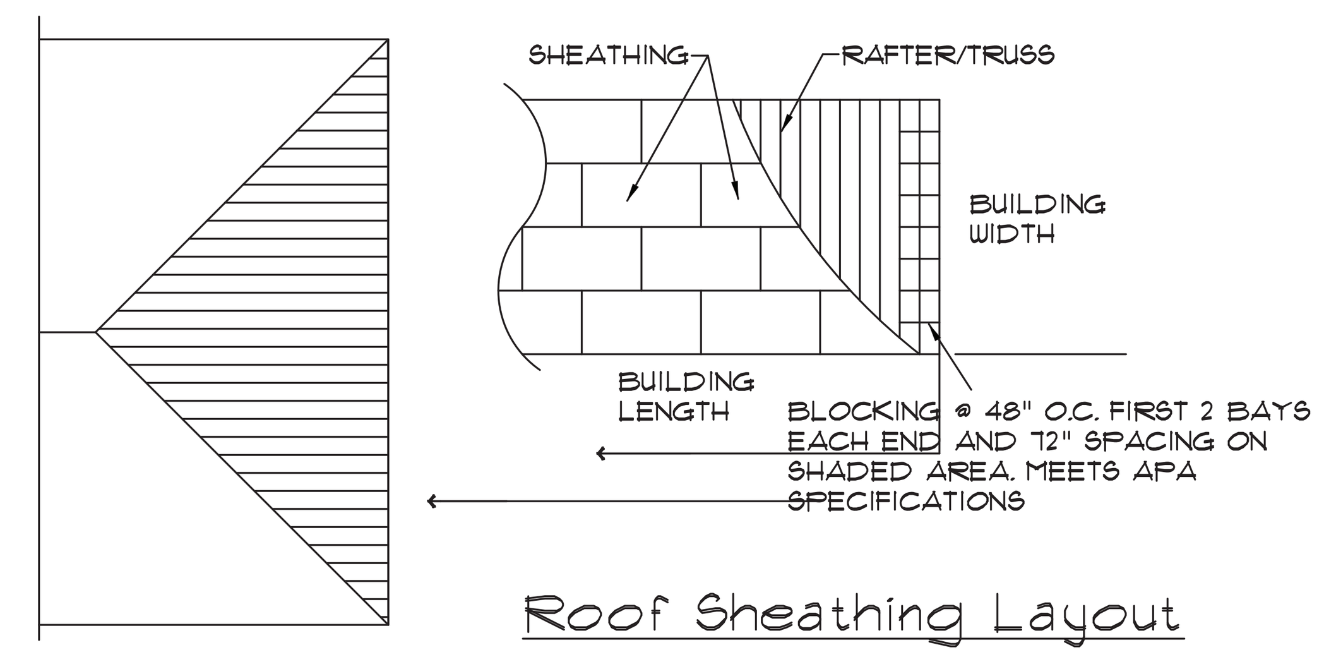
1x6 / 1x8 BOARD — (2) 10d. NAILS PER BOARD EDGES & FIELD ALL ZONES

NOTE:
(1) EDGE SPACING ALSO APPLIES OVER GABLE END WALLS OR TRUSSES
(2) PASLODE 3" X .099" DIAMETER POWER DRIVEN COATED SCREW NAILS MAY BE USED IN LIEU OF 10d. RING SHANK NAILS WITH REDUCED SPACING AS NOTED BELOW.
12" SPACE CHANGES TO 8", 6" TO 4", AND 4" OR 3" CHANGES TO 2 1/2".

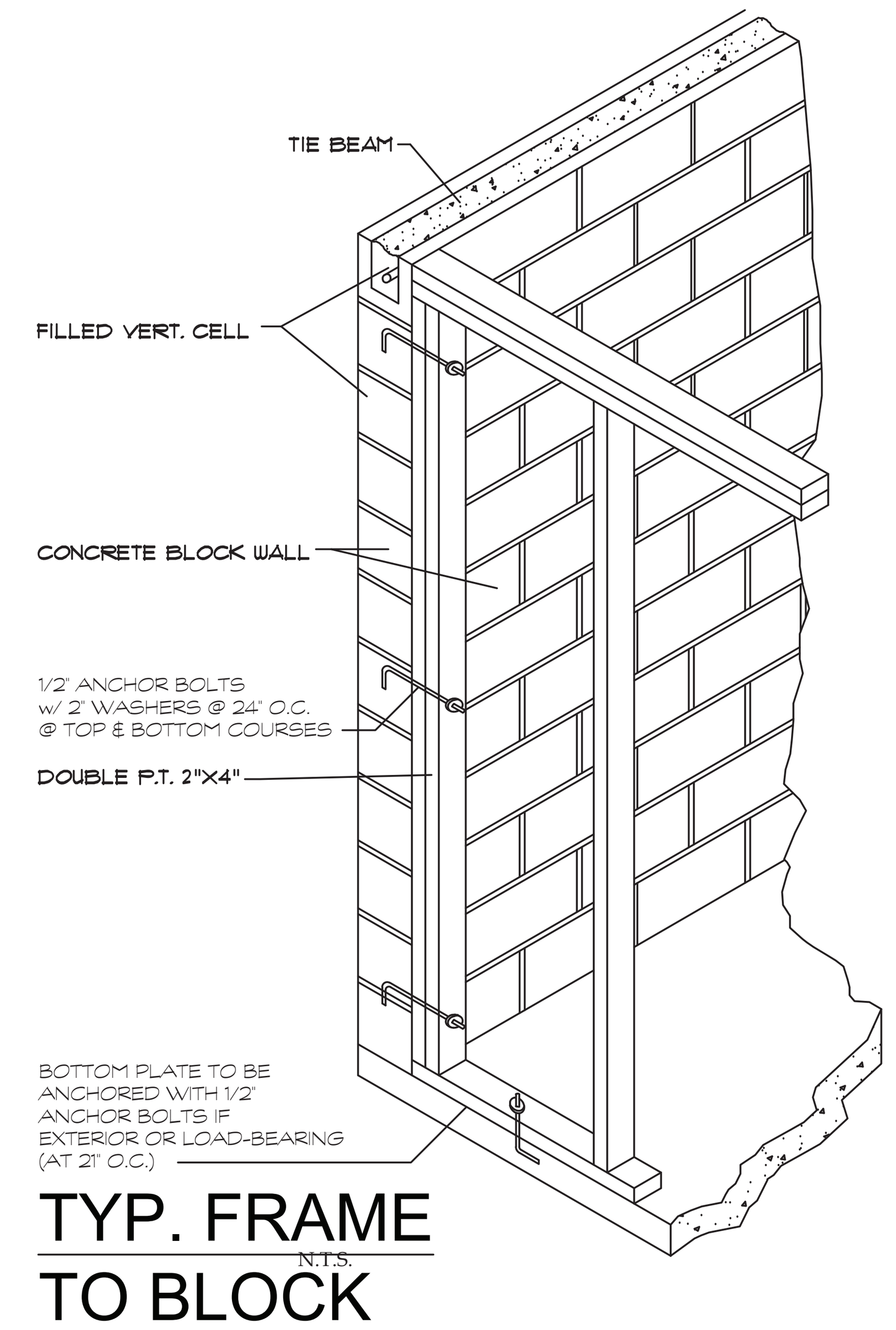
1/2" GYPSUM CEILING : Use 5d Nails @ 7" on center
SECOND FLOOR NAILING : 10d @6" O.C. Edges (glue & nail) @ 12" O.C @ Field

ASCE 7-16 WIND PRESSURE AND SUCTION DIAGRAMS

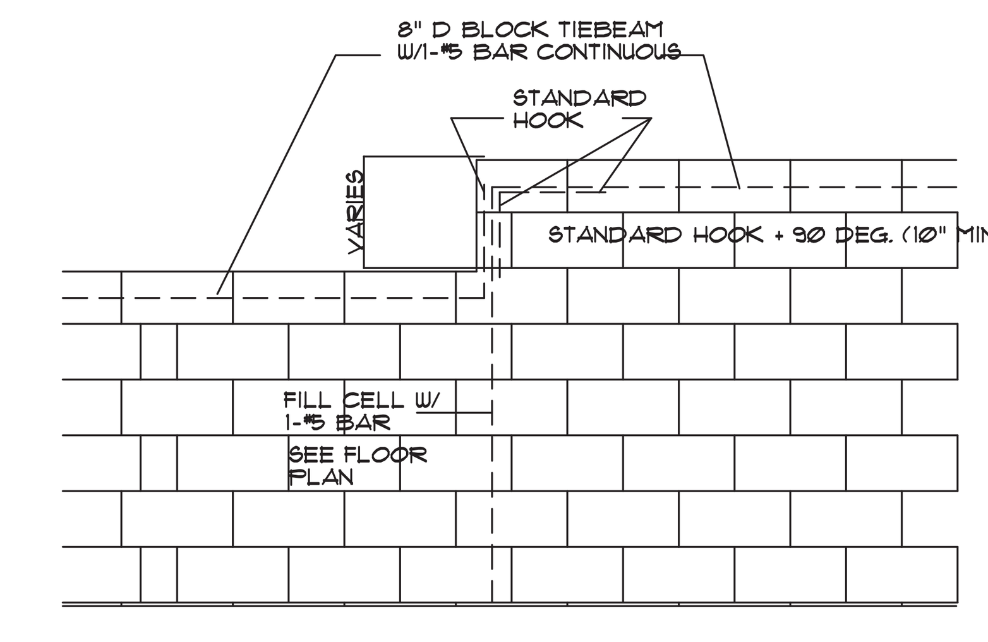




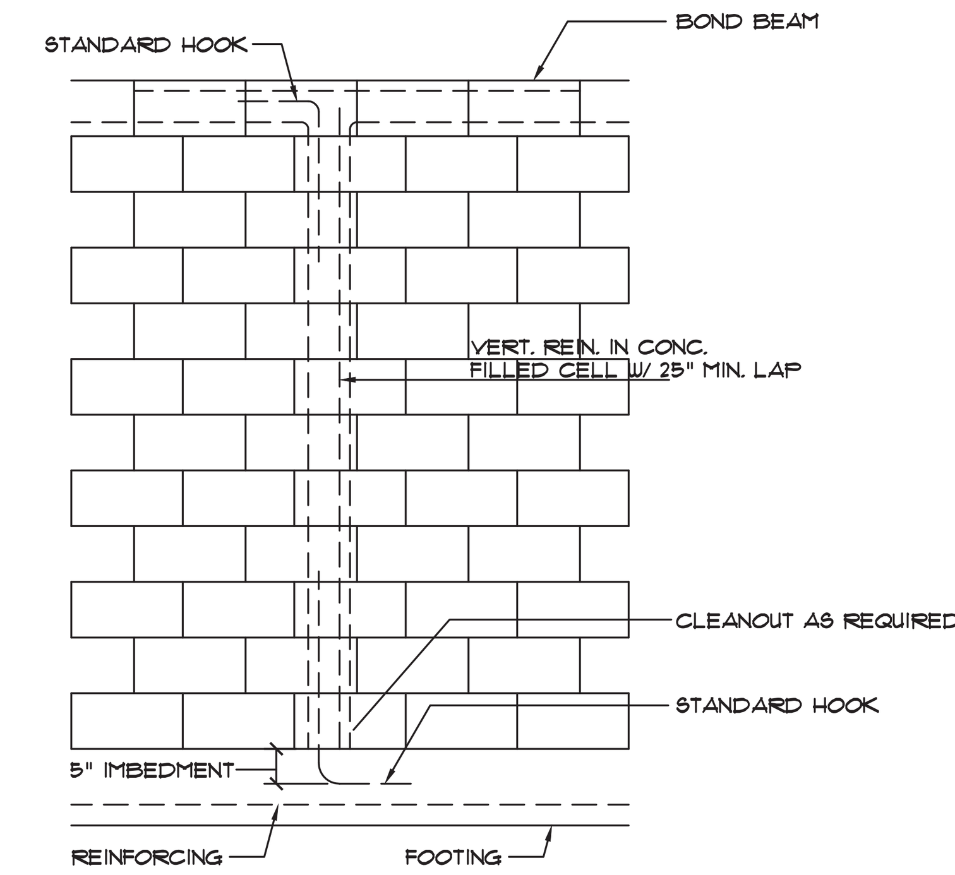
Roof Sheathing Layout



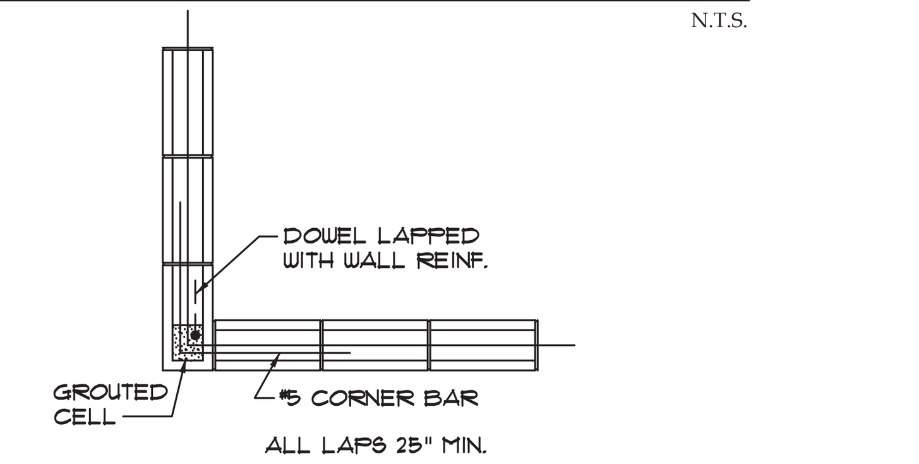
TYP. FRAME TO BLOCK CONNECTION N.T.S.



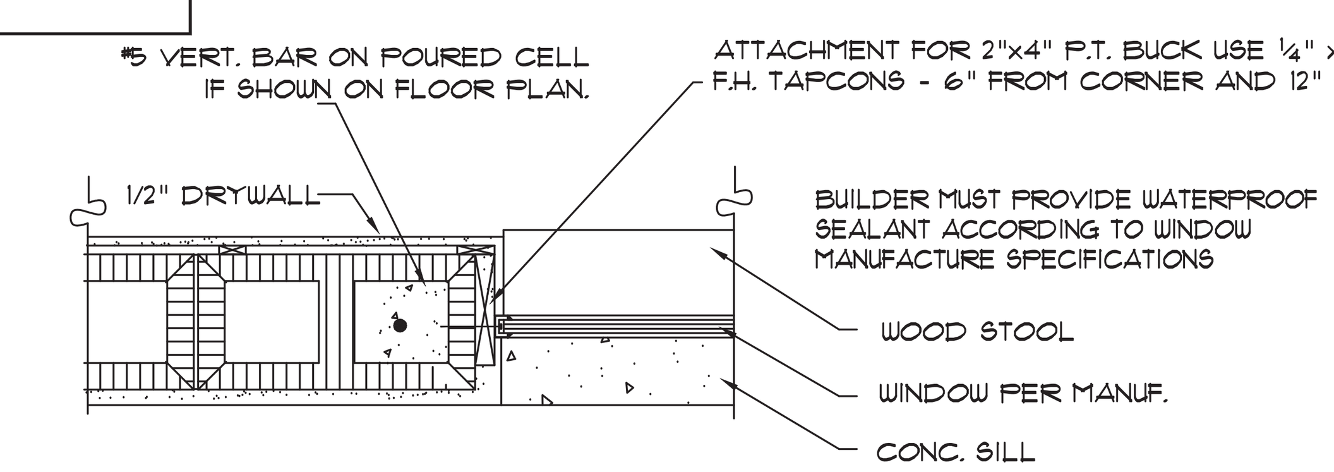
Step Down Tie Beam Detail N.T.S.



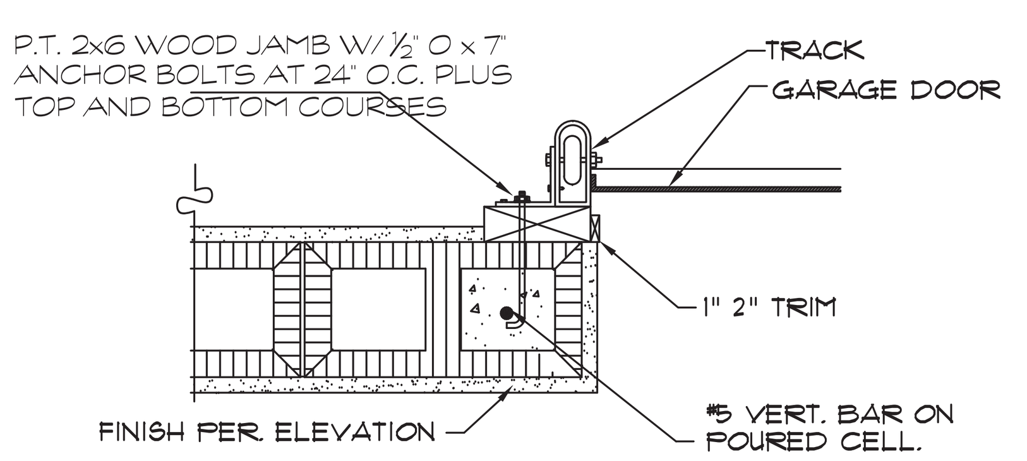
Typ. 1 Story Masonry Wall N.T.S.



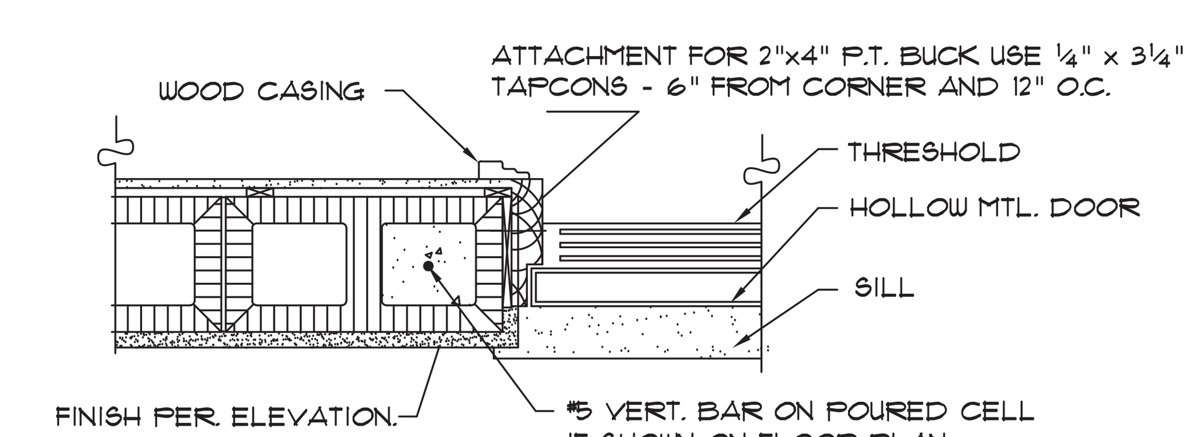
Corner Continuity of Bond Beam and Wall Reinforcement N.T.S.



JAMB AT WINDOWS HEAD



JAMB AT GARAGE DOOR & TYPICAL FRAME TO BLOCK



JAMB AT EXTERIOR DOOR

REVISIONS	BY

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
Lucia DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :
SCALE : NOTED
DRAWN : EML
JOB :
SHEET 12
OF 13 SHEETS

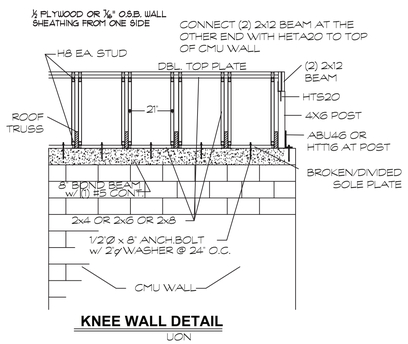
LIMITING HEIGHTS OF 2" STUDS

FOR HIGH FRAMING CONDITIONS, THE APPLICATION OR CONNECTION OF AN INTERMEDIATE FRAMING SUCH AS FLOOR JOISTS, CEILING JOISTS, ETC., ALLOW TO REDUCE THE ALLOWABLE HEIGHT FOR STUDS

SIZE STUD MATERIAL AT O.C. SPACING	MAXIMUM HEIGHT
2"x4" SPRUCE, FR 24" O.C.	8'-0"
2"x4" SPRUCE, FR 16" O.C.	9'-0"
2"x4" SPRUCE, FR 12" O.C.	10'-0"
2"x4" SOUTHERN PINE, FR 24" O.C.	9'-0"
2"x4" SOUTHERN PINE, FR 16" O.C.	10'-8"
2"x4" SOUTHERN PINE, FR 12" O.C.	12'-4"
2"x6" SPRUCE, FR 24" O.C.	11'-4"
2"x6" SPRUCE, FR 16" O.C.	13'-8"
2"x6" SPRUCE, FR 12" O.C.	16'-0"
2"x6" SOUTHERN PINE, FR 24" O.C.	13'-8"
2"x6" SOUTHERN PINE, FR 16" O.C.	17'-0"
2"x6" SOUTHERN PINE, FR 12" O.C.	19'-4"
2"x8" SPRUCE, FR 24" O.C.	14'-8"
2"x8" SPRUCE, FR 16" O.C.	18'-0"
2"x8" SPRUCE, FR 12" O.C.	21'-0"
2"x8" SOUTHERN PINE, FR 24" O.C.	18'-0"
2"x8" SOUTHERN PINE, FR 16" O.C.	22'-3"
2"x8" SOUTHERN PINE, FR 12" O.C.	25'-8"

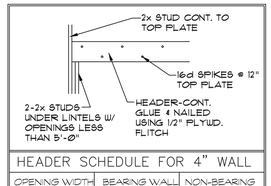
Top Plate Splice Detail

N.T.S.



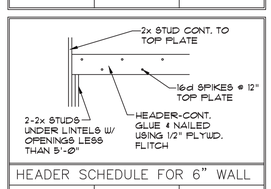
KNEE WALL DETAIL

UON



HEADER SCHEDULE FOR 4" WALL

OPENING WIDTH	BEARING WALL OR SHEARWALL	NON-BEARING WALLS
0'-0" TO 3'-0"	2-2X8S + PLYWD. FLITCH	2-2X4S
3'-1" TO 5'-0"	2-2X10S + PLYWD. FLITCH	2-2X4S
5'-1" TO 7'-0"	2-2X12S + PLYWD. FLITCH	2-2X6S
7'-1" TO 9'-0"	2-2X12 W/ 1/2" PLYWD. FLITCH	2-2X8S



HEADER SCHEDULE FOR 6" WALL

OPENING WIDTH	BEARING WALL OR SHEARWALL	NON-BEARING WALLS
0'-0" TO 3'-0"	3-2X10S + PLYWD. FLITCH	3-2X4S
3'-1" TO 5'-0"	3-2X12S + PLYWD. FLITCH	3-2X6S
5'-1" TO 7'-0"	3-1¾" LVL	3-2X8S
7'-1" TO 9'-0"	3-1¾" LVL	3-2X10S

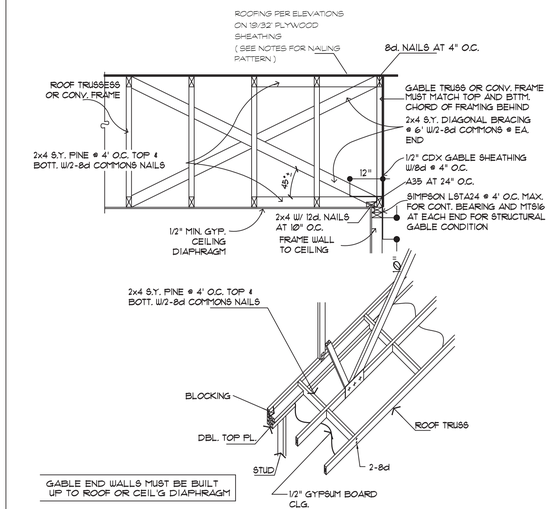
1. USE HEADER SIZES ABOVE UNLESS OTHERWISE NOTED ON FRAMING PLAN
2. PRIMARY FRAMING (BEAMS,GIRDERS,ETC.,) WERE SIZED USING 1800 'FB' EXTREME FIBER IN BENDING(SINGLE) 90 'FV' HORIZONTAL SHEAR 16E 'E' MODULES OF ELASTICITY
3. JOIST, RAFTERS, LINTELS, ETC. WERE SIZED USING: 1200 'FB' EXTREME FIBER IN BENDING(SINGLE) 90 'FV' HORIZINTAL SHEAR 16E 'E' MODULES OF ELASTICITY

MINIMUM WALL AND HEADER STUD REQUIREMENTS

UPLIFT CONNECTION REQUIREMENT AT POINTS 'A'(TOP AND BOTTOM OF HEADER STUDS. UPLIFT CONNECTION IS REQUIRED AT EACH END OF HEADER AND AT BOTTOM OF HEADER STUDS IN ADDITION TO CONNECTORS AT WALL STUDS

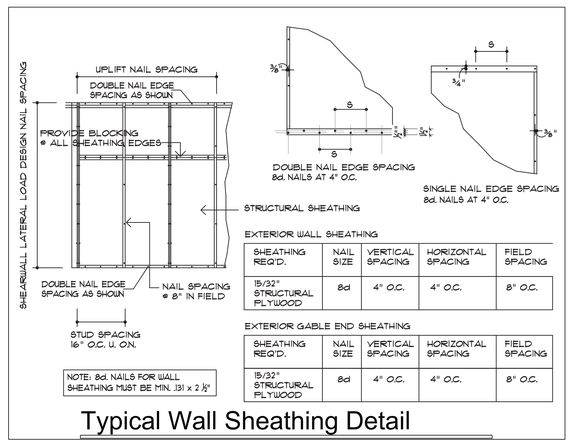
UNSUPPORTED WALL HEIGHT	STUD SPACING	MAXIMUM HEADER SPAN(FEET) 3	6	9	12	15	18
		* NUMBER OF HEADER STUDS SUPPORTING END OF HEADER: 1	2	2	2	2	2
10' OR LESS	12"	2	2	3	3	3	3
	16"	2	2	3	3	3	3
	24"	1	2	2	3	3	3
GREATER THAN 10'	12"	2	3	3	4	4	4
	16"	2	3	3	3	4	4
	24"	1	2	2	2	3	3

*THE HEADER STUD SHALL NOT BE REQUIRED IF THE HEADER IS SUPPORTED BY A SUITABLE FRAMING ANCHOR



GABLE END BRACING DETAIL FOR FLAT OR VAULTED CEILING

N.T.S.



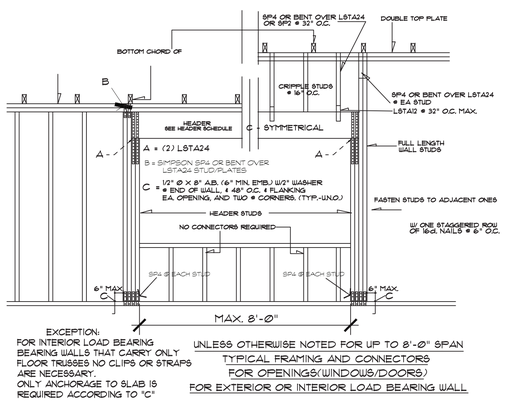
EXTERIOR WALL SHEATHING

SHEATHING REQ'D.	NAIL SIZE	VERTICAL SPACING	HORIZONTAL SPACING	FIELD SPACING
15/32" STRUCTURAL PLYWOOD	8d	4" O.C.	4" O.C.	8" O.C.

EXTERIOR GABLE END SHEATHING

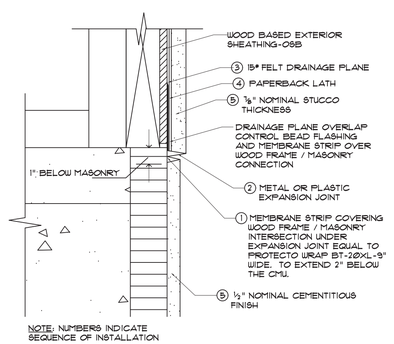
SHEATHING REQ'D.	NAIL SIZE	VERTICAL SPACING	HORIZONTAL SPACING	FIELD SPACING
15/32" STRUCTURAL PLYWOOD	8d	4" O.C.	4" O.C.	8" O.C.

Typical Wall Sheathing Detail



EXCEPTION:
FOR INTERIOR LOAD BEARING BEARING WALLS THAT CARRY ONLY FLOOR TRUSSES NO CLIPS OR STRAPS ARE NECESSARY. ONLY ANCHORAGE TO SLAB IS REQUIRED ACCORDING TO 'C'

UNLESS OTHERWISE NOTED FOR UP TO 8'-0" SPAN TYPICAL FRAMING AND CONNECTORS FOR OPENINGS(WINDOWS/DOORS) FOR EXTERIOR OR INTERIOR LOAD BEARING WALL



NOTE: NUMBERS INDICATE SEQUENCE OF INSTALLATION

STUCCO FLASHING DETAIL @ CMU / FRAME INTERFACE

REVISIONS	BY

RESIDENTIAL DESIGN
TEL. 407-402-3497
e-mail ericmlucia@gmail.com
Lucia DESIGNS

LP STRUCTURAL DESIGN, LLC
223 MAGNOLIA CIRCLE
EUSTIS, FLORIDA 32726
352-989-1935
PE#: 47617

NEW HOME DESIGN
ARIAS RESIDENCE
QUINCE AVE.
EUSTIS FLORIDA 32736

DATE :
SCALE : NOTED
DRAWN : EML
JOB :
SHEET 13
OF 13 SHEETS