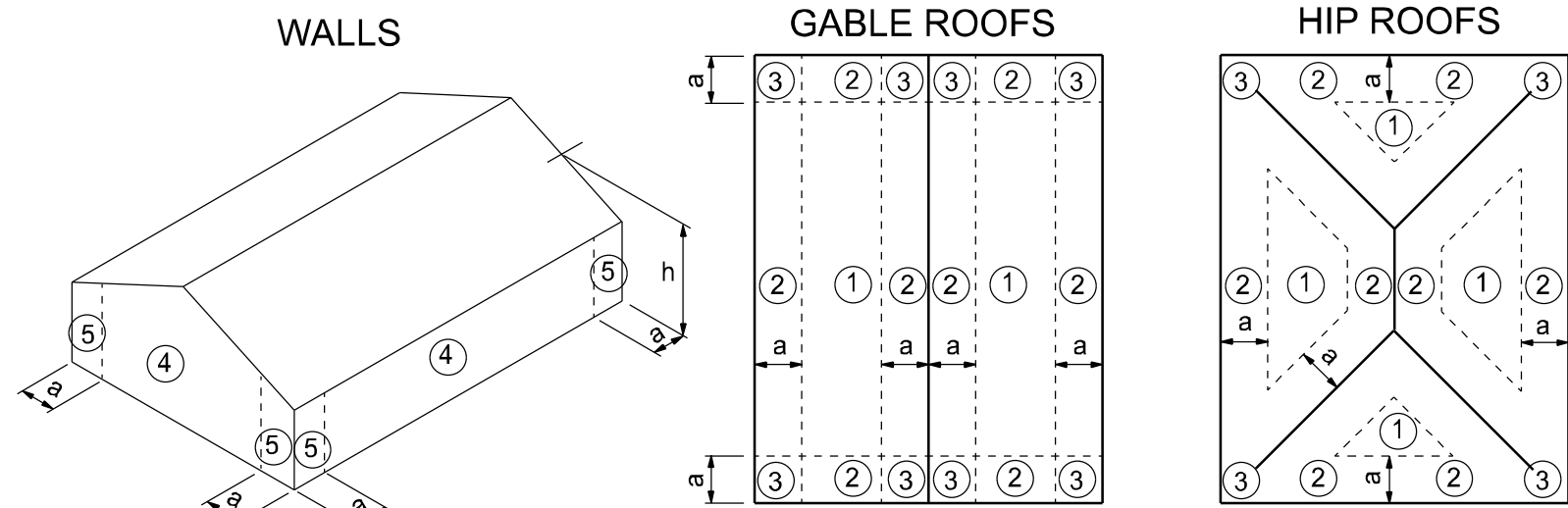


ALL WIND LOADS ARE IN ACCORDANCE WITH SECTION 1609, FLORIDA BUILDING CODE 7TH EDITION (2020)		
FLOOR AND ROOF LIVE LOADS		
UNINHABITABLE ATTICS:	20 PSF	
HABITABLE ATTICS, BEDROOM:	30 PSF	
ALL OTHER ROOMS:	40 PSF	
GARAGE:	40 PSF	
ROOFS:	20 PSF UNIFORM	
WIND DESIGN DATA		
ULTIMATE WIND SPEED:	125 MPH	
NOMINAL (BASIC) WIND SPEED:	97 MPH	
RISK CATEGORY:	II	
WIND EXPOSURE:	B	
ENCLOSURE CLASSIFICATION:	ENCLOSED	
INTERNAL PRESSURE COEFFICIENT:	0.18 +/-	
COMPONENTS AND CLADDING		
ROOFING ZONE 1:	16.0 PSF MAX.	-17.0 PSF MIN.
ROOFING ZONE 2:	16.0 PSF MAX.	-19.8 PSF MIN.
ROOFING ZONE 3:	16.0 PSF MAX.	-19.8 PSF MIN.
ROOFING AT ZONE 2 OVERHANGS:	-28.8 PSF MIN.	
ROOFING AT ZONE 3 OVERHANGS:	-28.8 PSF MIN.	
STUCCO, CLADDING, DOORS AND WINDOWS		
ROOFING ZONE 4:	17.0 PSF MAX.	-18.4 PSF MIN.
ROOFING ZONE 5:	17.0 PSF MAX.	-22.7 PSF MIN.
9' WIDE O/H DR.:	16.0 PSF MAX.	-16.9 PSF MIN.
16' WIDE O/H DR.:	16.0 PSF MAX.	-16.0 PSF MIN.



a: 10% of least horizontal dim. or 0.4h, whichever is smaller, but not less than either 4% of least horizontal dimension or 3 ft.  
h: mean roof height, in feet.

COMPONENTS AND CLADDING

## STRUCTURAL DESIGN CRITERIA

CODES:	FLORIDA BUILDING CODE 7TH EDITION (2020) BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2018 EDITION APA PLYWOOD DESIGN SPECIFICATION	
LIVE LOADS:	ROOF	20 PSF (REDUCIBLE)
	RESIDENTIAL FLOOR, UNLESS OTHERWISE INDICATED	40 PSF
WIND LOADS: (F.B.C.)	BALCONIES	40 PSF
	STAIRS	40 PSF
CONCRETE STRENGTH @ 28 DAYS	LIGHT PARTITIONS (DEAD LOAD), U.N.O.	20 PSF
	WIND LOADS BASED ON FBC, SECTION 1609 WIND VELOCITY: 125 M.P.H., USE FACTOR: 1.0	
REINFORCING:	ALL CONCRETE UNLESS OTHERWISE INDICATED	2500 PSI
	PEA GRAVEL CONCRETE FOR MASONRY CELLS ONLY (DO NOT USE FOR CONCRETE COLUMNS OR TIE BEAMS)	3000 PSI
CONCRETE MASONRY UNITS:	WELDED WIRE FABRIC SHALL CONFORM TO	ASTM A185
	ALL REINFORCING BARS	ASTM A615-40 40,000 PSI
STRUCTURAL STEEL:	ALL STIRRUPS AND TIES	ASTM A615-40 40,000 PSI
	ASTM C90-99b, STANDARD WEIGHT UNITS, fm=1500 PSI MORTAR TYPE "S", 1800 PSI CONCRETE GROUT: 3000 PSI CONTINUOUS MASONRY INSPECTION IS REQUIRED DURING CONSTRUCTION	
WOOD FRAMING:	ALL STRUCTURAL AND MISCELLANEOUS STEEL A36 36,000 PSI, U.N.O. SHOP AND FIELD WELDS: E70XX ELECTRODES ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307	
	BEAMS, RAFTERS, JOIST PLATES, ETC. U.N.O. NO. 2 SOUTHERN YELLOW PINE (19% M.C.) ROOF DECK: PLYWOOD C-C/C-D, EXTERIOR, or OSB FLOOR SHEATHING: T&G A-C GROUP 1 APA RATED (48/24) WALL SHEATHING: PLYWOOD C-C/C-D, EXTERIOR OR OSB VERSA LAM BEAM Fb = 2900 PSI (2.0E) WOOD COLS. PARALLAM 2.0E U.N.O.	
WOOD ROOF TRUSSES:	DESIGN LOADS:	
	TOP CHORD LIVE AND DEAD LOAD: 30 PSF BOTTOM CHORD LIVE AND DEAD LOAD: 10 PSF TOTAL: 40 PSF	
SOIL BEARING VALUE:	SEE DRAWINGS FOR SPECIAL CONCENTRATED LOADS. DESIGN FOR NEW WIND UPLIFT AS PER SPECIFIED CODES, DEDUCTING A MAXIMUM OF 5 P.S.F. DEAD LOAD, BUT NOT EXCEEDING ACTUAL DEAD LOAD.	
	ASSUMED ALLOWABLE SOIL BEARING PRESSURE AFTER COMPACTION: 1,500 PSF SEE SOILS REPORT AND SPECIFICATIONS FOR COMPACTION REQUIREMENTS IF SOIL CONDITIONS IN THE PROJECT DO NOT MEET OR EXCEED THE CAPACITY THE GENERAL CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO FOUNDATION POUR FOR VERIFICATION OF FOUNDATION DESIGN.	



PROJECT LOCATION  
PARCEL 33-4S-17-08944-020

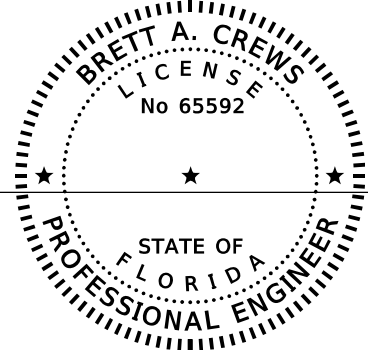
# SELLERS RESIDENCE

## ABBREVIATIONS

A.B.	Anchor Bolt	Fir.	Floor	Plt. Ht.	Plate Height
Abv.	Above	Fdn.	Foundation	Plt Sh.	Plant Shelf
A/C	Air-Conditioner	Fir. Sys.	Floor System	PSF	Pounds per square foot
Adj.	Adjustable	F.Pl.	Fireplace	P.T.	Pressure Treated
A.F.F.	Above Finished Floor	Ft.	Foot / Feet	Pwd.	Powder Room
A.H.U.	Air Handler Unit	Ftg.	Footing	Rad.	Radius
ALT.	Alternate	FX	Fixed	Ref.	Refrigerator
B.C.	Base Cabinet	Galv.	Galvanized	Req'd.	Required
B.F.	Bifold Door	G.C.	General Contractor	Rm.	Room
Bk Sh	Book Shelf	G.F.I.	Ground Fault Interrupter	Rnd.	Round
Bm.	Beam	G.T.	Girder Truss	R/R	Rod and Shelf
BOT.	Bottom	Hdr.	Header	SD.	Smoke Detector
B.P.	Bypass door	Hgt.	Height	S.F.	Square Ft.
Brg.	Bearing	HB	Hose Bibb	Sh.	Shelves
Cir.	Circle	Int.	Interior	SHT	Sheet
Clg.	Ceiling	K/Wall	Kneewall	S.L.	Side Lights
Col.	Column	K.S.	Knee Space	S.P.F.	Spruce Pine Fir
Comp.	A/C Compressor	Laun.	Laundry	Sq.	Square
C.T.	Ceramic Tile	Lav.	Lavatory	S.Y.P.	Southern Yellow Pine
D	Dryer	L.F.	Linear FL	Temp.	Tempered
Dec.	Decorative	L.T.	Laundry Tub	Thickn.	Thicken
Ded.	Dedicated Outlet	Mas.	Masonry	T.O.B.	Top of Block
Dbi.	Double	Max	Maximum	T.O.M.	Top of Masonry
Dia.	Diameter	M.C.	Medicine Cabinet	T.O.P.	Top of Plate
Disp.	Disposal	MDP	Master Distribution Panel	Trans.	Transom Window
Dist	Distance	Mfr.	Manufacturer	Typ.	Typical
D.S.	Drawer Stack	Micro.	Microwave	UCL	Under Cabinet Lighting
D.V.	Dryer Vent	Min	Minimum	U.N.O.	Unless Noted Otherwise
D.W.	Dishwasher	M.L.	Microalum	VB	Vanity Base
Ea.	Each	Mir.	Mirror	Vert.	Vertical
E.W.	Each Way	VL	Versalum	Versal	Versal
Elec.	Electrical	N.T.S.	Not to Scale	VTR	Vent through Roof
Elev.	Elevation	Opn'g.	Opening	W	Washer
Ext.	Exterior	Opt.	Optional	W/	With
Exp.	Expansion	Pc.	Piece	W/C	Water Closet
F.B.C.	Florida Bldg. Code	Ped.	Pedestal	W.A.	Wedge Anchor
Fir.	Finished Floor	PL	Parallam	Wd	Wood
F.G.	Fixed Glass	PLF	Pounds per linear foot	WP	Water Proof

## INDEX OF SHEETS

SHEET	DESCRIPTION
A-1	COVER SHEET
A-2	FLOOR PLAN
A-3	ELEVATIONS FRONT AND REAR
A-4	ELEVATIONS SIDES
A-5	FOUNDATION PLAN
A-6	ROOF PLAN
A-7	ELECTRICAL PLAN
A-8	SECTIONS AND FRAMING DETAILS
A-9	SHEARWALL DETAILS



Brett A. Crews, P.E. 65592

## GENERAL PLAN NOTES

### CONSTRUCTION DOCUMENTS

THE CUSTOMER IS RESPONSIBLE FOR DELIVERING THE REQUIRED SETS OF CONSTRUCTION DOCUMENTS TO THE PERMIT ISSUING AUTHORITIES, FOR THE ISSUANCE OF CONSTRUCTION PERMITS. THE CONTRACTOR SHALL REVIEW THE CONSTRUCTION DOCUMENTS AND VERIFY ALL DIMENSIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK OR FABRICATION OF ANY MATERIALS.

### DO NOT SCALE OFF THESE PLANS

AMPLE DIMENSIONS ARE SHOWN ON THE PLANS TO LOCATE ALL ITEMS. SIMPLE ARITHMETIC MAY BE USED TO DETERMINE THE LOCATIONS OF THOSE ITEMS NOT DIMENSIONED.

### CHANGES TO FINAL PLAN SETS

PLEASE DO NOT MAKE ANY STRUCTURAL CHANGES TO THESE PLANS WITHOUT CONSULTING WITH THE ARCHITECT. THE OWNER SHALL ASSUME ANY AND ALL LIABILITY FOR STRUCTURAL DAMAGE RESULTING FROM CHANGES MADE TO THE PLANS OR BY SUBSTITUTION OF MATERIALS DIFFERENT FROM SPECIFICATION ON THE PLANS.

### INORGANIC ARSENICAL PRESSURE TREATED WOOD

SOME FRAMING MATERIALS SPECIFIED FOR THE CONSTRUCTION OF YOUR PROJECT SUCH AS SILLS OR EXTERIOR FRAMING ARE PRESSURE TREATED. EACH PIECE IS CLEARLY MARKED FOR EASY IDENTIFICATION AND IS USUALLY GREENISH IN COLOR.

THIS WOOD HAS BEEN PRESERVED BY PRESSURE-TREATMENT WITH AN EPA-REGISTERED PESTICIDE CONTAINING INORGANIC ARSENIC TO PROTECT IT FROM INSECT ATTACK AND DECAY. EXPOSURE TO TREATED WOOD MAY PRESENT CERTAIN HAZARDS, THEREFORE, PRECAUTIONS SHOULD BE TAKEN BOTH WHEN HANDLING THE TREATED WOOD AND IN DETERMINING WHERE TO USE OR DISPOSE OF THE TREATED WOOD.

FOR FURTHER INFORMATION ON THE USE OF AND DISPOSAL OF INORGANIC ARSENIC PRESSURE TREATED WOOD, PLEASE REFER TO THE EPA MATERIAL SAFETY SHEET DEALING WITH THIS PRODUCT.

## PREFABRICATED WOOD TRUSSES

- ALL PREFABRICATED WOOD TRUSSES SHALL BE SECURELY FASTENED TO THEIR SUPPORTING WALLS OR BEAMS WITH HURRICANE CLIPS OR ANCHORS.
- 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.
- 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.
- BRIDGING FOR PRE-ENGINEERED TRUSSES SHALL BE AS REQUIRED BY THE TRUSS MANUFACTURER UNLESS NOTED ON THE PLANS.
- 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 FOLLOWING DESIGN LOADS:
  - DESIGN SPECIFICATIONS FOR LIGHT WEIGHT METAL PLATE CONNECTED WOOD TRUSSES PER THE TRUSS PLATE INSTITUTE TPI LATEST EDITION.
  - 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 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.
  - 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

- MISSUED UNTEL STRAPS FOR MASONRY CONSTRUCTION MAY BE SUBSTITUTED W/ (1) "SIMPSON MTS16 TWIST STRAP W/ (4) 1/4" X 2 1/4" DIA. TITENS TO THE BOND BEAM BLOCK AND (7) 10d TO THE TRUSS FOR UPLIFTS OF 1000 LBS. OR LESS. USE (2) FOR 2000 LBS. OR LESS. OTHERS MAY BE SUBSTITUTED ON A CASE BY CASE BASIS.
- MISSUED "J" BOLTS FOR WOOD BEARING WALLS MAY BE SUBSTITUTED W/ 1/2" DIA. ANCHOR BOLTS SET IN 3/4" DIA. X 6" DEEP UNITEK "PROPOXY" 300 ADHESIVE BINDER FOLLOWING ALL MANUFACTURERS RECOMMENDATIONS ( OR 1/2" X 6" RAWL STUD EXPANSION ANCHORS. )
- REGARDING MISSED REBAR IN VERTICAL FILLED CELLS: 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 EMBEDDEMENT EPOXY ( SIMPSON "EPOXY TIE SET", OR HILTI " 2 PART" EMBEDDMENT EPOXY ). MIXED PER MANUFACTURER'S INSTRUCTIONS. ASSURE THAT ALL DUST AND DEBRIS FROM DRILLING ARE REMOVED FROM THE HOLE BY BRUSHING AND AND USING COMPRESSED AIR PRIOR TO APPLYING THE EPOXY. ALLOW THE EPOXY TO CURE TO MANUFACTURER'S SPECIFICATIONS, THEN FILL THE CELL IN THE NORMAL WAY DURING BOND BEAM POUR.
- HURRICANE STRAPS MAY BE SUBSTITUTED WITH A STRAP OF GREATER HOLDOWN VALUE OR GREATER UPLIFT VALUE IN THE FIELD WITHOUT VERIFICATION, PROVIDED ALL MANUFACTURERS INSTALLATION INSTRUCTIONS ARE FOLLOWED.
- FOR MORTER 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 )

REVISIONS		
DATE	BY	DESCRIPTION

DESIGN BY:

**TRADEMARK**  
Construction Group, Inc.

CERTIFIED GENERAL CONTRACTOR  
CGC1514780

750 SW MAIN BLVD.  
LAKE CITY, FL. 32025  
(386)755-5254

**CES**  
Crews Engineering Services, LLC

CERTIFICATE OF AUTHORIZATION  
NO. 28022

349 SW CREWS FARM TERRACE  
LAKE CITY, FL 32025  
PHONE: 386.623.4303

DRAWN BY:

TM

APPROVED BY:

BC

**SELLERS RESIDENCE**

PROJECT NO.:

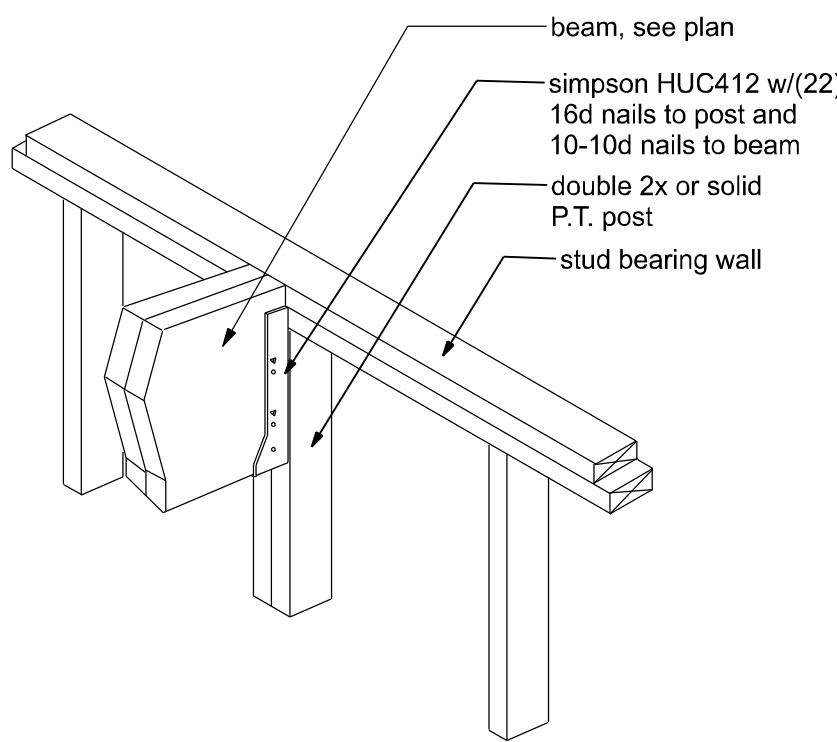
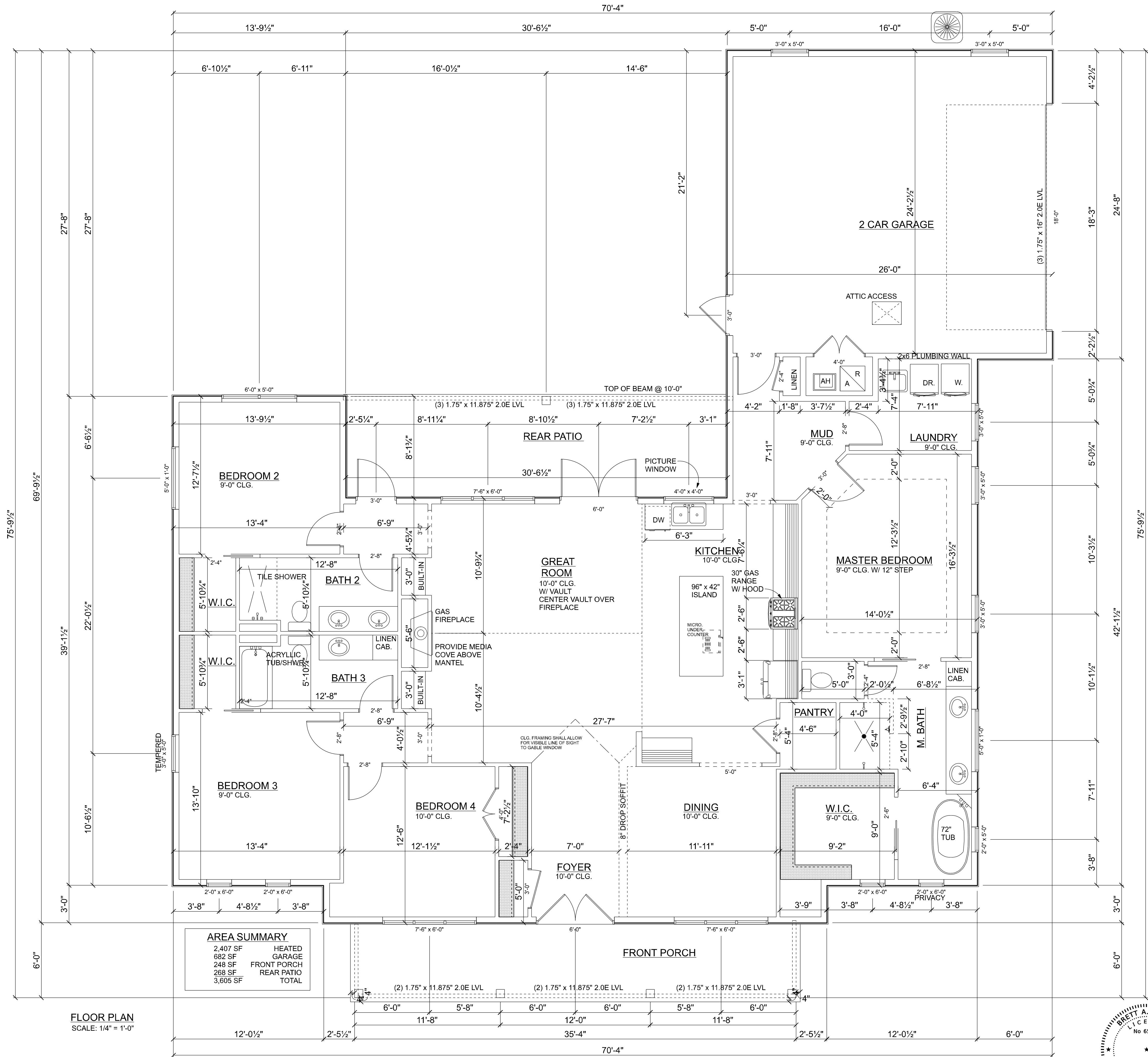
R22.001

COVER SHEET

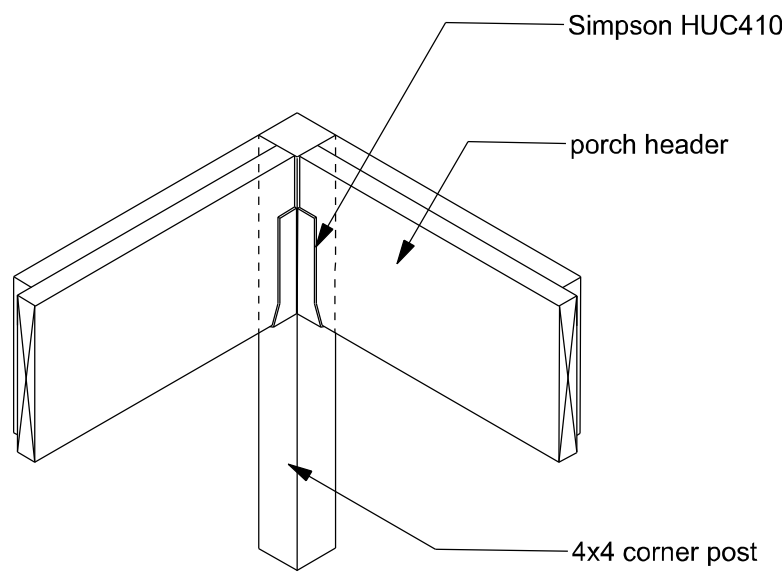
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A-1





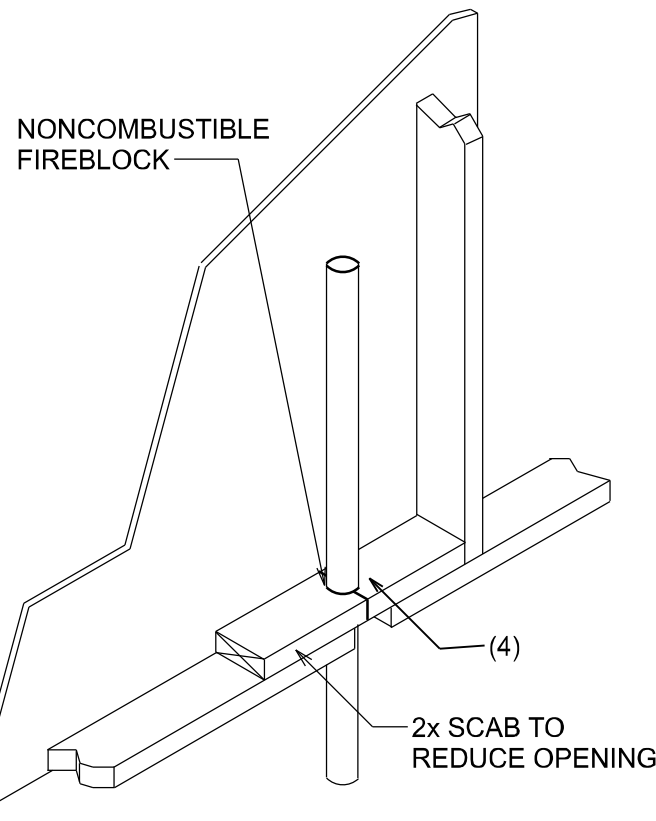
BEAM/WALL CONNECTION  
MAX. CAPACITY - 3640# DOWN; 1810# UPLIFT NOT TO SCALE



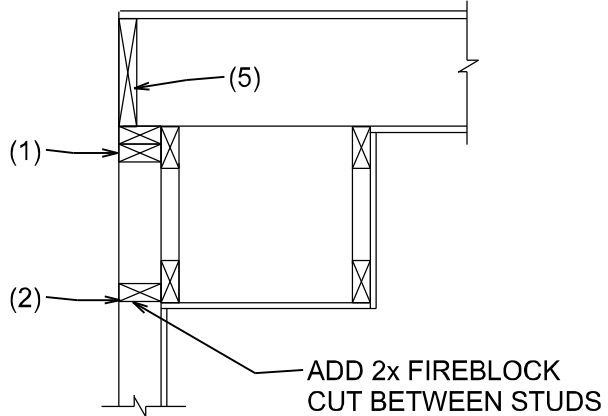
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NTS

FIREBLOCKING NOTES:

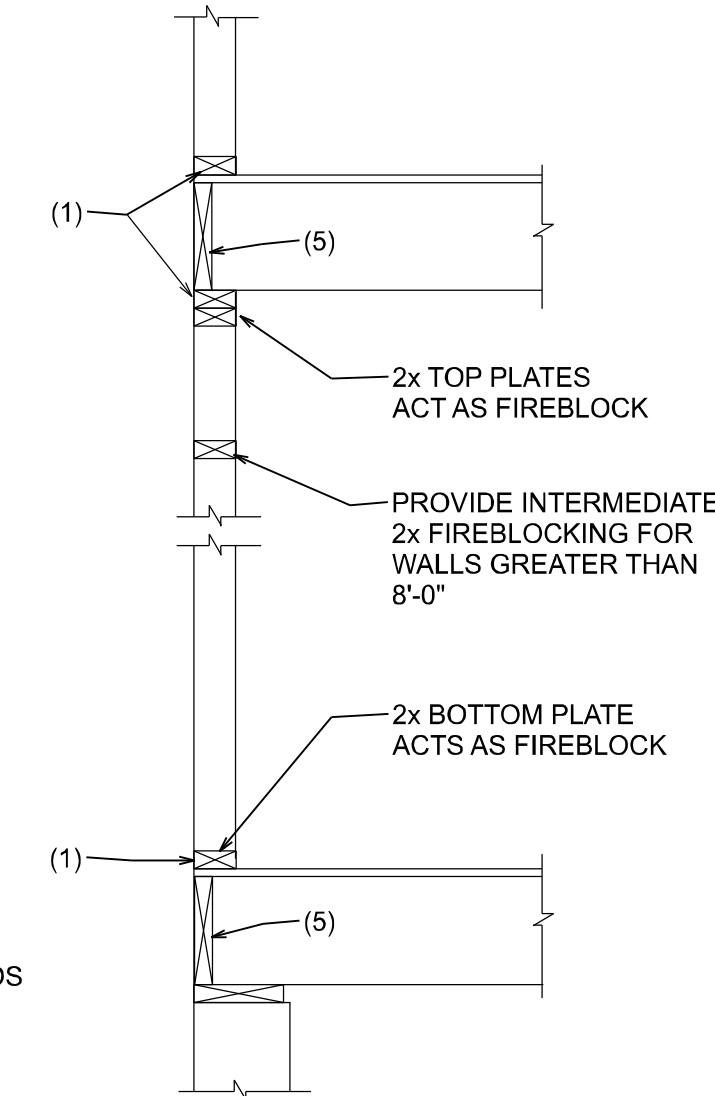
- FIREBLOCKING SHALL BE INSTALLED IN WOOD FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:
- IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS INCLUDING FURRED SPACES AT CEILING AND FLOOR LEVELS.
  - AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS, ETC.
  - IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN.
  - AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVELS WITH PYROPANEL MULTIFLEX SEALANT
  - AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL STUD WALL OR PARTITION SPACES AND CONCEALED SPACES CREATED BY AN ASSEMBLY OF FLOOR JOISTS, FIREBLOCKING SHALL BE PROVIDED FOR THE FULL DEPTH OF THE JOISTS AT THE ENDS AND OVER THE SUPPORTS.



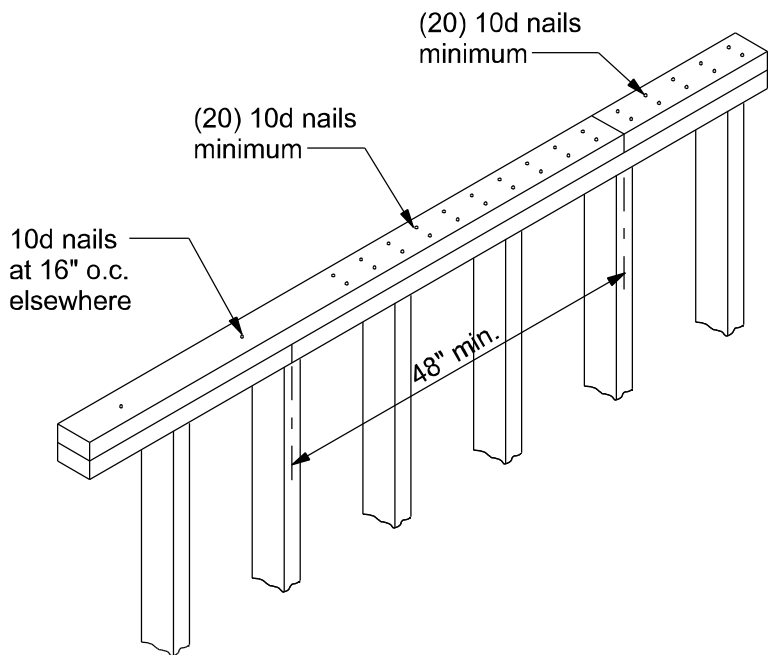
PENETRATIONS



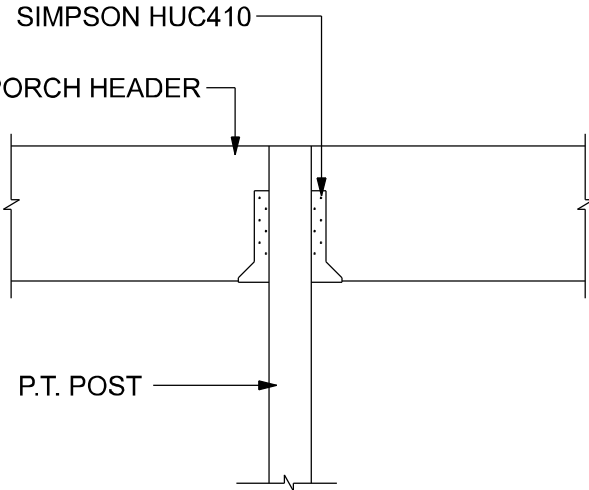
SOFFIT/DROPPED CLG.



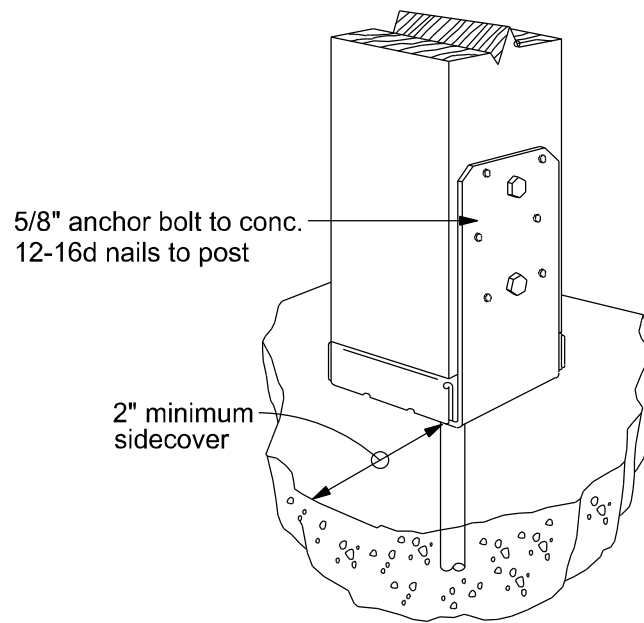
PLATFORM FRAMING



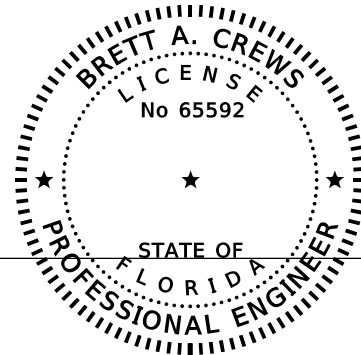
TOP PLATE SPLICE DETAILS  
SCALE: 1/2" = 1'-0"



INTERMEDIATE POST  
NTS



Simpson ABU66



Brett A. Crews, P.E. 65592

REVISIONS		
DATE	BY	DESCRIPTION

DESIGN BY:  
**TRADEMARK**  
Construction Group, Inc.

CERTIFIED GENERAL CONTRACTOR  
CGC1514780

750 SW MAIN BLVD.  
LAKE CITY, FL. 32025  
(386)755-5254

**CES**  
Crews Engineering Services, LLC

CERTIFICATE OF AUTHORIZATION  
NO. 28022

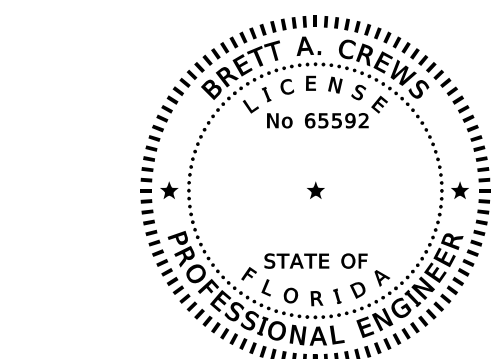
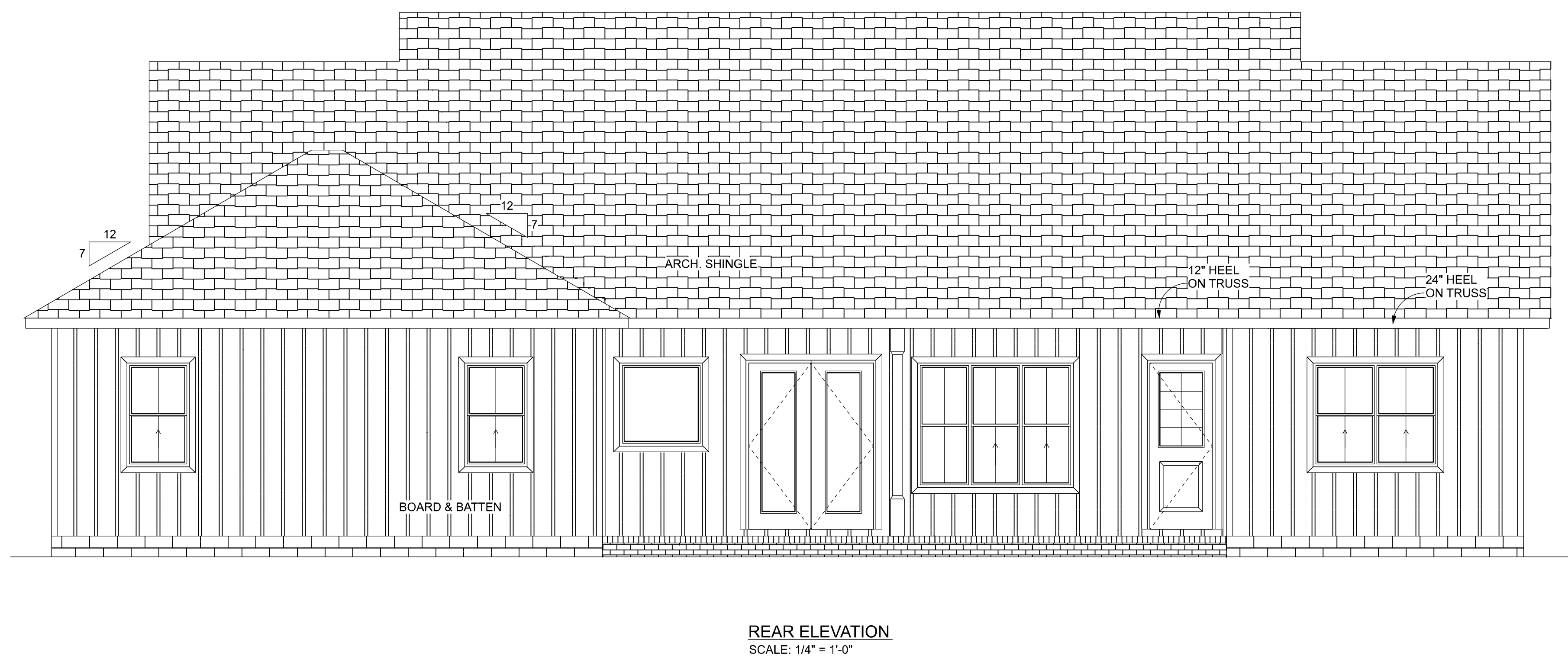
349 SW CREWS FARM TERRACE  
LAKE CITY, FL 32025  
PHONE: 386.623.4303

DRAWN BY:
TM
APPROVED BY:
BC

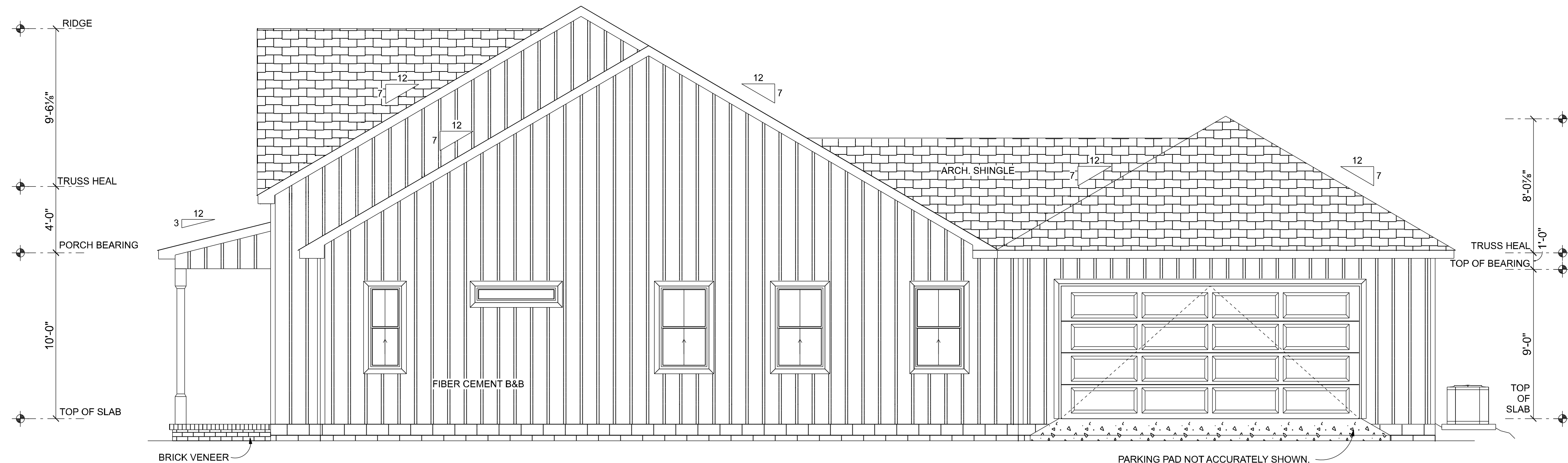
**SELLERS RESIDENCE**

FLOOR PLAN

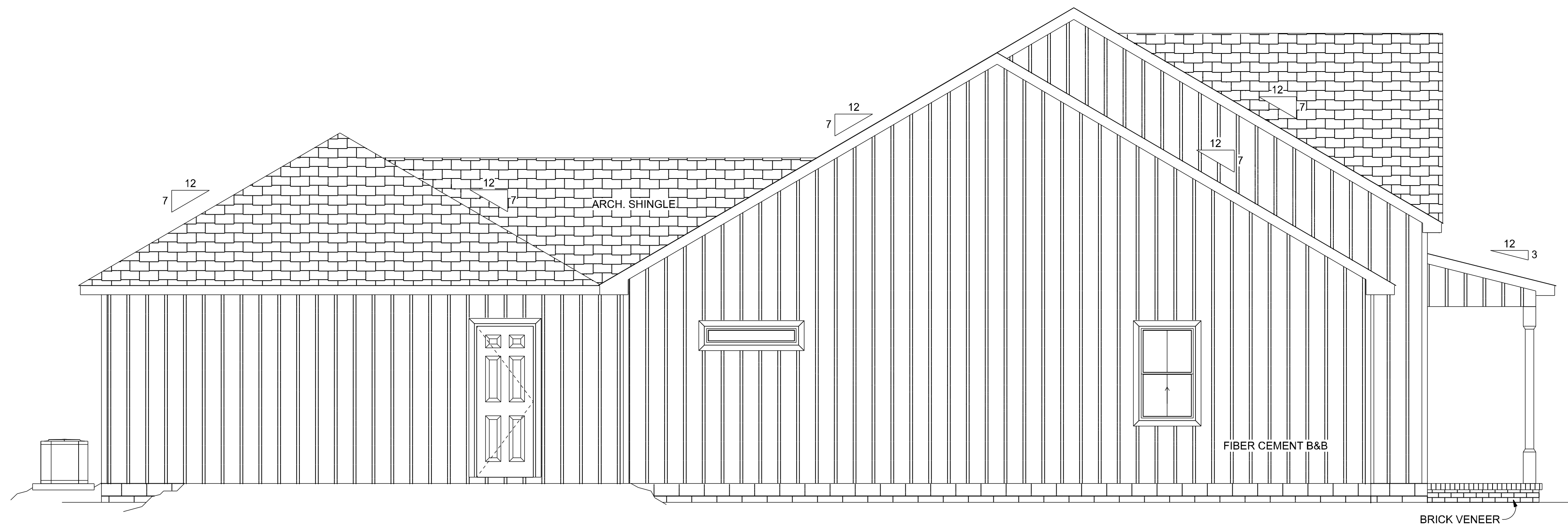
PROJECT NO.:
R22.001
SHEET:
A-2



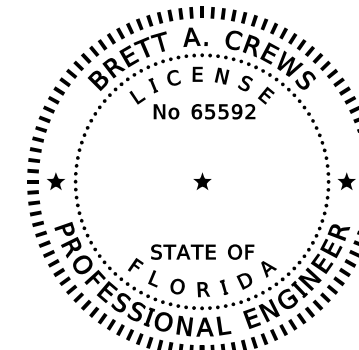
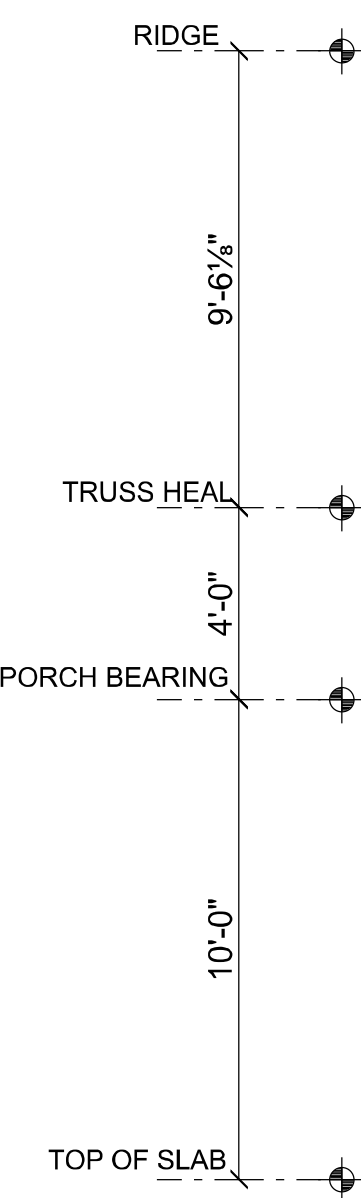
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DATE	BY	DESCRIPTION			750 SW MAIN BLVD. LAKE CITY, FL. 32025 (386)755-5254		349 SW CREWS FARM TERRACE LAKE CITY, FL 32025 PHONE: 386.623.4303		Brett A. Crews, P.E. 65592		APPROVED BY: <b>BC</b>		ELEVATIONS FRONT AND REAR		SHEET: A-3	



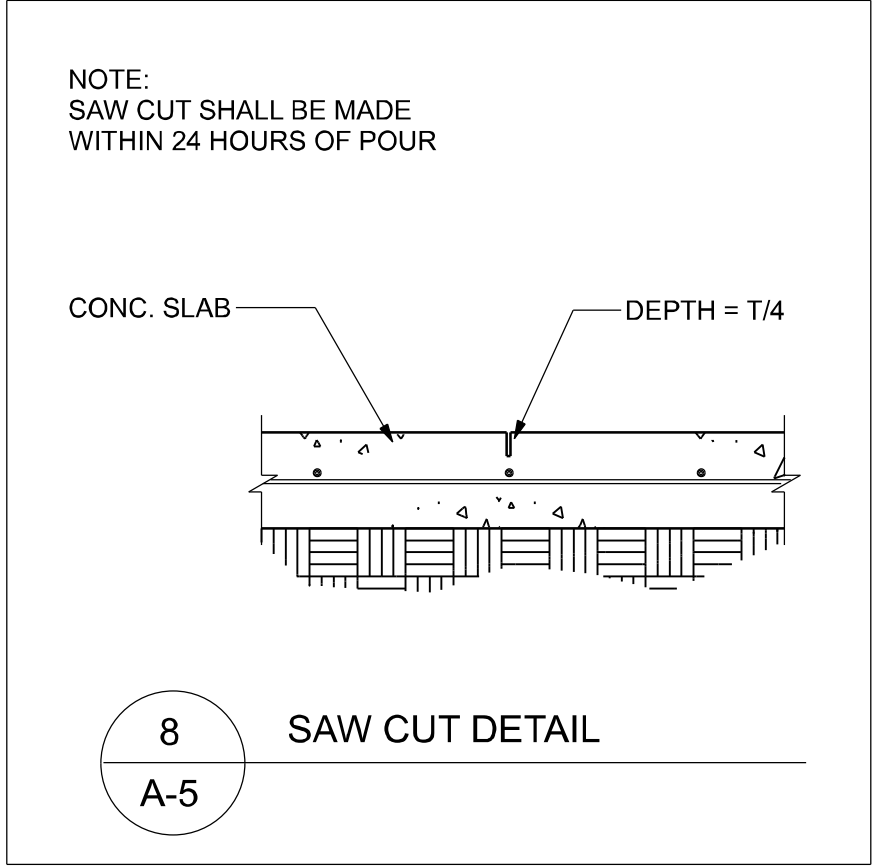
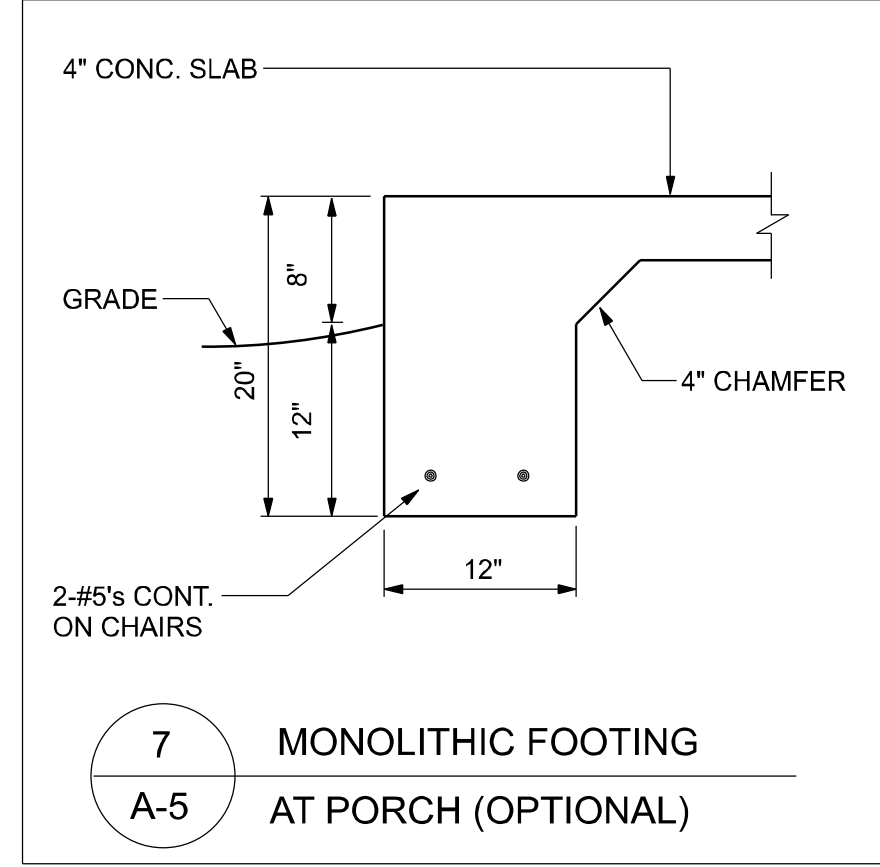
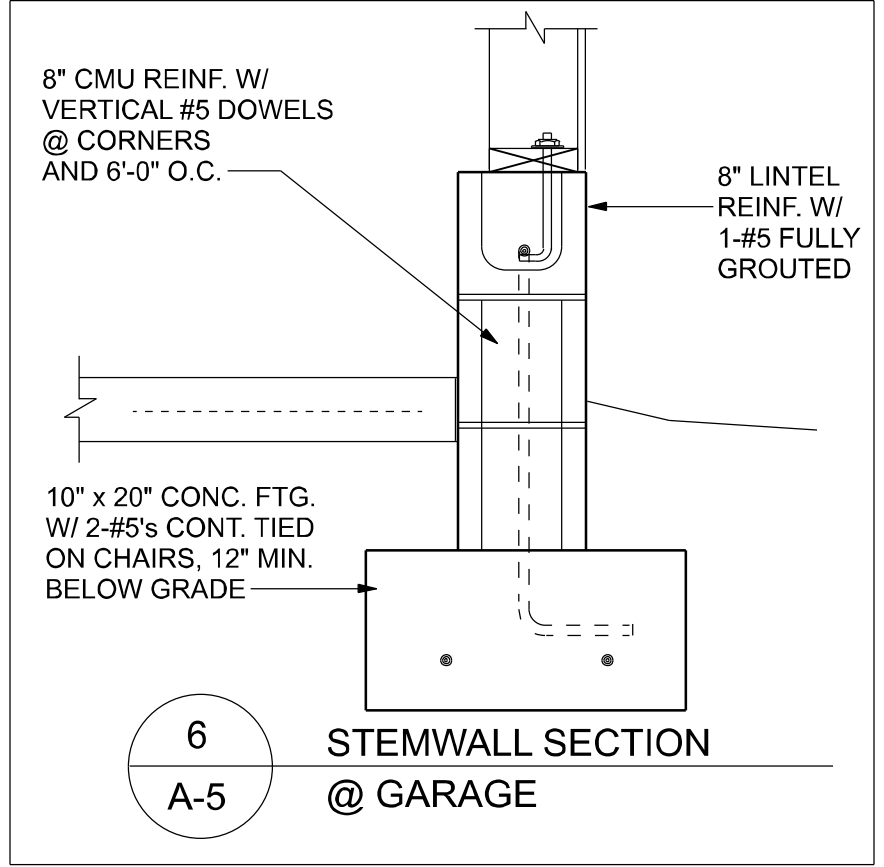
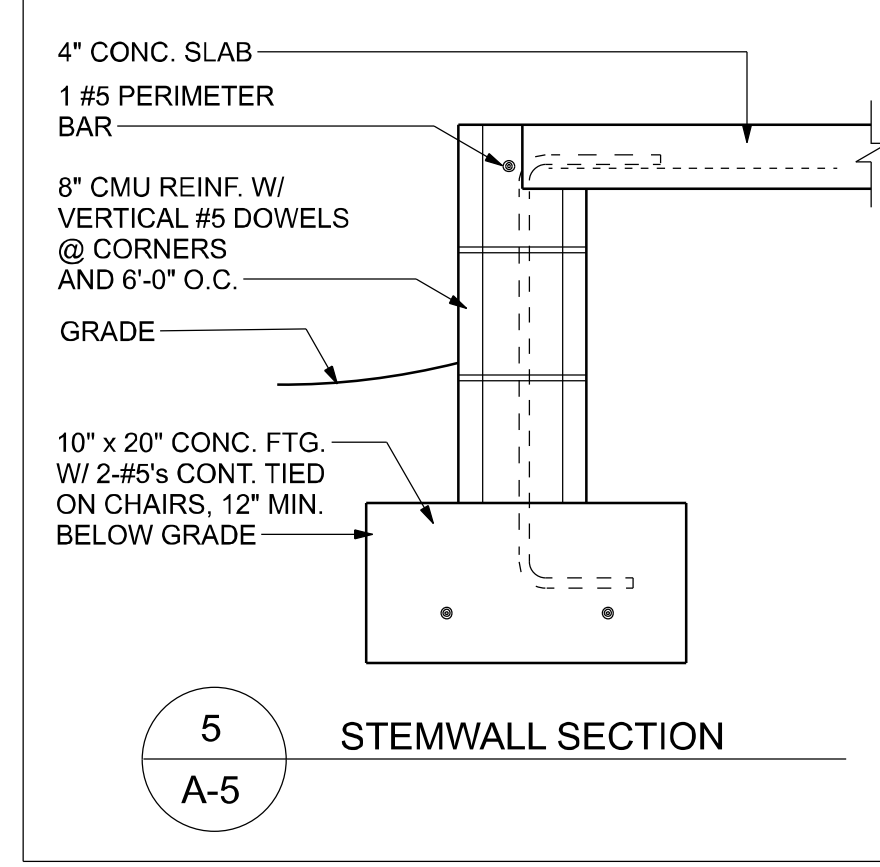
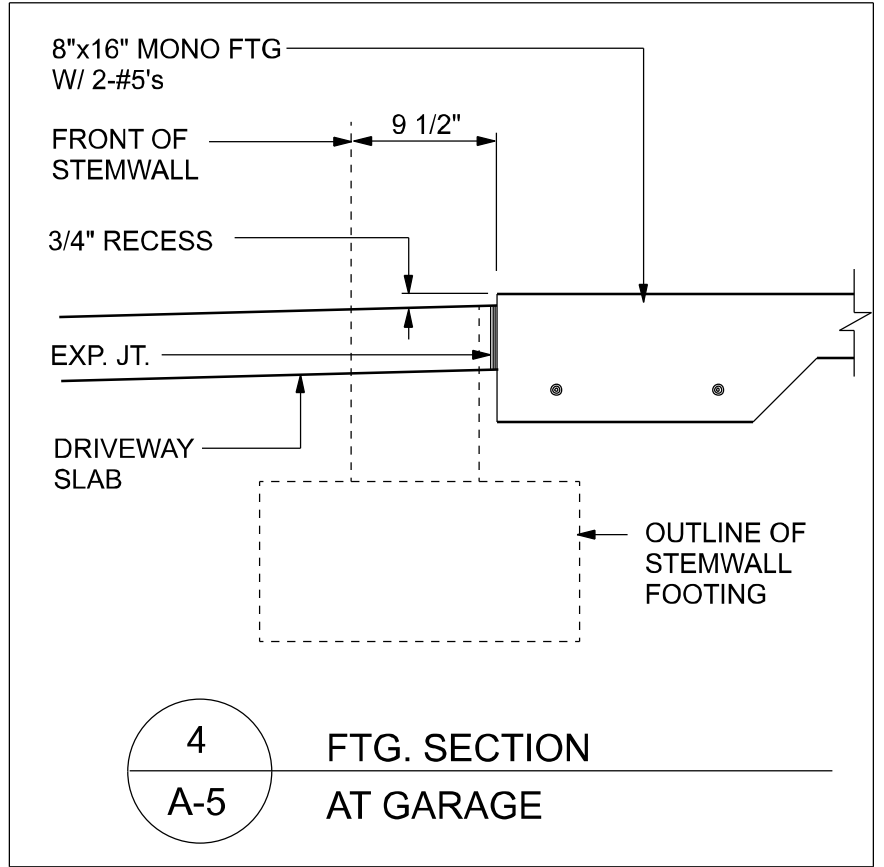
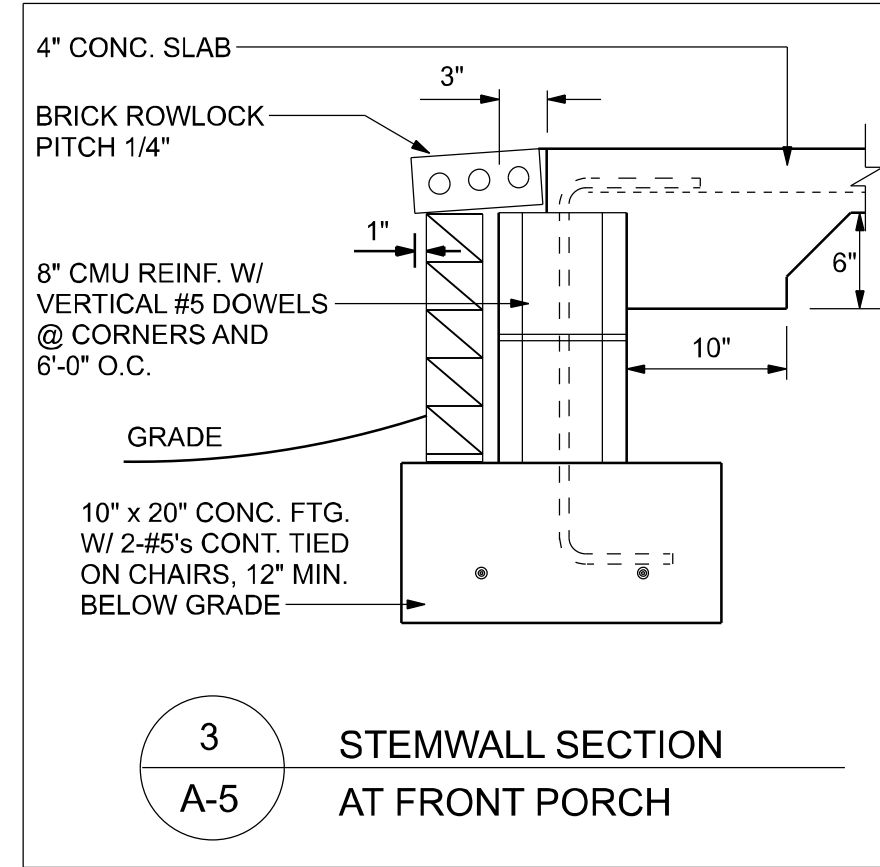
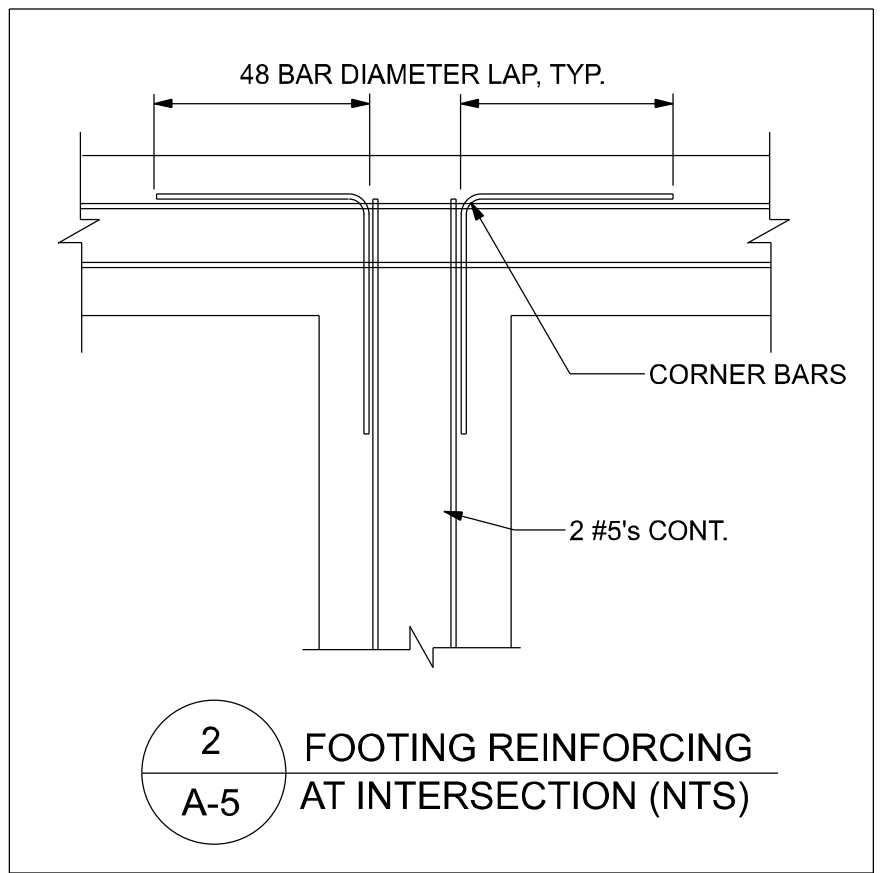
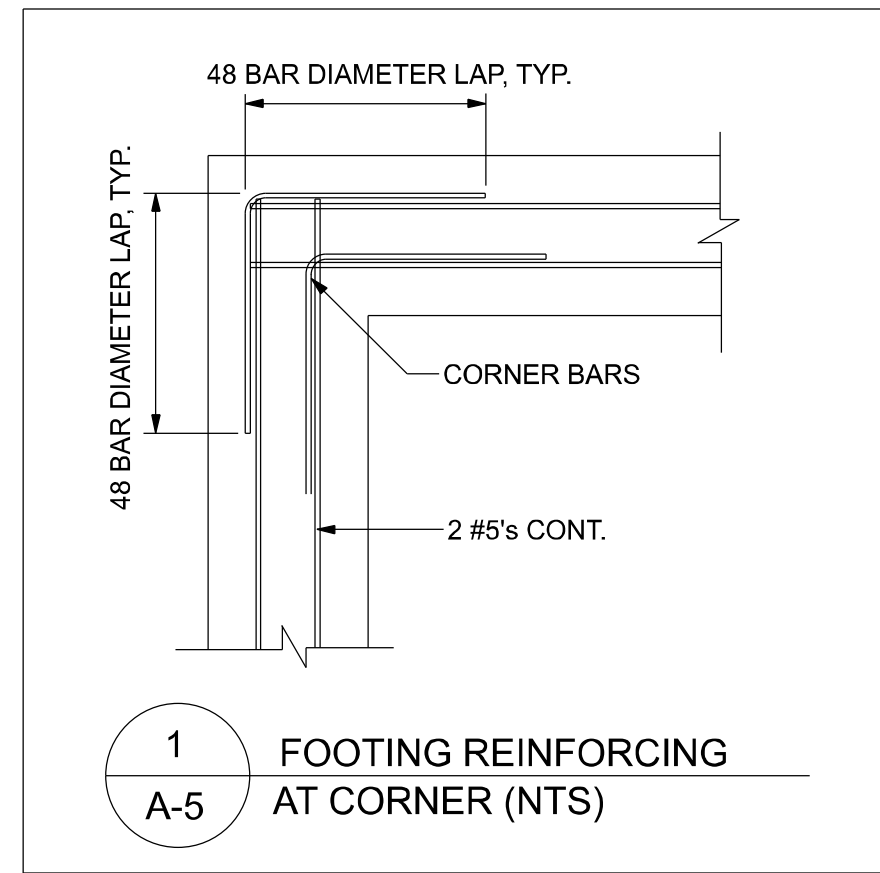
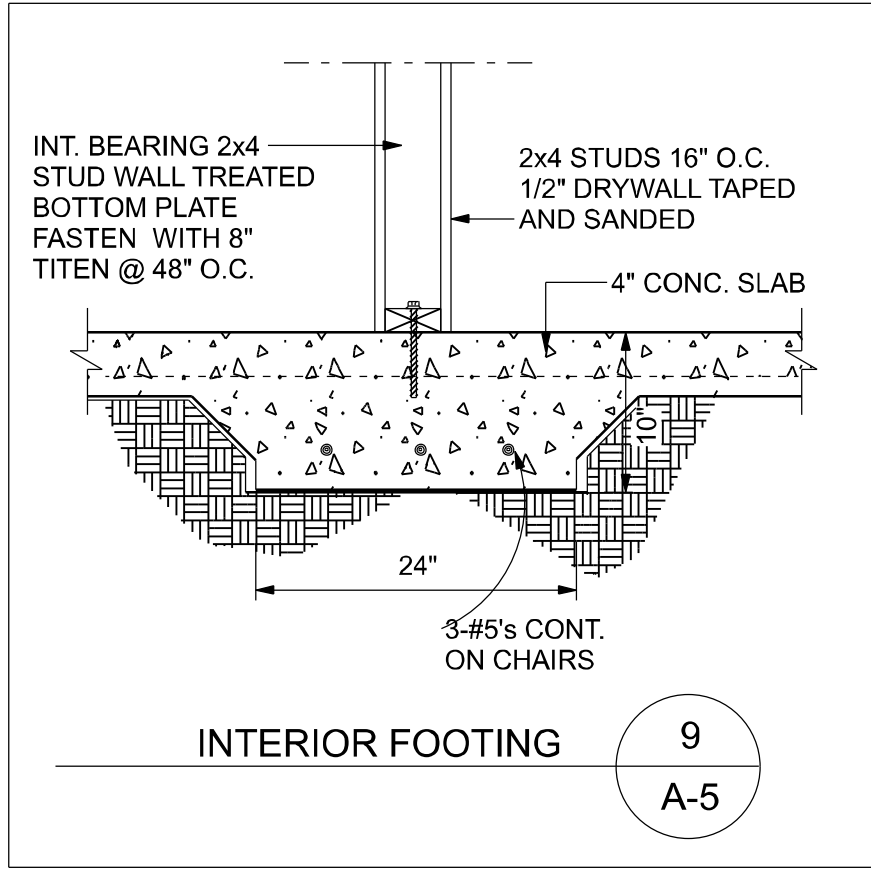
LEFT ELEVATION  
SCALE: 1/4" = 1'-0"



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



REVISIONS			DESIGN BY:	CERTIFIED GENERAL CONTRACTOR CGC1514780	<b>CES</b> Crews Engineering Services, LLC	CERTIFICATE OF AUTHORIZATION NO. 28022	349 SW CREWS FARM TERRACE LAKE CITY, FL 32025 PHONE: 386.623.4303	Brett A. Crews, P.E. 65592	DRAWN BY: <b>TM</b> APPROVED BY: <b>BC</b>	<b>SELLERS RESIDENCE</b>	PROJECT NO.:
DATE	BY	DESCRIPTION									R22.001
			<b>TRADEMARK</b> Construction Group, Inc.	750 SW MAIN BLVD. LAKE CITY, FL. 32025 (386)755-5254						ELEVATIONS SIDES	SHEET: <b>A-4</b>



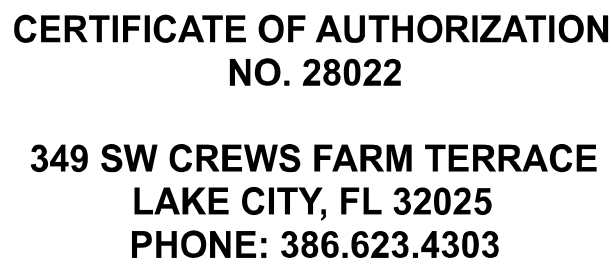
DESIGN BY:

**TRADEMARK**

**Construction Group, Inc.**

CERTIFIED GENERAL CONTRACTOR  
CGC1514780

750 SW MAIN BLVD.  
LAKE CITY, FL. 32025  
(386)755-5254



DRAWN BY: <b>TM</b>	<b><i>SELLERS RESIDENCE</i></b>	PROJECT NO.: R22.001
APPROVED BY: <b>BC</b>	FOUNDATION PLAN	SHEET: A-5





DECK REQUIREMENTS:  
ASPHALT SHINGLES SHALL BE FASTENED TO SOLIDLY SHEATHED DECKS.

SLOPE:  
ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF 4:12  
OR GREATER. FOR ROOF SLOPES FROM 3:12 TO 4:12, DOUBLE UNDERLAYMENT  
IS REQUIRED.

UNDERLAYMENT:  
UNLESS OTHERWISE NOTED, UNDERLAYMENT SHALL CONFORM WITH ASTM D 226  
TYPE 1, OR ASTM D 4869, TYPE 1.

SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET:  
SELF ADHERING POLYMER MODIFIED BITUMEN SHALL COMPLY WITH ASTM D 1970

ASPHALT SHINGLES:  
ASPHALT SHINGLES SHALL HAVE SELF SEAL STRIPS OR BE INTERLOCKING, AND  
COMPLY WITH ASTM D 225 OR ASTM D 3462.

**FASTENERS:**  
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 MATERIAL AND A MINIMUM 3/4" INTO THE ROOF SHEATHING. WHERE ROOF SHEATHING IS LESS THAN 3/4" THICK, THE NAILS SHALL PENETRATE THROUGH THE SHEATHING.

ATTACHMENT:  
ASPHALT SHINGLES SHALL BE SECURED TO THE ROOF WITH NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. WHERE ROOFS LOCATED IN BASIC WIND SPEED OF 110 MPH OR GREATER, SPECIAL METHODS OF FASTENING ARE REQUIRED. UNLESS OTHERWISE NOTED, ATTACHMENT OF ASPHALT SHINGLES SHALL CONFORM WITH ASTM D 3161 OR M-DC PA 107-95.

UNDERLAYMENT APPLICATION:  
FOR ROOF SLOPES FROM 3:12 TO 4:12, UNDERLAYMENT SHALL BE A MINIMUM OF TWO  
LAYERS APPLIED AS FOLLOWS:

1. STARTING AT THE EAVE, A 19 INCH STRIP OF UNDERLAYMENT SHALL BE APPLIED PARALLEL WITH THE EAVE AND FASTENED SUFFICIENTLY TO STAY IN PLACE.
2. 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 SLOPED 4:12 AND GREATER, UNDERLAYMENT SHALL BE A MINIMUM OF ONE LAYER OF UNDERLAYMENT FELT APPLIED 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.

**BASE AND CAP FLASHINGS:**  
BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. BASE FLASHING SHALL BE OF EITHER CORROSION RESISTANT METAL OF MINIMUM NOMINAL THICKNESS 0.019 INCH OR MINERAL SURFACE ROLL ROOFING WEIGHING A MINIMUM OF 77 LBS PER 100 SQUARE FEET. CAP FLASHING SHALL BE CORROSION RESISTANT METAL OF MINIMUM NOMINAL THICKNESS OF 0.019 INCH.

VALLEYS:  
VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS BEFORE APPLYING ASPHALT SHINGLES. VALLEY LININGS OF THE FOLLOWING TYPES SHALL BE PERMITTED.

1. FOR OPEN VALVEYSNED WITH METAL, THE VALLEY LINING SHALL BE AT LEAST 16 INCHES WIDE AND OF ANY OF THE CORROSION RESISTANT METALS IN TABLE 1507.3.9.2.
2. FOR OPEN VALVEYSNED, VALLEY LINING OF TWO PILES OF MINERAL SURFACE ROOFING SHALL BE PERMITTED. THE BOTTOM LAYER SHALL BE 18 INCHES AND THE TOP LAYER A MINIMUM OF 36 INCHES WIDE.
3. FOR CLOSED VALLEYS VALLEY LINING SHALL BE ONE OF THE FOLLOWING:
  1. BOTH TYPES 1 AND 2 ABOVE, COMBINED.
  2. ONE TYPE 2 OR OF SMOOTH ROOF LINING AT LEAST 36 INCHES WIDE AND COMPLYING WITH ASTM D 224.
4. HEAVY UNDERLAYMENT AT LEAST 36 INCHES WIDE AND COMPLYING WITH ASTM D 1970

MATERIAL	MINIMUM THICKNESS (in)	GAGE	WEIGHT (LB)
COPPER			1
ALUMINUM	0.024		
STAINLESS STEEL		28	
GALVANIZED STEEL	0.0179	26 (zinc coated G90)	
ZINC ALLOY LEAD PAINTED TERNE	0.027		2 1/2 20

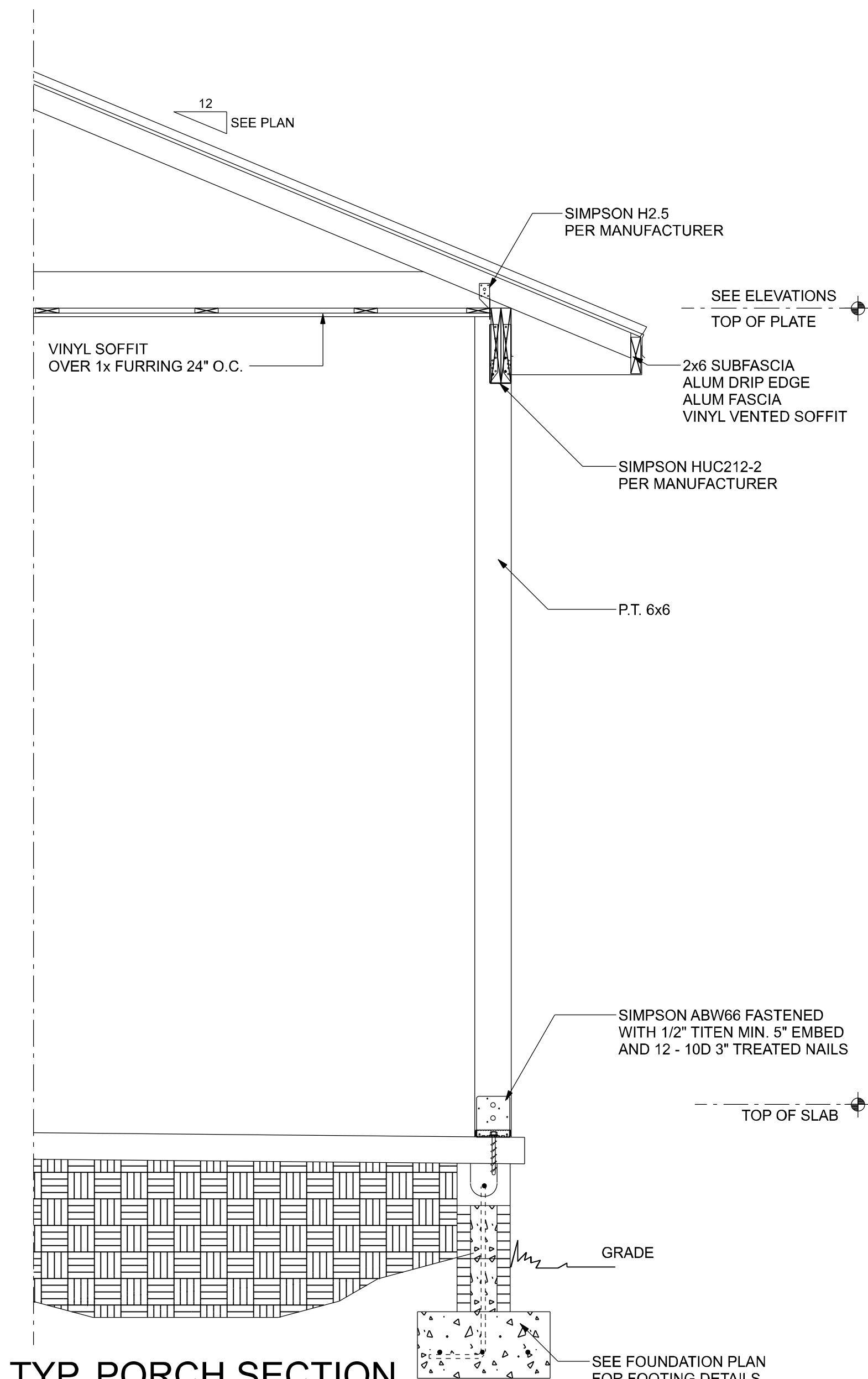
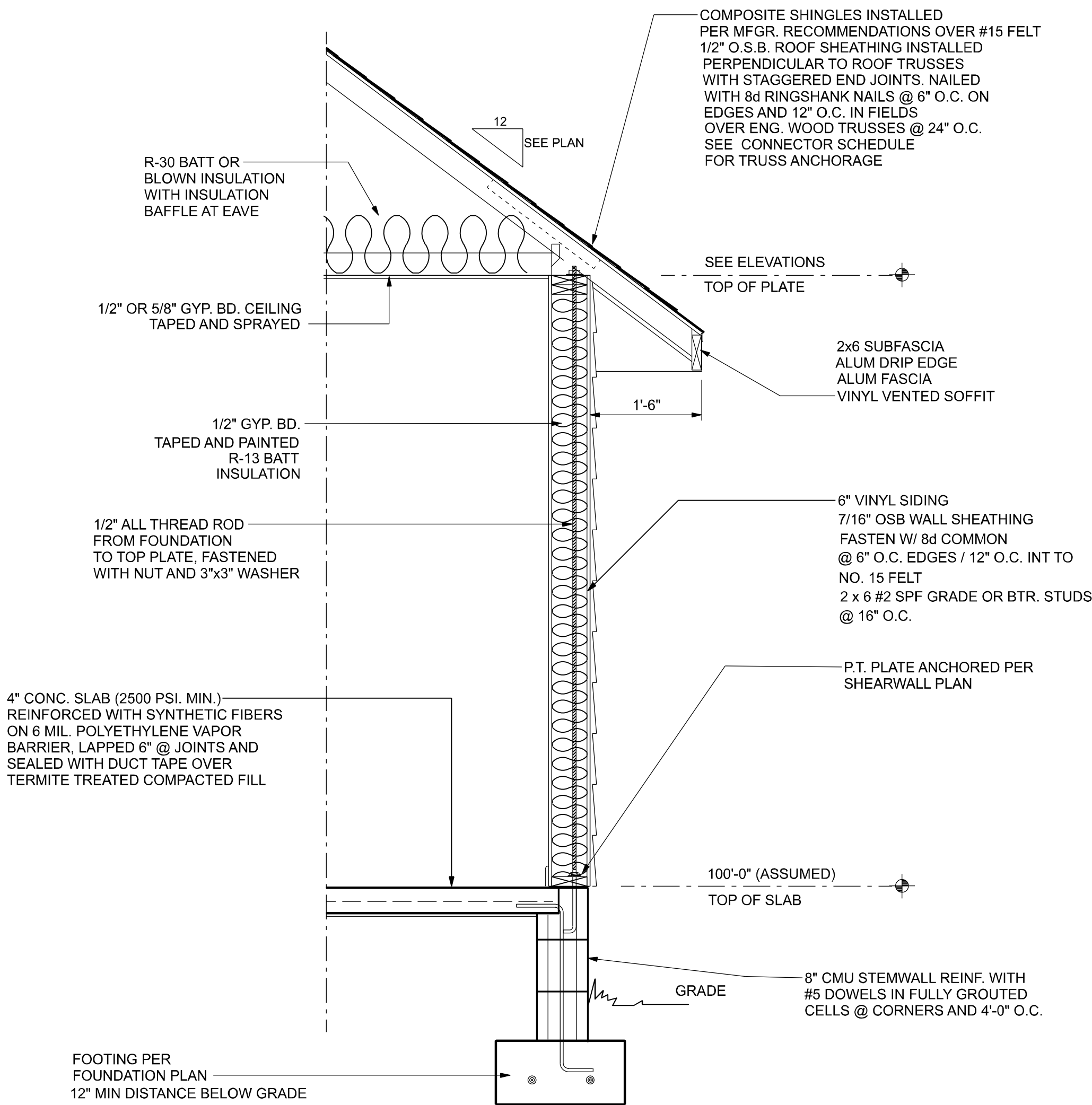
1.	THE CONTRACTOR SHALL INDEMNIFY THE OWNER AGAINST ALL CLAIMS, WHETHER FROM PERSONAL INJURY OR PROPERTY DAMAGE, ARISING FROM EVENTS ASSOCIATED WITH THE WORK PERFORMED UNDER THE CONTRACT FOR THIS PROJECT.	5.	THE OWNER SHALL FILE A "NOTICE OF COMMENCEMENT" PRIOR TO THE BEGINNING OF THE PROJECT AND THE CONTRACTOR(S) SHALL FILE "NOTICE TO OWNER" AND PROVIDE "RELEASE OF LIEN" FOR ALL PAYMENT REQUESTS PRIOR TO DISBURSEMENT OF ANY FUNDS.
2.	THE CONTRACTOR AND/OR SUB-CONTRACTORS SHALL WARRANT ALL WORK FOR A PERIOD OF ONE YEAR FOLLOWING THE WORK DATE OF FINAL COMPLETION AND ACCEPTANCE BY THE OWNER. DEFECTS IN MATERIALS, EQUIPMENT, COMPONENTS AND WORKMANSHIP SHALL BE CORRECTED AT NO FURTHER COST TO THE OWNER DURING THE ONE YEAR WARRANTY PERIOD.	6.	ANY AND ALL DISPUTES ARISING FROM EVENTS ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT BETWEEN THE OWNER, CONTRACTOR(S) AND SUPPLIERS SHALL BE RESOLVED THROUGH BINDING ARBITRATION.
3.	AT THE OWNER'S OPTION, A WARRANTY INSPECTION SHALL BE PERFORMED DURING THE ELEVENTH MONTH FOLLOWING THE COMMENCEMENT OF THE WARRANTY PERIOD, FOR THE PURPOSE OF DETERMINING ANY WARRANTY WORK THAT MAY BE REQUIRED. THE CONTRACTOR SHALL BE PRESENT DURING THIS INSPECTION IF REQUESTED BY THE OWNER.	7.	ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND LOCAL REGULATIONS, INCLUDING APPLICABLE ENERGY CODES. ALL COMPONENTS OF THE BUILDING SHALL MEET WITH THE MINIMUM ENERGY REQUIREMENTS OF THE BUILDING CODE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT IN WRITING PRIOR TO THE COMMENCEMENT OF THE WORK.
4.	THE CONTRACTOR SHALL PAY FOR ALL PERMITS, LICENSES, TESTS AND THE LIKE THAT MAY BE REQUIRED BY THE VARIOUS AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT BE THEY CITY, COUNTY, STATE OR FEDERAL.	8.	ALL INSULATION SHALL BE LEFT EXPOSED AND ALL LABELS LEFT INTACT ON THE WINDOWS AND DOORS UNTIL INSPECTED BY THE BUILDING OFFICIAL.
		9.	ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.

$$\frac{3}{4}'' = 1'-0''$$

THE CUSTOMER IS RESPONSIBLE FOR DELIVERING THE REQUIRED SETS OF CONSTRUCTION DOCUMENTS TO THE PERMIT ISSUING AUTHORITY FOR THE ISSUANCE OF CONSTRUCTION PERMITS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR REVIEWING THE PLANS AND VERIFYING ALL EXISTING CONDITIONS, ELEVATIONS, AND DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION INCLUDING FABRICATION. ALL DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION.

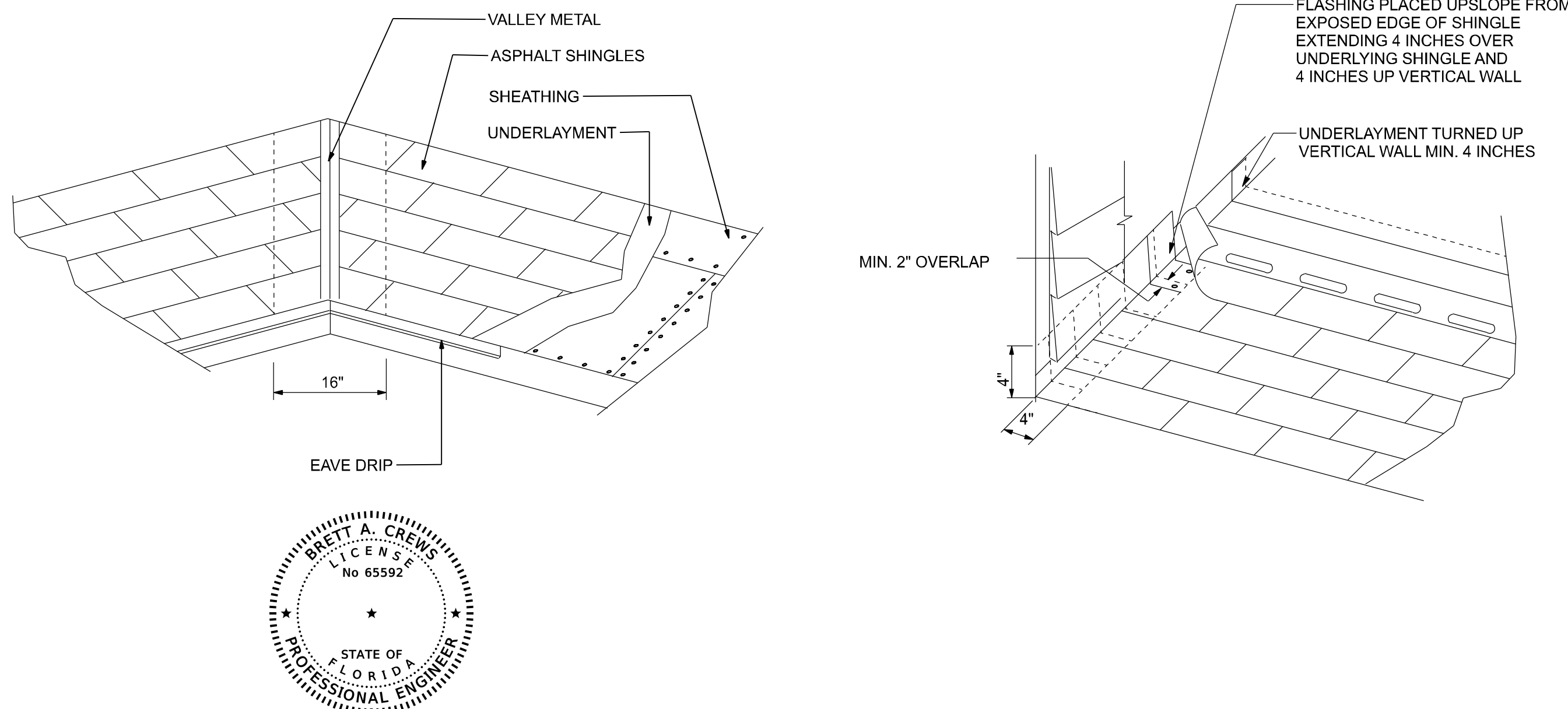
AMPLE DIMENSIONS ARE SHOWN ON THE PLANS TO LOCATE ALL ITEMS.  
SIMPLE ARITHMETIC MAY BE USED TO DETERMINE THE LOCATION OF THOSE  
ITEMS NOT DIMENSIONED.

PLEASE DO NOT MAKE ANY STRUCTURAL CHANGES TO THESE PLANS WITHOUT CONSULTING WITH THE ARCHITECT/ENGINEER. THE OWNER SHALL ASSUME ANY AND ALL LIABILITY FOR STRUCTURAL DAMAGE RESULTING FROM CHANGES MADE TO THE PLANS OR BY SUBSTITUTION OF MATERIALS DIFFERENT FROM SPECIFICATIONS ON THE PLANS.



1. UPLIFT CONNECTORS SUCH AS HURRICANE CLIPS, TRUSS ANCHORS AND ANCHOR BOLTS ARE ONLY REQUIRED ON MEMBERS IN WALLS THAT ARE EXPOSED TO UPLIFT 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 CONSULT THE TRUSS ENGINEERING FOR THE LOCATION OF THESE WALLS.

1. MISSED LINTEL STRAPS FOR MASONRY CONSTRUCTION MAY BE SUBSTITUTED W/ (1) "SIMPSON MTS16 TWIST STRAP W/ 1/4" X 2 1/4" DIA. TITENS TO THE BOND BEAM BLOCK AND ANCHOR TO THE TRUSS FOR WEIGHTS OF 1000 LBS. OR LESS, OR (2) FOR 2000 LBS. OR LESS, OTHERS MAY BE SUBSTITUTED ON A CASE BY CASE BASIS.
2. MISSED "J" BOLTS FOR WOOD BEARING WALLS MAY BE SUBSTITUTED W/ 1/2" DIA. ANCHOR BOLTS SET IN 3/4" DIA. X 6" DEEP UNITEK "PROPOXY" 300 ADHESIVE BINDER FOLLOWING ALL MANUFACTURERS RECOMMENDATIONS ( OR 1/2" X 6" RAWL STUD EXPANSION ANCHORS )
3. REGARDING MISSED REBAR IN DEEP FILLED CELLS: DRILL A 3/4" DIAMETER HOLE TO DEEP AT THE LOCATION OF THE MISSED REBAR AND INSTALL A 32" LONG #5 BAR INTO THE EPOXY FILLED HOLE, USE A TWO PART EMBEDMENT EPOXY ( SIMPSON "EPOXY TIE SET", OR HILTI " 2 PART" EMBEDMENT EPOXY ), MIXED PER MANUFACTURER'S INSTRUCTIONS. ASSURE THAT ALL DUST AND DEBRIS FROM DRILLING ARE REMOVED FROM THE HOLE BY BRUSHING AND VACUATING COMPLETELY. THEN FILL THE HOLE WITH EPOXY. ALLOW THE EPOXY TO CURE TO MANUFACTURER'S SPECIFICATIONS THEN FILL THE CELL IN THE NORMAL WAY DURING BOND BEAM POUR.
4. HURRICANE STRAPS MAY BE SUBSTITUTED WITH A STRAP OF GREATER HOLDOWN VALUE OR GREATER UPLIFT VALUE IN THE FIELD WITHOUT VERIFICATION, PROVIDED ALL MANUFACTURERS INSTALLATION INSTRUCTIONS ARE FULLY FOLLOWED.
5. FOR MORTER 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 )



REVISIONS			DESIGN BY:		CERTIFIED GENERAL CONTRACTOR		CERTIFICATE OF AUTHORIZATION		DRAWN BY:		PROJECT NO.:	
DATE	BY	DESCRIPTION	TRADEMARK		CGC1514780		NO. 28022		TM		R22.001	
			Construction Group, Inc.		750 SW MAIN BLVD. LAKE CITY, FL. 32025 (386)755-5254		349 SW CREWS FARM TERRACE LAKE CITY, FL 32025 PHONE: 386.623.4303		APPROVED BY: BC		SECTIONS AND FRAMING DETAILS	
					CES Crows Engineering Services, LLC				Brett A. Crews, P.E. 65592		A-8	

1. One all-thread rod at each corner.
2. One all-thread rod at each end of shearwalls.
3. One all-thread rod at each end of opening headers greater than 3'-0"
4. Check sub-sheathing to top plate connection for horizontal transfer capability.
5. If necessary, add all-thread rods to girders individually to exclude the from average uplift p/f.
6. Check sole plate to slab connection, additional anchors may be required for lateral and shear load transfer.

Placement at slab level:

When presetting the all-thread rod at a building corner, the rod should be placed 8 to 12 inches away from the corner so it does not set under the corner framing members. When a all-thread rod is specified at a building corner, it may be placed on either side of the corner.

When presetting the all-thread rod at a header end, the rod should be placed 8 to 12 inches away from the header end so it does not fall under the stud pack framing members.

Top connections made at corners and header ends shall be made within 2 inches of the framing pack. A nut and 3X3 washer shall be applied to the top plates and tightened securely.

When using the rod coupler, care should be taken to ensure full and equal thread engagement. This is easily achieved by threading the coupler all the way onto the rod, then standing the two rods end to end, then threading the coupler back over the rod joint so each rod is halfway into the coupler.

In the case of an all thread rod misplacement, the rod may be epoxied into the concrete.

The slab level sole plate shall be connected to the slab with the connectors specified and at the spacing specified within the design documents. All-thread rods shall be placed as per the design specifications. All-thread rods with a nut and washer at the sole plate will qualify as a sole plate connection but may require other anchors intermediate of the all-thread rod locations to qualify the specified spacing requirements.

On multiple story applications, the all-thread rod system shall be rechecked for proper tension just before the walls are veneered. This will allow the all-thread rod system to compensate for the buildings dead load compression.

1. ALL SHEARWALLS SHALL BE TYPE 2 SHEARWALLS AS DEFINED BY STD 10-99 305.4.3.
2. THE WALL SHALL BE ENTIRELY SHEATHED WITH 7/16" O.S.B. INCLUDING AREAS ABOVE AND BELOW OPENING.
3. ALL SHEATHING SHALL BE ATTACHED TO FRAMING ALONG ALL FOUR EDGES WITH JOINTS FOR ADJACENT PANELS OCCURRING OVER COMMON FRAMING MEMBERS OR ALONG BLOCKING.
4. NAIL SPACING SHALL BE 6" O.C. EDGES AND 12" O.C. IN THE FIELD.
5. TYPE 2 SHEARWALLS ARE DESIGNED FOR THE OPENING IT CONTAINS. MAXIMUM HEIGHT OF OPENING SHALL BE 5/6 TIMES THE WALL HEIGHT. THE MINIMUM DISTANCE BETWEEN OPENINGS SHALL BE THE WALL HEIGHT/3.5 ie. FOR 8'-0" WALLS = (2'-3").

UPLIFT CAPACITY = 474 pl  
(TABLE 305S1 SSTD10-99)

NOTE:  
ALL WALL SHEATHING SHALL BE WINDSTORM  
1 1/8" FULL HEIGHT SHEATHING-  
SEE DETAIL 1 FOR NAILING



SCALE: 1/2" = 1'-0"

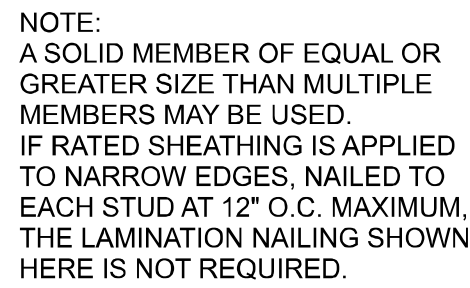
NOTE:  
VERIFY GIRDER TRUSS LOCATION  
ON TRUSS LAYOUT FOR REQ'D  
ALL THREAD AT GIRDER LOCATION



NTS

## ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS

OPENING CONNECTION REQUIREMENTS				
CLEAR OPENING WIDTH	HEADER SIZE #2 GRADE OR BETTER	END BEARING	CONNECTOR AT EACH END OF OPENING	ANCHORAGE TO FOUNDATION @ EACH END OF OPENING
0' - 3'	(2) 2x8	1.5"	N/A	N/A
>3' - 6'	(2) 2x10	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>6' - 9'	(2) 2x12	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>9' - 12'	(2) 1 3/4" x 11 1/4" LVL - 2.0E	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>12' - 15'	(2) 1 3/4" x 11 1/4" LVL - 2.0E	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>15' - 18'	(2) 1 3/4" x 11 1/4" LVL - 2.0E	4.5"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD

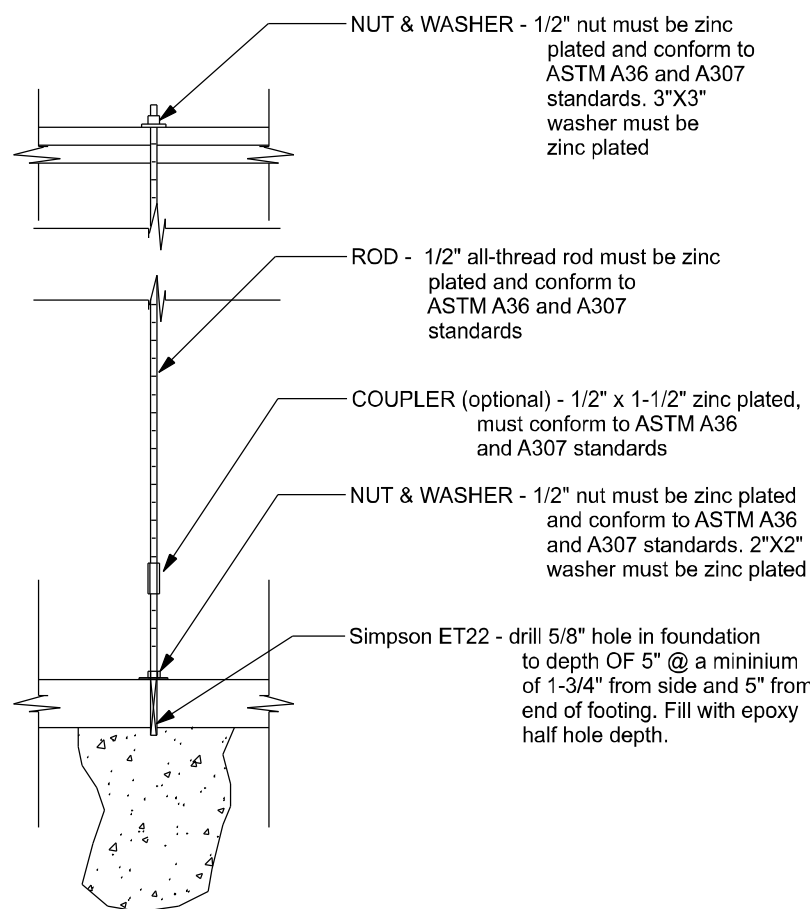
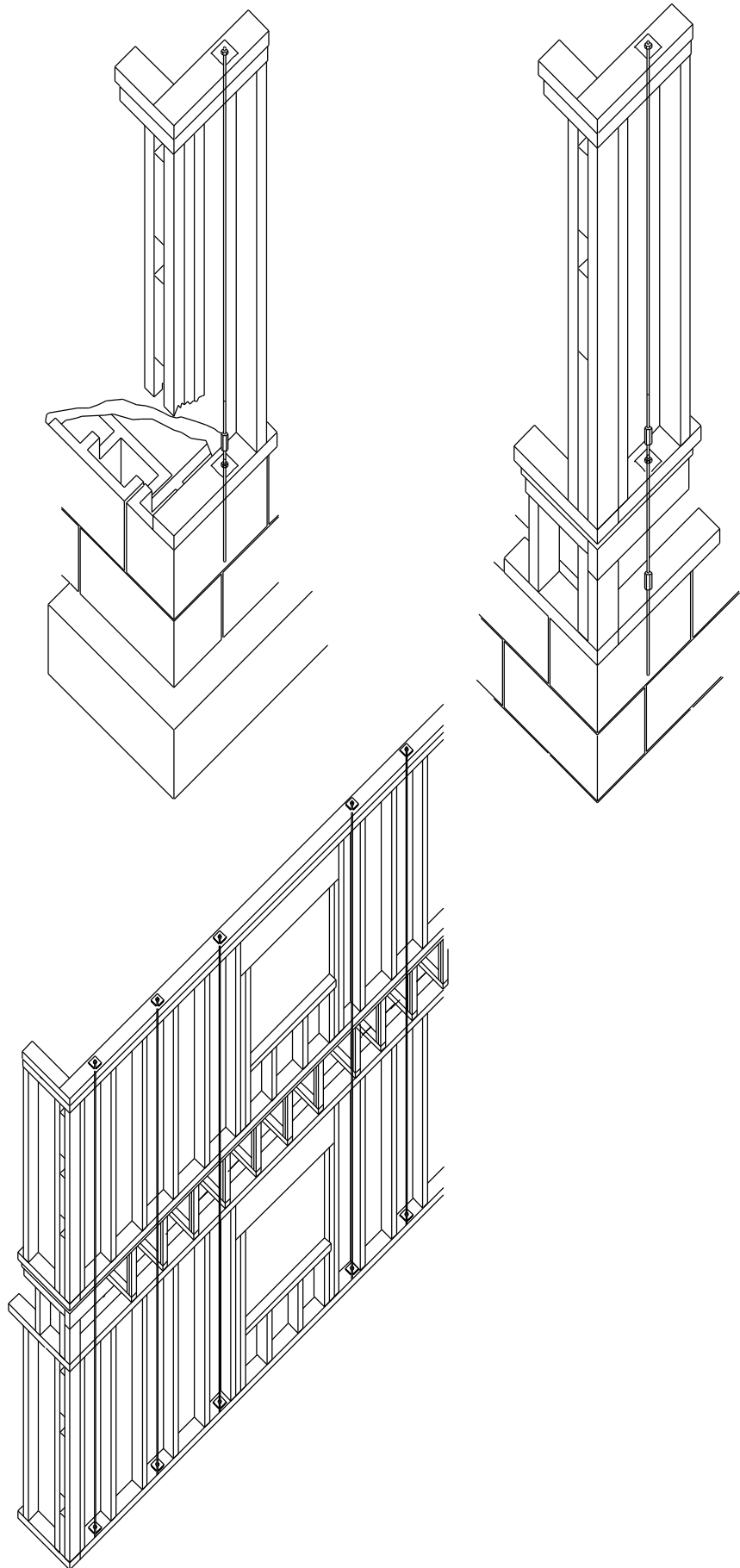


A diagram of a horizontal beam of length 12 ft. A triangular load starts at 0 lb/ft at the left end and increases linearly to 3 lb/ft at the right end. A point load of 1 lb is applied at the right end of the beam. The beam is supported by a pin support at the left end and a roller support at the right end. The distance between the supports is 12 ft. The triangular load is represented by a triangle with a peak of 3 lb/ft at the right end. The point load is represented by a downward arrow of 1 lb at the right end.

END (TOP OR BOTTOM)

## GIRDER COLUMN DETAIL

SCALE: 1/2" = 1'-0"



## DESCRIPTION

**TRADEMARK**  
**Construction Group, Inc.**

CERTIFIED GENERAL CONTRACTOR  
CGC1514780

750 SW MAIN BLVD.  
LAKE CITY, FL. 32025  
(386)755-5254

**CES**  
Crews Engineering Services, LLC

**349 SW CREWS FARM TERRACE  
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PHONE: 386.623.4303**

A circular professional engineer seal for Brett A. Crews. The outer ring contains the text "BRETT A. CREWS" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the text "LICENSE" and "No 65592" at the top, and "STATE OF FLORIDA" at the bottom, with a single star in the center.

TM

BC

***SELLERS RESIDENCE***

## SHEARWALL DETAILS

R22.001

A-9