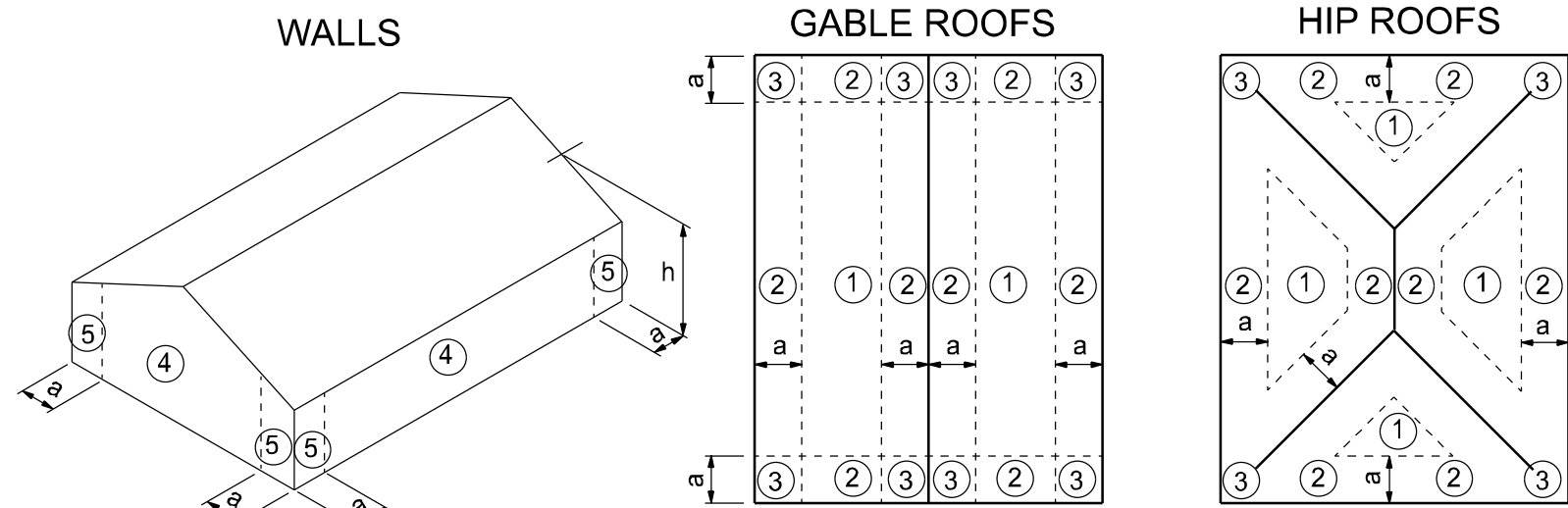


ALL WIND LOADS ARE IN ACCORDANCE WITH SECTION 1609, FLORIDA BUILDING CODE 6TH EDITION (2017)		
FLOOR AND ROOF LIVE LOADS		
UNINHABITABLE ATTICS:	20 PSF	
HABITABLE ATTICS, BEDROOM:	30 PSF	
ALL OTHER ROOMS:	40 PSF	
GARAGE:	40 PSF	
ROOFS:	20 PSF UNIFORM	
WIND DESIGN DATA		
ULTIMATE WIND SPEED:	130 MPH	
NOMINAL (BASIC) WIND SPEED:	101 MPH	
RISK CATEGORY:	II	
WIND EXPOSURE:	B	
ENCLOSURE CLASSIFICATION:	ENCLOSED	
INTERNAL PRESSURE COEFFICIENT:	0.18 +/-	
COMPONENTS AND CLADDING		
ROOFING ZONE 1:	16.8 PSF MAX.	-18.4 PSF MIN.
ROOFING ZONE 2:	16.8 PSF MAX.	-21.5 PSF MIN.
ROOFING ZONE 3:	16.8 PSF MAX.	-21.5 PSF MIN.
ROOFING AT ZONE 2 OVERHANGS:	-31.1 PSF MIN.	
ROOFING AT ZONE 3 OVERHANGS:	-31.1 PSF MIN.	
STUCCO, CLADDING, DOORS AND WINDOWS		
ROOFING ZONE 4:	18.4 PSF MAX.	-19.9 PSF MIN.
ROOFING ZONE 5:	18.4 PSF MAX.	-24.6 PSF MIN.
9' WIDE O/H DR.:	16.1 PSF MAX.	-18.3 PSF MIN.
16' WIDE O/H DR.:	16.0 PSF MAX.	-17.3 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 6TH EDITION (2017) BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-14) SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS (ACI 301-16) BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-13) NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2015 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: 120 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 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

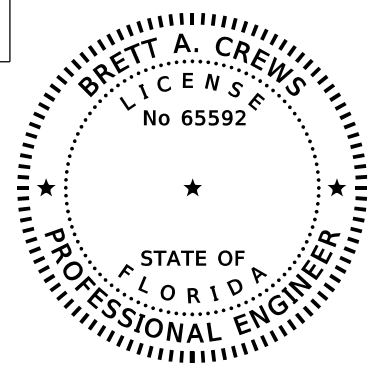
TERRELL RESIDENCE

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/SH	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	Thik'n.	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.	Microlam	VB	Vanity Base
Ea.	Each	Mir.	Mirror	Vert.	Vertical
E.W.	Each Way	Mon.	Monolithic	VL.	Versalram
Elev.	Elevation	N.T.S.	Not to Scale	VTR	Vent through Roof
Ext.	Exterior	Opn'g.	Opening	W	Washer
Exp.	Expansion	Opt.	Optional	W/	With
F.B.C.	Florida Bldg. Code	Pc.	Piece	W/C	Water Closet
Fin. Fir.	Finished Floor	Ped.	Pedestal	W.A.	Wedge Anchor
F.G.	Fixed Glass	PL	Parallam	Wd	Wood
		PLF	Pounds per linear foot	WP	Water Proof

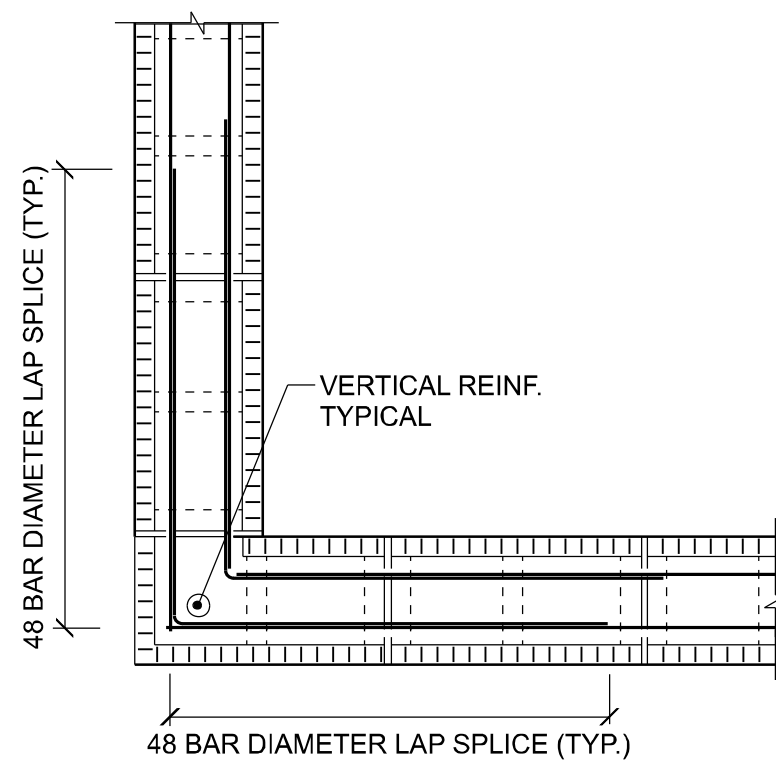
INDEX OF SHEETS

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	MASONRY DETAILS
A-8	ELECTRICAL PLAN

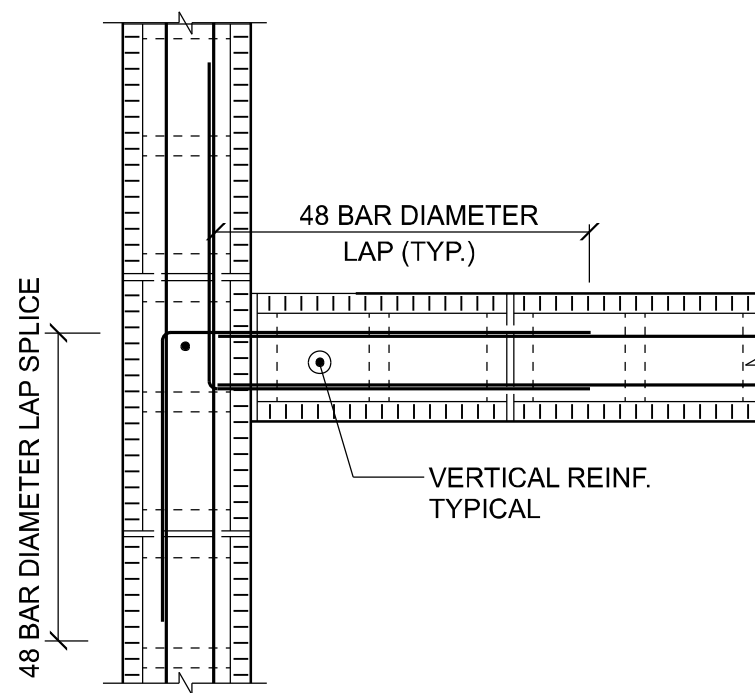


REVISIONS			DESIGN BY:	CERTIFIED GENERAL CONTRACTOR CGC1514780	 <b>CES</b> Crews Engineering Services, LLC	CERTIFICATE OF AUTHORIZATION NO. 28022  349 SW CREWS FARM TERRACE LAKE CITY, FL 32025 PHONE: 386.623.4303	 Digitally signed by Brett A. Crews Date: 2020.10.13 08:57:58-04'00'  Brett A. Crews, P.E. 65592	DRAWN BY:  <b>TM</b>  APPROVED BY:  <b>BC</b>	<b>TERRELL RESIDENCE</b>	PROJECT NO.:  R20.003
DATE	BY	DESCRIPTION							 <b>TRADEMARK</b> Construction Group, Inc.	750 SW MAIN BLVD. LAKE CITY, FL. 32025 (386)755-5254

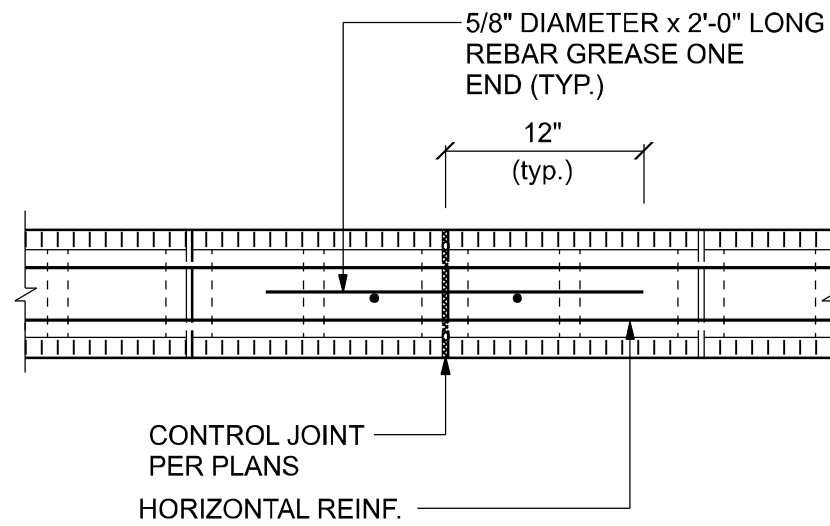




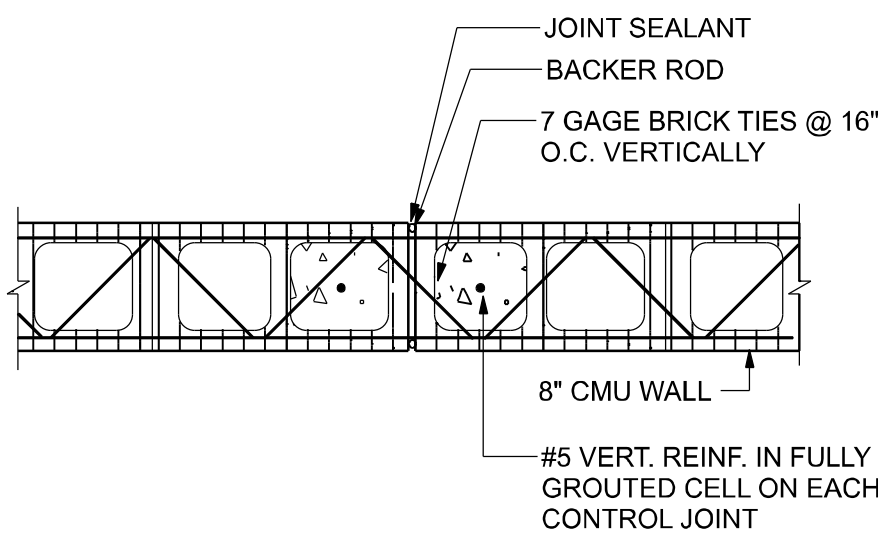
**BOND BEAM AT CORNER**  
SCALE: 3/4" = 1'-0"



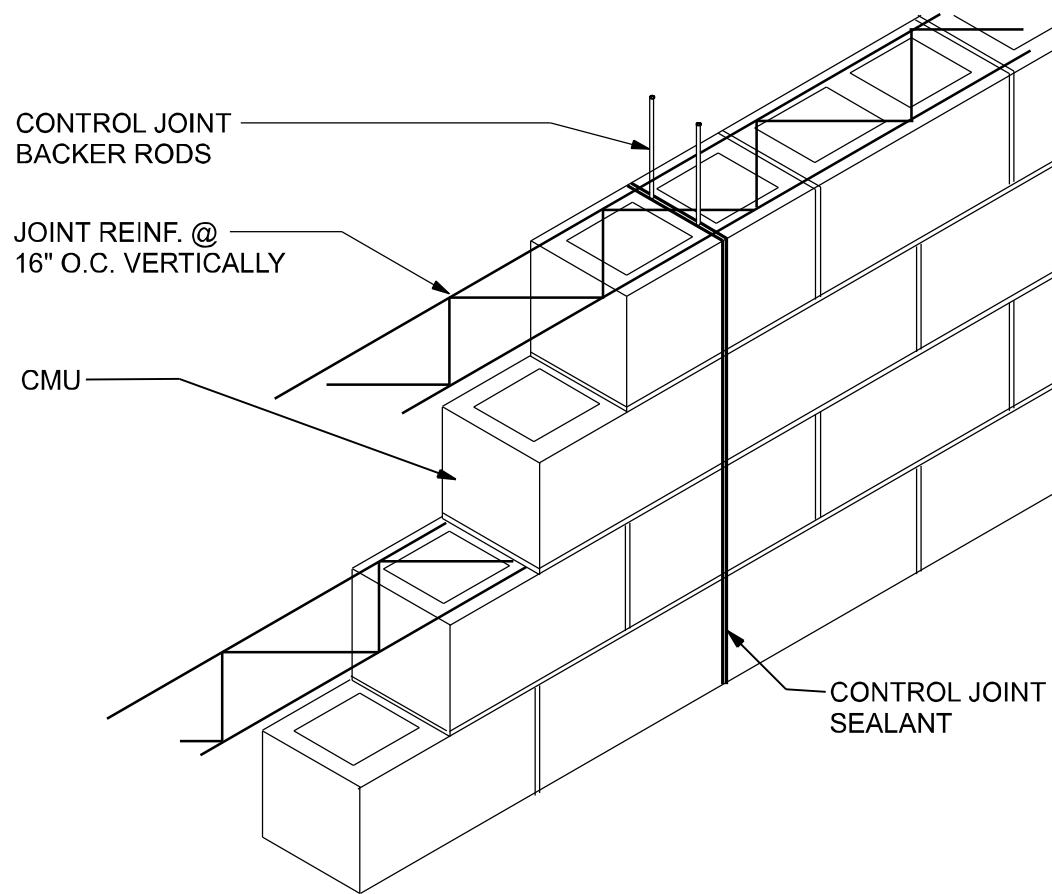
**BOND BEAM AT INTERSECTION**  
SCALE: 3/4" = 1'-0"



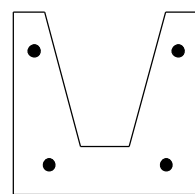
**BOND BEAM AT CONTROL JOINT**  
SCALE: 3/4" = 1'-0"



**CONTROL JOINT PLAN**  
SCALE: 3/4" = 1'-0"

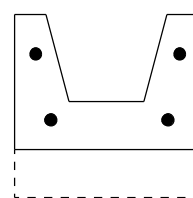


**CONTROL JOINT LOCATION**  
NTS



Lintel Concrete Strength = 4000 psi  
Fill Concrete Strength = 3000 psi  
Steel Strength = Grade 60 (#6), Grade 40 (#2 - #5)

TYPE	TOP BARS	BOTTOM BARS
A	NONE	2-#3
B	2-#2	2-#4
C	2-#3	2-#4
D	2-#3	2-#5
E	2-#4	2-#6



Lintel Concrete Strength = 4000 psi  
Fill Concrete Strength = 3000 psi  
Steel Strength = Grade 60 (#6), Grade 40 (#2 - #5)

TYPE	TOP BARS	BOTTOM BARS
A	NONE	2-#3
B	NONE	2-#4
C	2-#2	2-#4

**PRECAST LINTEL OVER OPENINGS**

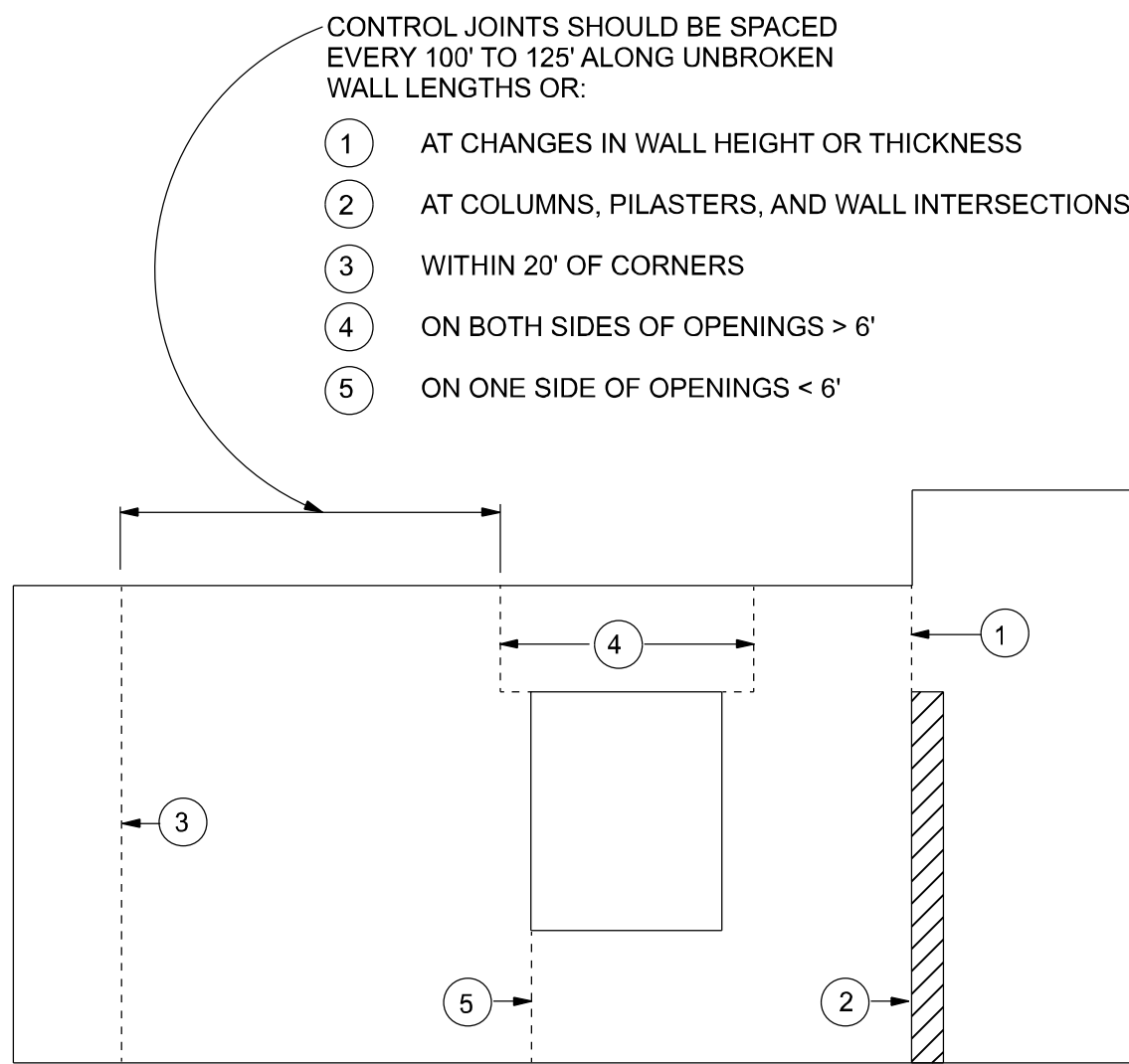
LENGTH	CLEAR SPAN	TYPE	FILLED + BEAM
4'-6"	3'-2"	A	6000+ PLF
7'-6"	6'-2"	B	5663 PLF
12'-0"	10'-8"	D	2181 PLF
17'-4"	16'-0"	E	1366 PLF

FILLED + BEAM = Acting as composite beam with an 8" perimeter beam  
1-#5 rebar in lintel, 1-#5 rebar in perimeter beam

**DOORWAY HEADER**

DOOR SIZE	TYPE	FILLED + BEAM
3'-0"	A	6000+ PLF
5'-0"	B	5689 PLF
6'-0"	C	4262 PLF

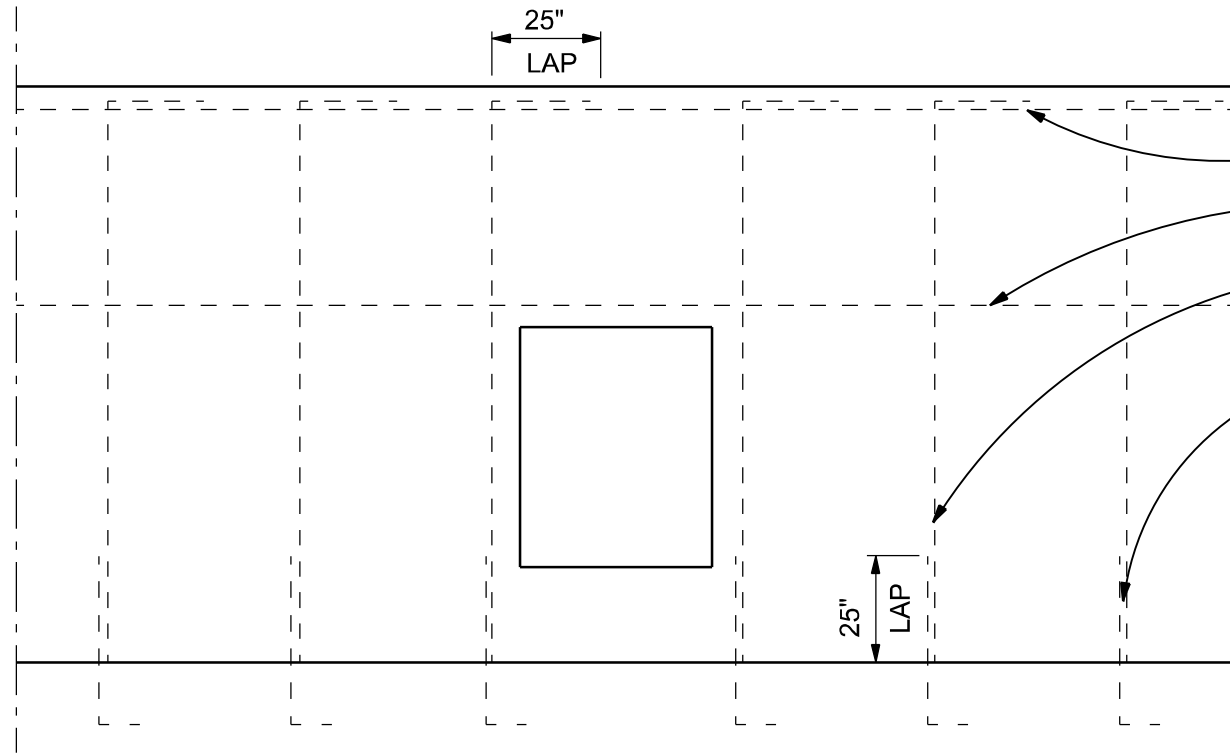
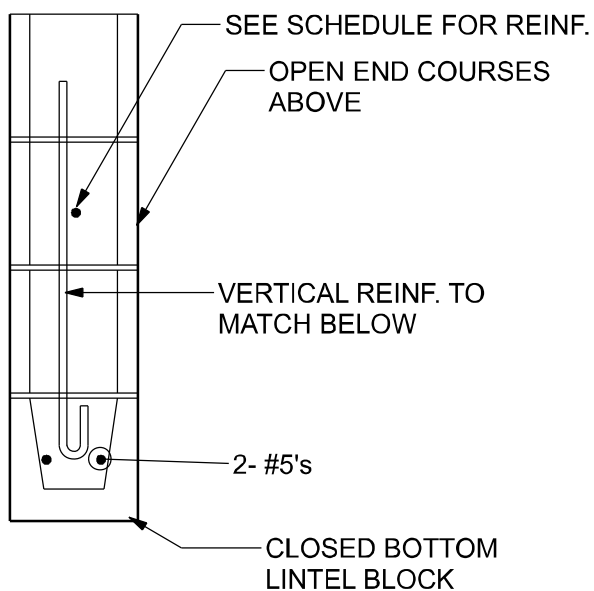
FILLED + BEAM = Acting as composite beam with an 8" perimeter beam  
1-#5 rebar in lintel, 1-#5 rebar in perimeter beam



**CONTROL JOINT SPACING**  
NTS

CMU Lintel Schedule		
OPENING	LINTEL DEPTH 8" CMU	REINF. AT TOP
4'-0" or less	16"	1-#5
over 4'-0" to 7'-4"	16"	1-#5
over 7'-4" to 11'-4"	24"	1-#5's
over 11'-4" to 14'-0"	32"	1-#5's
over 14'-0" to 16'-0"	40"	1-#5's

1. For openings 6'-0" and less, provide 8" bearing with 1-#5 each side of opening.  
2. For openings larger than 6'-0" provide min. 16" bearing with 2-#5's each side of opening  
3. Extend horizontal reinforcement min. 16" past each side of opening.  
4. Extend vertical reinforcement full height of wall each side of opening.  
5. Grout all reinforcement solid with 3,000 psi grout.  
6. Grout lintel solid to depth indicated on schedule unless otherwise on the drawings.  
7. Shore all cmu lintels during construction for 48 hours after grout has been placed.

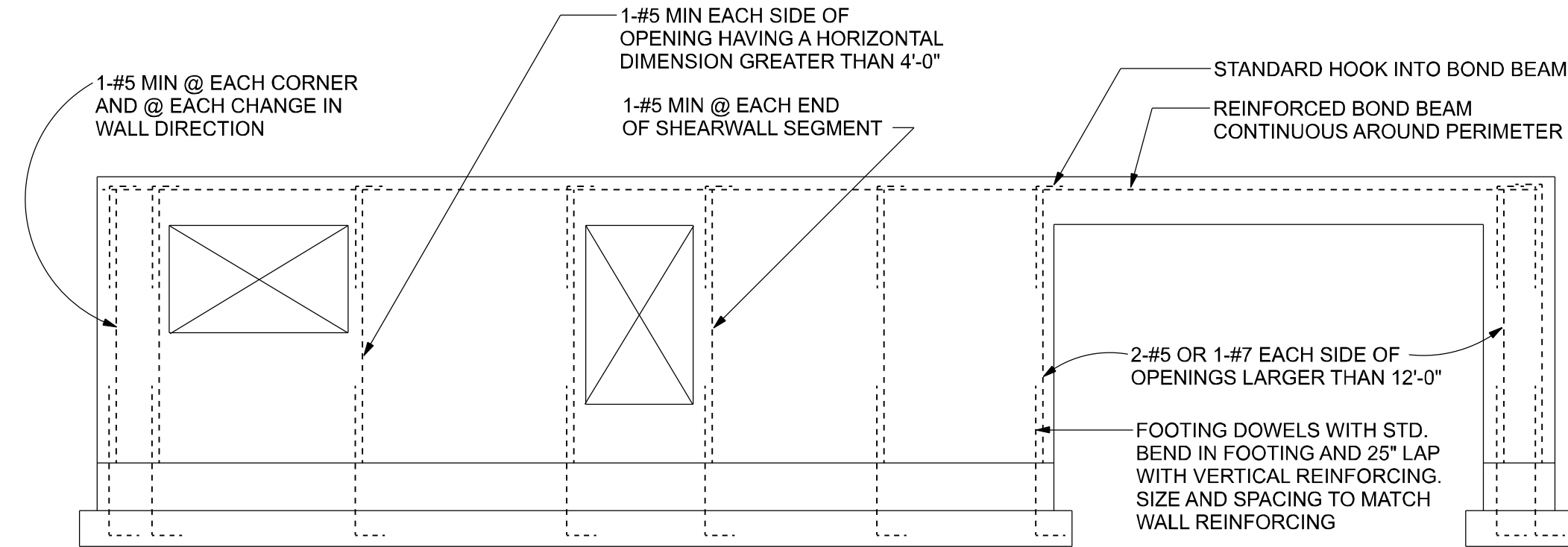


**WALL REINFORCING REQUIREMENTS**  
NTS

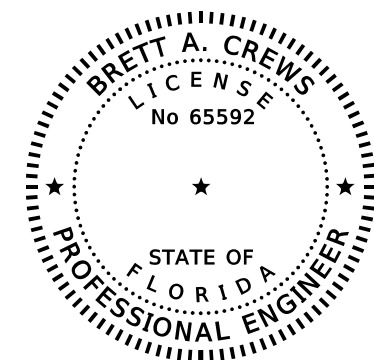
**GENERAL REINFORCING REQUIREMENTS**

- TOP OF WALL, 1-#5 CONTINUOUS
- TOP OF WALL OPENINGS, 1-#5 CONTINUOUS
- VERTICAL REINFORCEMENT TO BE 5/8" DIAMETER MINIMUM @ 4'-0" O.C. MAXIMUM.
- FOOTING DOWELS WITH STD. BEND IN FOOTING AND 25" LAP WITH VERTICAL REINF. SIZE AND SPACING TO MATCH WALL REINF.

NOTE:  
PROVIDE TRUSS TYPE JOINT REINFORCING NOT TO EXCEED 16" VERTICALLY.



**EXTERIOR WALL REINFORCEMENT SUMMARY**  
**ONE STORY (TWO STORY SIMILAR)**  
NTS



REVISIONS			DESIGN BY:	CERTIFIED GENERAL CONTRACTOR	CERTIFICATE OF AUTHORIZATION	DRAWN BY:	PROJECT NO.:
DATE	BY	DESCRIPTION					
			<b>TRADEMARK</b> Construction Group, Inc.	CGC1514780  750 SW MAIN BLVD. LAKE CITY, FL. 32025 (386)755-5254	NO. 28022  349 SW CREWS FARM TERRACE LAKE CITY, FL 32025 PHONE: 386.623.4303	TM  BC	TERRELL RESIDENCE
							MASONRY DETAILS
							R20.003
							SHEET: A-7