# **MATERIALS**

1. f'c 8" precast lintel = 3500 psi 2. f'c prestressed lintel = 6000 psi 3. Grout per ASTM C476 f'c = 3000 psi w/ maximum 3/8 inch aggregate & 8 to 11 inch slump 4. Concrete Masonry Units (CMU) per ASTM C90 w/minimum net area compressive strength = 1900 psi 5. Rebar per ASTM A615 grade 60 6. Prestressing strand per ASTM A416 grade 270 low relaxation 7. Mortar per ASTM C270 type M or S

#### **GENERAL NOTES**

1. Provide full mortar bed and head joints. 2. Shore filled lintels as required. 3. Installation of lintel must comply with the architectural and/or structural documents. 4. U-Lintels are manufactured with 5 1/2" long notches at the ends to accomodate vertical cell reinforcing and grouting. 5. All lintels meet or exceed L/360 deflection, except lintels 17'-4" and longer with a nominal height of 8" meet or exceed L/180 deflection. 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 rating based on rational design analysis per ACI 318 and ACI 530 10. Product Approvals: Miami-Dade County, Florida No. 03-0606.05

11. The exterior surface of lintels installed in exterior concrete masonry walls shall have a coating of stucco applied in accordance with ASTM C-296 or other approved coating. 12. Lintels loaded simultaneously with vertical (gravity or uplift) and horizontal (lateral) loads should be checked for the combined loading with the following equation: Applied vertical load
Safe vertical load
Safe horizontal load

13. Additional lateral load capacity can be obtained by the designer by providing additional reinforced concrete masonry above the lintel. See detail at right:

# TYPE DESIGNATION

F = FILLED WITH GROUT / U = UNFILLED / S = SOLID OUANTITY OF #5 FIELD ADDED REBAR AT BOTTOM OF LINTEL CAVITY 8F16-1B/1T-4'-0" - QUANTITY OF #5 FIFLD NOMINAL HEIGHT -ADDED REBAR AT TOP TOP MIN. (1) REQ'D - FIELD PLACED C.M.U.

#5 FIELD ADDED REBAR AT BOTTOM OF LINTEL CAVITY - BOTTOM REINFORCING PROVIDED IN LINTEL (SEE REINFORCING SCHEDULE) 8" NOMINAL WIDTH SAFE LOAD TABLE NOTES 1. All values based on minimum 4 inch nominal bearing. Exception: Safe loads for unfilled lintels must be reduced by 20% if bearing length is

B. Safe loads are superimposed allowable loads. 4. Safe loads based on grade 40 or grade 60 5. One #7 rebar may be substituted for two #5 rebars in 8" lintels only 6. The designer may evaluate concentrated loads from the safe load tables by calculating the maximum resisting moment and shear at d-away from face of support.

less than 6 1/2 inches.

2. N.R. = Not Rated

7. For composite lintel heights not shown, use safe load from next lower height shown. 8. For lintels lengths not shown, use safe load from next longest length shown 9. All safe loads in units of pounds per linear 10. All safe loads based on simply supported 11. The number in the the parenthesis

field added rebar. Example 7'-6" lintel type 8F32-1B safe gravity load = 6472\H0.0469;(15)\H0.0781; w/ 15% reduction  $6472 \Rightarrow (.85) = 5501 \text{ plf}$ 

indicates the percent reduction for grade 40

		^								
<	°			SAFE	LOAD -	POUNE	S PER I	INEAR	FOOT	
_		TYPE		8F8-0B	8F12-0B	8F16-0B	8F20-0B	8F24-0B	8F28-0B	8F32-0B
LENGT	4		8U8	8F8-1B	8F12-1B	8F16-1B	8F20-1B	8F24-1B	8F28-1B	8F32-1B
01.40"	(0.4II)	5550107	2004	3069	4605	6113	7547	8974	10394	11809
2'-10"	(34")	PRECAST	2231	3069	4605	6113	7547	8974	10394	11809
01.01	(40!)	DDECAGE	0004	3069	3719	5163	6607	8054	9502	10951
3'-6"	(42")	PRECAST	2231	3069	4605	6113	7547	8974	10394	11809
4'-0"	(48")	PRECAST	1066	2561	2751	3820	4890	5961	7034	8107
<del></del>	(40)	TREGAST	1966	2693	4605	6113	7547	8974	10394	11809
4'-6"	(54")	PRECAST	1500	1969	2110	2931	3753	4576	5400	6224
<del></del>	(54)	TREGROT	1599	2189	4375	6113	7547 <sub>(7)</sub>	8672	10294	11809
5'-4"	(64")	PRECAST	1217	1349	1438	1999	2560	3123	3686	4249
3-4	(04)	PRECASI	1217	1663	3090	5365	7547(36)	7342(19)	8733 <sub>(19)</sub>	10127 <sub>(19)</sub>
5'-10"	(70")	PRECAST	1062	1105	1173	1631	2090	2549	3009	3470
3-10	(70)	FRECASI	1062	1451	2622	4360	7168 (45)	6036(19)	7181(19)	8328 (20)
6'-6"	(78")	PRECAST	000	1238	2177	3480	3031	3707	4383	5061
0-0	(70)	TREGACT	908	1238	2177	3480	5381	8360	10394(37)	8825 (14)
7'-6"	(90")	PRECAST	740	1011	1729	2632	2205	2698	3191	3685
7 -0	(90)		743	1011	1729	2661	3898	5681	8467 <sub>(44)</sub>	6472 (15)
9'-4"	(112")	PRECAST	554	699	1160	1625	2564	3486	2818	3302
9-4 (112)	TREGAGI	554	752	1245	1843	2564	3486	4705(37)	6390(47)	
10'-6" (126")	(126")	PRECAST	475	535	890	1247	2093	2777	2163	2536
10-0	(120)	PRECASI	475	643	1052	1533	2093	2781	3643 (38)	4754 (45)
11'-4"	(426")	DDECAST	000	582	945	1366	1846	2423	3127	4006
11-4	(136")	PRECAST	362	582	945	1366	1846	2423	3127	4006
10! 0"	(4.4.4")	DDECAST	227	540	873	1254	1684	2193	2805	3552
12'-0"	(144")	PRECAST	337	540	873	1254	1684	2193	2805	3552
401.48	(4.60!!)	DDECACT	000	471	755	1075	1428	1838	2316	2883
13'-4"	(160")	PRECAST	296	471	755	1075	1428	1838	2316	2883
14'-0"	(160")	DDECAST	270	424	706	1002	1326	1697	2127	2630
14 -0	(168")	PRECAST	279	442	706	1002	1326	1697	2127	2630
14'-8"	(176")	PRESTRESSED	,,,,,,	NR	NR	NR	NR	NR	NR	NR
14-0	(176")	FILESTINESSED	N.R.	458	783	1370	1902	2245	2517	2712
15'-4"	(10/1")	PRESTRESSED	l ND	NR	NR	NR	NR	NR	NR	NR
15-4	(184")	TREGINEGGEB	N.R.	412	710	1250	1733	2058	2320	2513
17'-4"	(208")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
.,	(200)	- NEOTNEOGED	IN.K.	300	536	950	1326	1609	1849	2047
19'-4"	(232")	PRESTRESSED	N D	NR	NR	NR	NR	NR	NR	NR
	(202)		N.R.	235	418	750	1037	1282	1515	1716
21'-4"	(256")	PRESTRESSED		NR	NR	NR	NR	NR	NR	NR
	,200 )		N.R.	180	340	598	845	1114	1359	1468
22'-0"	(264")	PRESTRESSED		NR	NR	NR	NR	NR	NR	NR
	(-3.)		N.R.	165	315	550	784	1047	1285	1399
24'-0"	(288")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
0	(200)		IN.IX.	129	250	450	654	884	1092	1222

# SAFE UPLIFT LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

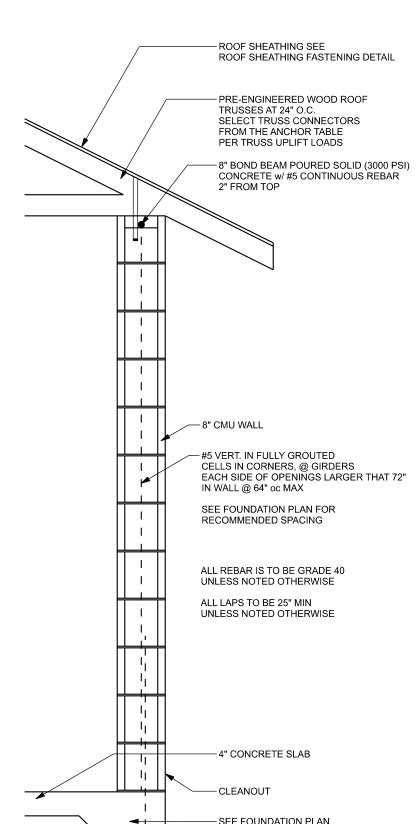
(Castro	(aete	SAFE	E LOAD	- POUN	NDS PE	R LINEA	AR FOO	Т
	TYPE	8F8-1T	8F12-1T	8F16-1T	8F20-1T	8F24-1T	8F28-1T	8F32-1T
LENGTH		8F8-2T	8F12-2T	8F16-2T	8F20-2T	8F24-2T	8F28-2T	8F32-2T
01.4011 (0.411) [	DDEGAGE	1972	3173	4460	5747	7034	8321	9608
2'-10" (34") F	PRECAST	1972	3173	4460	5747	7034	8321	9608
01.011 (4.011) [	DDEGAGE	1569	2524	3547	4569	5591	6613	7636
3'-6" (42") F	PRECAST	1569	2524	3547	4569	5591	6613	7636
4'-0" (48") F	DDECAST	1363	2192	3079	3966	4853	5740	6627
4'-0" (48") F	PRECAST	1363	2192	3079	3966	4853	5740	6627
4'-6" (54") F	PRECAST	1207	1940	2724	3508	4292	5077	5861
+-0 (54) r	FRECASI	1207	1940	2724	3508	4292	5077	5861
-I 411 (O.411) F	DDEGAGE	1016	1632	2290	2949	3607	4265	4924
5'-4" (64") F	PRECAST	1016	1632	2290	2949	3607	4265	4924
-140" (70")		909	1492	2093	2694	3295	3897	4498
5'-10" (70") F	PRECAST	929	1492	2093	2694	3295	3897	4498
21.611 (7.011)		835 (12)	1340	1880	2419	2959	3498	4038
6'-6" (78") F	PRECAST	835	1340	1880	2419	2959	3498	4038
		727 (23)	1021	1634 (12)	2102 (11)	2571(10)	3039 (10)	3508 (s
7'-6" (90") F	PRECAST	727	1166	1634	2102	2571	3039	3508
N. 411. (44011) F	DDEGAGE	591	680	1133 (15)	1471 (15)	1811 (15)	2152(16)	2494 (15
9'-4" (112") F	112") PRECAST	591	851	1326	1705	2084	2463	2842
	(126") PRECAST	530	552	914 (15)	1185 (15)	1458 (15)	1732 (15)	2007 (15
10'-6" (126") F		530	686	1183	1526	1865	2204	2544
	PRECAST	474	485	798 (15)	1034 (15)	1272 (15)	1510 (15)	1749 (15
11'-4" (136") F		494	599	1028	1422	1738	2053	2369
		470 (9)	441	723 (14)	936 (14)	1151 (15)	1366 (15)	1582 (15
12'-0" (144") F	PRECAST	470	543	928	1349	1649	1948	2247
		418 (15)	373	606 (14)				
13'-4" (160") F	PRECAST	428	455	770	1145	1444	1718	1993
		384 (15)	346	559 (14)	723 (14)	887 (14)	1052 (14)	1218 (14
14'-0" (168") F	PRECAST	410	420	709	1050	1434 (8)	1694 (8)	1954 (7
		239	323	519 <sub>(13)</sub>	671 (13)	823 (13)	976 (14)	1129 (14
14'-8" (176") F	PRESTRESSE	246	390	655	968	1324 (8)	1625 (11)	1874 (11
		224	302	485 (13)	626 (13)	767 <sub>(13)</sub>	909 (13)	1052 (13
15'-4" (184") <sup>F</sup>	PRESTRESSE	230	364	609	897	1224 (8)	1562 (14)	1801 (14
		197	255	404 (12)	520 <sub>(12)</sub>	637 (12)	754 (12)	872 (12
17'-4" (208") F	PRESTRESSE	192	303	500	732	993 (8)		
		162	222	347 (11)				
19'-4" (232") F	PRESTRESSE	166		424	616		, ,	
		1/12	261 198	306 (11)		831 <sub>(8)</sub> 480 <sub>(11)</sub>	1057 <sub>(14)</sub> 567 <sub>(11)</sub>	1225 <sub>(14</sub> 654 <sub>(11</sub>
21'-4" (256") F	PRESTRESSE	—			393 (11)			
		142	230	369	531	713 <sub>(7)</sub>	903 (13)	1046 (13
22'-0" (264") F	PRESTRESSE		192	295 (10)	378 (11)	461 (10)	545 (11)	629 (11
		137	221	354	508	681 <sub>(7)</sub>	861 (13)	997 (13
24'-0" (288") F	PRESTRESSE	124	175	267 (10)	341 (10)	416 (10)	491 (10)	566 <sub>(10</sub>
. ,		124	200	316	450	600 (7)	756 <sub>(12)</sub>	875 <sub>(13</sub>

# SAFE GRAVITY LOADS FOR 8" PRECAST w/ 2" RECESS DOOR U-LINTELS

			SAFE LOAD - POUNDS PER LINEAR FOOT													
		TYPE	00110	8RF6-0B	8RF10-0B	8RF14-0B	8RF18-0B	8RF22-0B	8RF26-0B	8RF30-0B						
LENG	TH		8RU6	8RF6-1B	8RF10-1B	8RF14-1B	8RF18-1B	8RF22-1B	8RF26-1B	8RF30-1B						
41 4"	(FO!!)	DDECAST	160E	1749	3355	3280	4349	5421	6493	7567						
4'-4"	(52")	PRECAST	1635	1891	3699	5206	6639	8060	9479	10893						
41.6"	(E 4")	DDECAST	1404	1596	3063	2992	3968	4946	5924	6904						
4'-6"	(54")	PRECAST	1494	1756	3699	5206	6639	8060	9479	10893						
5'-8"	(68")	PRECAST	866	920	1770	1716	2277	2839	3402	3966						
3-0	(00) PRECASI	TREOAGT	TREOAGT	TREOROT	TREGROT	11(20)(01	TREGACT	TREGACT	000	1167	2481	4567	6389	8060 (34)	7917 <sub>(19)</sub>	9311 (19)
5'-10"	(70")	PRECAST	810	859	1653	1600	2124	2649	3174	3700						
	(10)		TREGRET	11120/101	11120/101	11120/101	010	1113	2342	4242	6639 (10)	8060 (39)	7402 <sub>(19)</sub>	8706 <sub>(19)</sub>		
6'-8"	(80")	PRECAST	797	901	1825	3120	5048	7747	9448	7360						
0-0	(00)	FRECASI	191	901	1825	3120	5048	7915	9479	10893 (32)						
7'-6"	(90")	PRECAST	669	755	1490	2459	3776	5743	7239	5623						
	(90)	FILLOAGI	009	755	1490	2459	3776	5743	8998 (19)	10893 (48)						
9'-8"	(116")	PRECAST	111	466	999	1568	2253	3129	4091	3146						
3 -0	(110)	TRECAGI	411	526	999	1568	2253	3129	4150	5891 <sub>(47)</sub>						

# SAFE UPLIFT LOADS FOR 8" PRECAST w/ 2" RECESS DOOR U-LINTELS

			SAI	E LOA	D - POL	INDS PI	ER LINE	AR FO	ОТ
		TYPE	8RF6-1T	8RF10-1T	8RF14-1T	8RF18-1T	8RF22-1T	8RF26-1T	8RF30-1T
LENG <sup>®</sup>	TH		8RF6-2T	8RF10-2T	8RF14-2T	8RF18-2T	8RF22-2T	8RF26-2T	8RF30-2T
41 411	(FO!!)	DDECAST	905	1748	2635	3522	4409	5296	6183
4'-4"	(52")	PRECAST	905	1748	2635	3522	4409	5296	6183
41.6"	(E 4")	DDECACT	867	1675	2525	3374	4224	5074	5924
4'-6"	(54")	PRECAST	867	1675	2525	3374	4224	5074	5924
5'-8"	(68")	PRECAST	675	1301	1960	2618	3277	3935	4594
5-6 (66)	(00)		675	1301	1960	2618	3277	3935	4594
5'-10" (70")	PRECAST	655	1262	1900	2538	3176	3815	4453	
3-10	(10)	TILLOAGT	655	1262	1900	2538	3176	3815	4453
6' 0"	/90"\	DDECAST	570	1012	1651	2204	2758	3312	3865
6'-8" (80")		PRECAST	570	1097	1651	2204	2758	3312	3865
7'-6"	(00")	PRECAST	506	797	1462 (8)	1952 <sub>(7)</sub>	2442 (6)	2931 (6)	3257
7'-6" (90")		PRECASI	506	967	1462	1952	2442	2931	3421
9'-8" (116")		PRECAST	395	491	931 (12)	1301 (15)	1640 (15)	1980 (15)	2322 (16
<i>9</i> -0	(110)	TILLUAGI	395	589	1135	1514	1893	2272	2652



	 	RECOMMENDED SPACING
	1	ALL REBAR IS TO BE GRADE 40 UNLESS NOTED OTHERWISE
	  -  -	ALL LAPS TO BE 25" MIN UNLESS NOTED OTHERWISE
	- - - - -	
	<u>-</u>	
_	1	4" CONCRETE SLAB
	<sub> </sub>	CLEANOUT
	<b>→</b>	SEE FOUNDATION PLAN FOR FOOTER DETAIL

(MONO FOOTER w/ RECESS)

TYPICAL EXTERIOR WALL
(BASED ON FBC R606)
SCALE: 3/4" = 1'-0"

w/ STD HOOK

FOR OVERHANGES 12"-24" USE A DROPED GABLE TRUSS WITH

- ROOF SHEATHING

(TYP.) GABLE BRACING DETAIL

INSTALL 2X4 SPF#2 DIAGONAL BRACE ———

AND NAIL TO BLOCKING AT TOP CHORD &

BOTTOM CHORD AND RAT RUN @ 4' O.C.

EDGE & 12" O.C. FIELD

ATTACH RAT RUN TO -BLOCKING w/

(4) .131"X3 1/4" NAILS

TOE NAIL TRUSS -

131"X3 1/4" NAILS @ 6" O.C.

TO PLATE

FOR UPLIET -NAIL SHEATHING

TO 2X8 PLATE

w/ 8d @ 3" OC & TO TRUSS

BOTTOM CHORD

w/ 8d @ 3" OC

2X4 OUTLOOKER @ 24" O.C. w/ H2.5a TO GABLE TRUSS AND (4) .131"x 3.25" NAILS TO 2nd TRUSS (BLOCK BETWEEN OUTLOOKER)

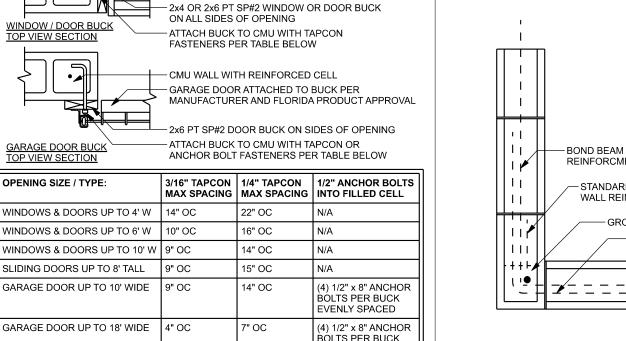
— 2X4 LOOKOUT BLOCKING @ 24" O.C.

Wind Speed	Sheathing Thickness Plywood Or OSB	Required Nail	Nail spacing along panel edges	Nail spacing along intermedia supports in the panel field
120 mph Exp. B	7/16"	ASTM F1667 RSRS-01 (2 3/8" × 0.113")	6" oc	12" oc
120 mph Exp. C	7/16"	ASTM F1667 RSRS-01 (2 3/8" × 0.113")	6" oc	6" oc
120 mph Exp. D	19/32"	ASTM F1667 RSRS-03 (2 1/2" × 0.131") or ASTM F1667 RSRS-04 (3" × 0.120")	6" oc	6" oc
130 mph Exp. B	7/16"	ASTM F1667 RSRS-01 (2 3/8" × 0.113")	6" oc	6" oc
130 mph Exp. C	15/32"	ASTM F1667 RSRS-01 (2 3/8" × 0.113")	6" oc	6" oc
130 mph Exp. D	19/32"	ASTM F1667 RSRS-03 (2 1/2" × 0.131") or ASTM F1667 RSRS-04 (3" × 0.120")	6" oc	6" oc
140 mph Exp. B	7/16"	ASTM F1667 RSRS-01 (2 3/8" × 0.113")	6" oc	6" oc
140 mph Exp. C	19/32"	ASTM F1667 RSRS-03 (2 1/2" × 0.131") or ASTM F1667 RSRS-04 (3" × 0.120")	6" oc	6" oc
140 mph Exp. D	19/32"	ASTM F1667 RSRS-03 (2 1/2" × 0.131") or ASTM F1667 RSRS-04 (3" × 0.120")	6" oc	6" oc

is permitted to be 6 inches on center along panel edges and 6 inches on center along intermediate supports in the panel field. This table specifies the code minimum thickness of roof sheathing.

The thickness of the sheathing may need to be increased based in the type of roofing material being used. See manufacturer Florida product approval.

> — WINDOW OR DOOR ATTACHED TO BUCK PER MANUFACTURER AND FLORIDA PRODUCT APPROVAL



EVENLY SPACED

BOND BEAM REBAR CONTINUOUS OVER WALL & OPENING

- TAPCON IN FACE OF CMU: 2 1/2" MIN. EDGE DISTANCE 1 1/4" MIN. EMBEDMENT, 3" MIN. SPACING - WINDOWS AND DOORS MAY BE ATTACHED DIRECTLY TO CMU PER MANUFACTURER AND FLORIDA PRODUCT APPROVAL. - A 1x PT "SPACER" BUCK MAY BE USED IF WINDOW / DOOR IS ATTACHED TO CMU PER ELORIDA PRODUCT APPROVAL.

**OPENING SIZE / TYPE:** 

- IN THE CASE THAT THE LINTEL IS NOT WITHIN

KNOCK - OUT BLOCK

- #5 REINFORCING BAR(S) GRADE 40 ARE TO SET APPROX. 1-1/2" FROM TOP

OF ALL LINTEL DESIGNS AND IN SOME CASES

THE BOTTOM OF LINTEL AS SHOWN ON LOAD TABLES. TOP HORIZONTAL

REINFORCEMENT IS TO BE A CONTINUOUS

TIE AS NOTED IN NOTE #9 (LINTEL DETAIL)

1. FILL LINTEL AND ALL CELLS ABOVE LINTEL.

2. VERIFY THAT ALL REINFORCEMENT HAS

B. SEE LINTEL TYPE DESIGNATION TABLE

- FILLED CELL WITH #5 VERTICAL -

SEE STRUCTRUAL PLANS FOR LOCATIONS

- CLEAN OUT RQD FOR GROUT LIFT > 5'-0" ----

TYPICAL FILLED LINTEL ASSEMBL`

FOR ADDITIONAL INFORMATION.

BEEN PLACED PROPERLY

**CMU WALL** 

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

-(4) .131"X3 1/4" -

DIAGONAL BRACE MUST

TO 12' AND UNBRACED

NAILS

- (4) .131"X3 1/4" NAILS (TYP.)

- H3 INSTALLED HORIZONTALLY

MIN. 8" FROM CORNERS & @ 48" OC

-(8) .131"X3 1/4" NAILS

- 2X4 SPF#2 BLOCKING

-2X\_SP#2PTPLATEw/ 1/2" X 10" ANCHOR BOLTS w/ 3" WASHER & NUT

-- (4) .131"X3 1/4" --

BE NAILED TO TRUSS WEBS

-(4) .131"X3 1/4"

– PRECAST LINTELS STD. 90° HOOK —

WITH (1) #5

A COMPOSITE BOND BEAM SYSTEM, TOP HORIZONTAL

REINFORCEMENT IS TO EXTEND 2'-0" PAST INSIDE OF JAMBS

DOOR & WINDOW BUCK ATTACHMENT

CORNER CONTINUITY OF BOND BEAM AND WALL REINFORCEMENT (BASED ON FBC FIG. R609.2.4)

GRADE & SPECIES TABLE

SP #2

SP #2

SP #2

24F-V3 SP

LSL TIMBERSTRAND 1700 1.

LVLI MICROLAM 1295012.01

PARALAM |2900|2.0

925 1.4

1 800 l1 4

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

- BOND BEAM REINFORCMENT — STANDARD HOOK LAPPED WITH WALL REINFORCMENT - GROUTED CELL — #5 CORNER BAR LAP BOND BEAM REBAR 25" MIN.

< 10530

### **GENERAL NOTES:**

**CONNECTOR TABLE** 

To Plate

7-10d1 1/2"

To Stud

10-10d

14-10d

12-16d

To Post

To Stud / Post

To Stud / Post Anchor

10-10d x 1 1/2"

7 - 10d IN TRUSS

10 - 10d IN TRUSS

7-10d, 1 1/2"

10-10d, 1 1/2"

17-10d, 1 1/2"

21-10d, 1 1/2"

5/8 AB TO WALL

22-10d TO TRUSS

15" EMBEDMENT

16-10d TO TRUSS

(2) 3/4 AB TO WALL

15" EMBEDMENT

(2) 3/4 AB TO WALL

for Code

15" EMBEDMENT

7-16d

4 - 1/4"x2 1/4" TITEN IN BLOCK

4 - 1/4"x2 1/4" TITEN IN BLOCK

' - 1/4"x2 1/4" TITEN IN BLOCK

14 - 16d SINKER IN GIRDER

To Truss/Rafter

4-8dx1 1/2"

5-8dx1 1/2

7-10d1 1/2"

12-10d1 1/2" | 12-10d1 1/2"

To One Member To Other Member

8-10d

To Plate

wrap under or over pla

wrap under or over pla

5/8"x12" Drill & Epoxy

5/8"x12" Drill & Epoxy

5/8"x7" Drill & Epoxy

6-10d

8-SDS 1/4"x1 1/2" 1/2"x6" Titen HD

18-16dx2 1/2" 1/2"x12" Titen HD

Jplift SP Uplift SPF Truss Connector

Jplift SP Uplift SPF Strap Ties

1235 | 1235 | LSTA24

ILSTA24

Uplift SP Uplift SPF Holdowns @ Stemwall

plift SP Uplift SPF Holdowns @ Mono

Uplift SP Uplift SPF Post Bases @ Mono

MANUFACTURER'S ENGINEERING

< 1205

< 1605

< 860

< 1175

< 1040

< 1490

< 1780

< 1780

< 2130

< 2310

< 3965

< 10980

UPLIFT LBS. TRUSS CONNECTOR

MASONRY \*

Uplift SP Uplift SPF Post Bases @ Stemwall To Post

MASONRY TRUSS ANCHOR TABLE

TA22

MTSM20

HTSM20

META20

META20

HETA20

LGT2

HHETA20

HHETA24

HGT-2

HGT-3

OBTAIN UPLIFT REQUIREMENTS FROM TRUSS

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE FBCR. TRUSS ENGINEERING SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS. TRUSS ENGINEERING IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER AND SHALL BE SIGNED & SEALED BY THE MANUFACTURER'S DESIGN ENGINEER. IT IS THE BUILDER'S RESPONSIBILITY VERIFY THE TRUSS DESIGNER FULLY SATISFIED ALL THE ABOVE REQUIREMENTS AND TO SELECT UPLIFT CONNECTIONS BASED ON TRUSS ENGINEERING UPLIFT AND PROVIDE FOOTINGS FOR INTERIOR BEARING WALLS. BUILDER IS TO FURNISH TRUSS ENGINEERING TO WIND LOAD ENGINEER FOR REVIEW OF TRUSS REACTIONS ON THE BUILDING STRUCTURE STRAP 2X6 RAFTERS. WITH MIN. UPLIFT CONNECTION 415LB EACH END; 2X8 RAFTERS 700 LB EACH END.

SITE PREPARATION: SITE ANALYSIS AND PREPARATION IS NOT PART OF THIS PLAN FOUNDATION: CONFIRM THAT THE FOUNDATION DESIGN & SITE CONDITIONS MEET GRAVITY LOAD REQUIREMENTS (ASSUME 1500 PSF BEARING CAPACITY UNLESS

VISUAL OBSERVATION OR SOILS TEST PROVES OTHERWISE) CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS, F'c = 2500 PSI. WELDED WIRE REINFORCED SLAB: 6" x 6" W1.4 x W1.4, FB = 85KSI, WELDED WIRE REINFORCEMENT FABRIC (W.W.M.) CONFORMING TO ASTM A185, LOCATED IN MIDDLE

OF THE SLAB: SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT SPACINGS

FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER REINFORCEMENT. FIBER LENGTH 1/2 INCH TO 2 INCHES. DOSAGE AMOUNTS FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD PER THE MANUFACTURER'S RECOMMENDATIONS. FIBERS TO COMPLY WITH ASTM C 1116. SUPPLIER TO PROVIDE ASTM C 1116

CERTIFICATION OF COMPLIANCE WHEN REQUESTED BY BUILDING OFFICIAL.

.113" X 2 3/8" RING SHANK NAILS @ 6" OC ON EDGES & INTERMEDIATE

CONTROL JOINTS: WHERE SPECIFIED. SAWN CONTROL JOINTS IN SLAB-ON-GRADE SHALL BE CUT IN ACCORDANCE WITH ACI 302. JOINTS SHALL BE CUT WITHIN 12 HOURS OF SLAB PLACEMENT. THE LENGTH / WIDTH RATIOS OF SLAB AREAS SHALL NOT EXCEED 1.5 AND TYPICAL SPACING OF CUTS TO BE 12FT. DO NOT CUT WWM OR REINFORCING STEEL. (RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER AND CONTRACTOR'S APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCOURAGE THE SLAB TO CRACK ON A GIVEN LINE.)

(30" FOR #5 BARS); UNO. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-96, U.N.O. ROOF SHEATHING: ALL ROOFS ARE HORIZONTAL DIAPHRAGMS; 1/2" CDX PLYWOOD SHEATHING, UNBLOCKED, APPLIED PERPENDICULAR TO FRAMING, OVER A MINIMUM OF 3 FRAMING MEMBERS, WITH PANEL EDGES STAGGERED, FASTENED WITH

REBAR: ASTM A 615, GRADE 60, DEFORMED BARS, FY = 60 KSI. ALL LAP SPLICES 48 \* DB

SUPPORTS 4" OC ON GABLES STRUCTURAL CONNECTORS: MANUFACTURERS & PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLE NOT ENDORSEMENT. AN EQUIVALENT DEVICE OF THE SAME OR OTHER MANUFACTURER CAN BE SUBSTITUTED FOR ANY DEVICES LISTED IN THE EXAMPLE TABLES AS LONG AS IT MEETS THE REQUIRED OAD CAPACITIES. MANUFACTURER'S INSTALLATION INSTRUCTIONS MUST BE FOLLOWED TO ACHIEVE RATED LOADS.

ANCHOR BOLTS: A-307 ANCHOR BOLTS WITH MINIMUM EMBEDMENT AS SPECIFIED IN DRAWINGS BUT NO LESS THAN 7" IN CONCRETE OR REINFORCED BOND BEAM OR 15" IN GROUTED CMU.

# **BUILDER'S RESPONSIBILITY:**

THE BUILDER AND OWNER ARE RESPONSIBLE FOR THE FOLLOWING, WHICH ARE SPECIFICALLY NOT PART OF THE WIND LOAD ENGINEER'S SCOPE OF WORK. ONFIRM SITE CONDITIONS, FOUNDATION BEARING CAPACITY, GRADE AND BACKFILL HEIGHT. WIND SPEED AND DEBRIS ZONE. AND FLOOD ZONE. PROVIDE MATERIALS AND CONSTRUCTION TECHNIQUES, WHICH COMPLY TH FBCR REQUIREMENTS FOR THE STATED WIND VELOCITY AND DESIGN PRESSURES.

PROVIDE A CONTINUOUS LOAD PATH FROM TRUSSES TO FOUNDATION. IF YOU BELIEVE THE PLAN OMITS A CONTINUOUS LOAD PATH CONNECTION, CALL THE WIND LOAD ENGINEER IMMEDIATELY. VERIFY THE TRUSS MANUFACTURER'S SEALED ENGINEERING INCLUDES TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, USS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL

# ROOF SYSTEM DESIGN:

BEARING LOCATIONS

THE SEAL ON THESE PLANS FOR COMPLIANCE WITH FBCR, S BASED ON REACTIONS, UPLIFTS, AND BEARING LOCATIONS IN RUSS ENGINEERING SUBMITTED TO THE WIND LOAD ENGINEER. IT IS THE RESPONSIBILITY OF THE BUILDER TO CHECK ALL DETAILS OF THE COMPLETE ROOF SYSTEM DESIGN SUBMITTED BY THE TRUSS MANUFACTURER AND HAVE IT SIGNED, AND SEALED BY A DESIGN PROFESSIONAL FOR CORRECT APPLICATION OF FRCR REQUIRED LOADS AND ANY SPECIAL LOADS. THE BUILDER IS RESPONSIBLE T REVIEW EACH INDIVIDUAL TRUSS MEMBER AND THE TRUSS ROOF SYSTEM AS A WHOLE AND TO PROVIDE RESTRAINT FOR ANY LATERAL BRACING. THE BUILDER SHOULD USE CARE CHECKING THE ROOF RESPONSIBLE FOR THE TRUSS LAYOUT WHICH WAS CREATED BY THE TRUSS MANUFACTURER AND THE TRUSS DESIGNER ALSO DENIES RESPONSIBILITY FOR THE LAYOUT PER NOTES ON THEIR SEALED

MASONRY CONSTRUCTION AND MATERIALS FOR THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATION" FOR MASONRY STRUCTURES" (ACI 530.1/ASCE 6/TMS 602). THE CONTRACTOR AND MASON MUST IMMEDIATELY, BEFORE PROCEEDING, NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN ACI 530.1-02 AND THESE DESIGN DRAWINGS. ANY EXCEPTIONS TO ACI 530.1-02 MUST BE APPROVED BY

	ACI530.1-02 Section	Specific Requirements
1.4A	Compressive strength	8" block bearing walls F'm = 1500 psi
2.1	Mortar	ASTM C 270, Type N, UNO
2.2	Grout	ASTM C 476, admixtures require approva
2.3	CMU standard	ASTM C 90-02, Normal weight, Hollow, medium surface finish, 8"x8"x16" running bond and 12"x12" or 16"x16" column block
2.3	Clay brick standard	ASTM C 216-02, Grade SW, Type FBS, 5.5"x2.75"x11.5"
2.4	Reinforcing bars, #3 - #11	ASTM 615, Grade 40, Fy = 40 ksi, Lap splices min 40 bar dia. (25" for #5)
2.4F	Coating for corrosion protection	Anchors, sheet metal ties completely embedded in mortar or grout, ASTM A525, Class G60, 0.60 oz/ft2 or 304SS
2.4F	Coating for corrosion protection	Joint reinforcement in walls exposed to moisture or wire ties, anchors, sheet metaties not completely embedded in mortar ogrout, ASTM A153, Class B2, 1.50 oz/ft2 or 304SS
3.3.E.2	Pipes, conduits, and accessories	Any not shown on the project drawings require engineering approval.
3.3.E.7	Movement joints	Contractor assumes responsibility for type and location of movement joints if not detailed on project drawings.

SIGN	CRITERIA	& LOADS:	

SOIL BEARING CAPACITY 1500 PSF

FLOOD ZONE

CODE FOR DESIGN LOADS	ASCE 7-16
VINDLOADS	
BASIC WIND SPEED ASCE 7-10, 3S GUST)	130 MPH
VIND EXPOSURE BUILDER MUST FIELD VERIFY EXPOSURE PER SITE BEFORE STARTING CONSTRUCTION)	C (Surface Roughness Categories: Open terrain with scattered obstructions having heights generally less than 30'. This category includes flat open country and grasslands.)
OPOGRAPHIC FACTOR BUILDER MUST FIELD VERIFY)	I
RISK CATEGORY	II
NCLOSURE CLASSIFICATION	ENCLOSED
NTERNAL PRESSURE COEFFICIENT	0.18
ROOF ANGLE	7-45 DEGREES
IEAN ROOF HEIGHT	30 FT
C&C DESIGN PRESSURES	FBC R301.2(2) & TABLE R301.2(4) SEE TABLE BELOW
LOOR LOADING	
ROOMS OTHER THAN SLEEPING ROOM	40 PSF LIVE LOAD

DMPONENT & CLADING DESIGN PRESSURES 130 MPH (EXP C							
FECTIVE ND AREA (FT2)	INTERIOR	ZONE 5 (walls) END 4' FROM ALL OUTSIDE CORNER					
20	Vult = +43 / -47	Vult = +43 / -57					

16 PSF LIVE LOAD

THIS BUILDING IS NOT IN THE FLOOD ZONE

ILDING CODE	FLORIDA BUILDING CODE RESIDEN
DE FOR DESIGN LOADS	ASCE 7-16
INDLOADS	
SIC WIND SPEED	130 MPH

130 MPH
C (Surface Roughness Categories: Open terrain with scattered obstructions having heights generally less than 30'. This category includes flat open country and grasslands.)
I
II
ENCLOSED
0.18
7-45 DEGREES
30 FT
FBC R301.2(2) & TABLE R301.2(4) SEE TABLE BELOW
40 PSF LIVE LOAD
30 PSF LIVE LOAD
20 PSF LIVE LOAD

MPONENT & CLADING DESIGN PRESSURES 130 MPH (EXP				
	INTERIOR	ZONE 5 (walls) END 4' FROM ALL OUTSIDE CORNER		
		Vult = +43 / -57 Vasd = +26 / -35		

Stated dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.

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Building Code Residential (2020) to the best of my knowledge. LIMITATION: This design is valid for one building, at specified location.

DIGITAL SIGNATURE ISSUED BY: IdenTrust MARK DISOSWAY P.E. 53915

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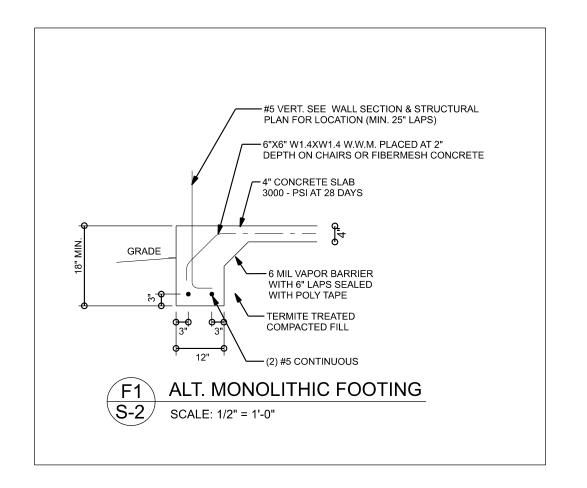
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Mark Disosway P.E. 163 SW Midtown Place Suite 103 Lake City, Florida 32025 386.754.5419 disoswaydesign@gmail.com

JOB NUMBER: 220212

**S-1** OF 2 SHEETS

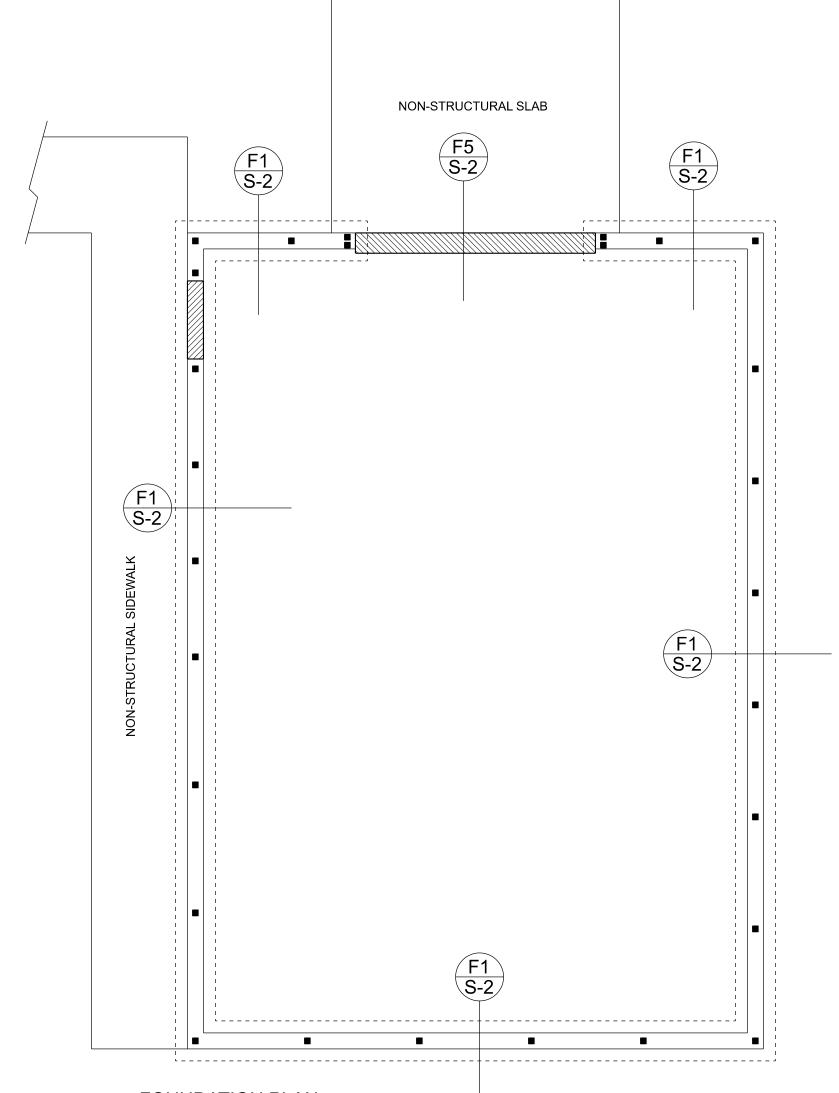


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IHEE	THE ENGINEER IN WRITING.			
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3.3.E.2	Pipes, conduits, and accessories	Any not shown on the project drawings require engineering approval.		
3.3.E.7	Movement joints	Contractor assumes responsibility for type and location of movement joints if not detailed on project drawings.		

TALL STEM WALL TABLE:
The table assumes 60 ksi reinforcing bars with 6" hook in the footing and bent 24" into the reinforced slab at the top. The vertical steel is to be placed toward the tension side of the CMU wall (away from the soil pressure, within 2" of the exterior side of the wall). If the wall is over 8' high, add Durowall ladder reinforcement at 16"OC vertically or a horizontal bond beam with 1#5 continuous at mid height. For higher parts of the wall 12" CMU may be used with reinforcement as shown in the table below.

with reinforcement as shown in the table below.							
STEMWALL HEIGHT (FEET)	UNBALANCED BACKFILL HEIGHT	VERTICAL REINFORCEMENT FOR 8" CMU STEMWALL (INCHES O.C.)		VERTICAL REINFORCEMENT FOR 12" CMU STEMWALL (INCHES O.C.)			
		#5	#7	#8	#5	#7	#8
3.3	3.0	96	96	96	96	96	96
4.0	3.7	96	96	96	96	96	96
4.7	4.3	88	96	96	96	96	96
5.3	5.0	56	96	96	96	96	96
6.0	5.7	40	80	96	80	96	96
6.7	6.3	32	56	80	56	96	96
7.3	7.0	24	40	56	40	80	96
8.0	7.7	16	32	48	32	64	80
8.7	8.3	8	24	32	24	48	64
9.3	9.0	8	16	24	16	40	48

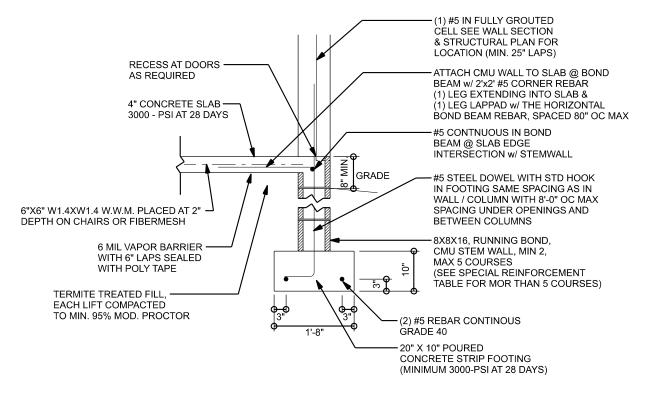


FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

FOUNDATION NOTES

FN - 1
DIMENSIONS ON FOUNDATION & STRUCTURAL SHEETS
ARE NOT EXACT. REFER TO ARCHITECTURAL PLANS
FOR ACTUAL DIMENSIONS, RECESSES IN SLAB,
STEP DOWNS, ETC. DISOSWAY DESIGN GROUP OR
MARK DISOSWAY, PE IS NOT RESPONSIBLE FOR
DIMENSION ERRORS ON THIS PLAN.

CONTRACTOR SHALL VERIFY NEED FOR INTERIOR BEARING
FN - 2
IN ALL AREAS BY REVIEWINGTHE ROOF TRUSS PLAN
(BY THE SUPPLIER) BEFORE FINALIZING FOUNDATION PLAN
FN - 3
THE SLAB SHALL BE: 4" CONCRETE SLAB REINFORCED W/
6X6-1.4/1.4 WELDED WIRE MESH PLACED ON CHAIRS
@ 1 1/2" DEPTH OR FIBER MESH CONCRETE, 6-MIL
POLY VAPOR BARRIER W/6" LAPS SEALED W/
POLY TAPE OVER TERMITE-TREATED & COMPACTED FILL

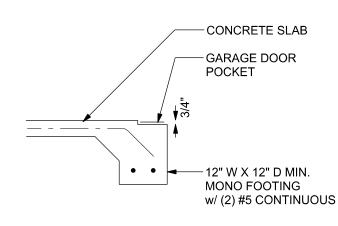


F1 STEM WALL FOOTING
S-2 SCALE: 1/2" = 1'-0"

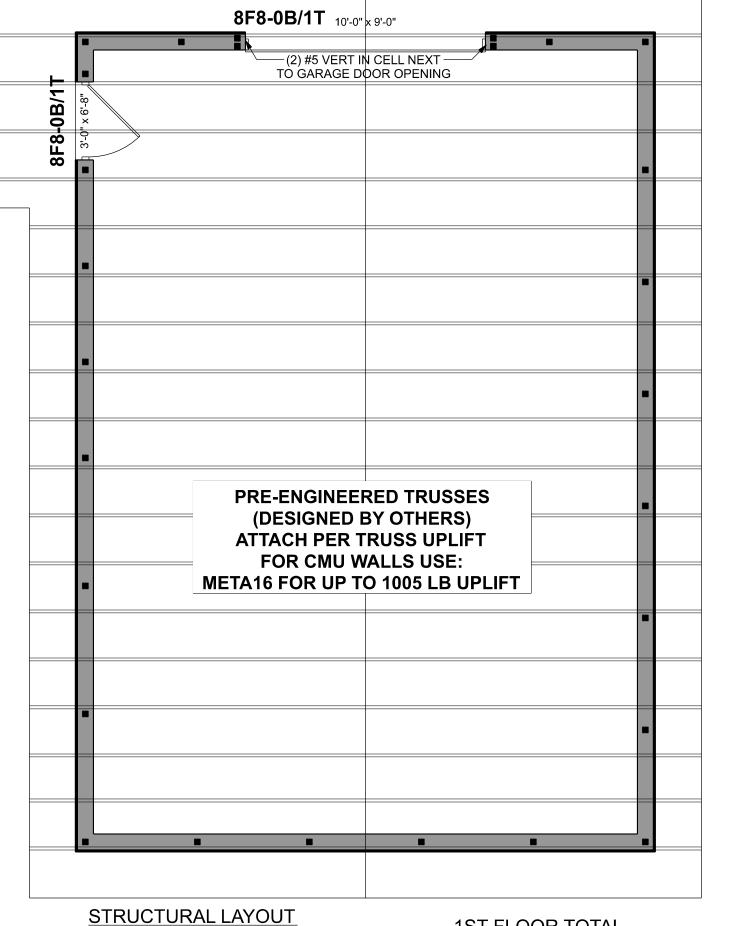
BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 12" BELOW

UNDISTURBED SOIL OR ENGINEERED

FILL PER FBC 2017-RES. SEC. R403.1.4



F5 GARAGE DOOR POCKET FOOTING
S-2 SCALE: 1/2" = 1'-0"



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

1ST FLOOR TOTAL
SHEAR WALL SEGMENTS

	REQUIRED	ACTUAL
TRANSVERSE	11.0'	38.0'
LONGITUDINAL	8.0'	62.5'

# STRUCTURAL PLAN NOTES

TRUSS PACKAGE

SN-1 ALL LINTEL LENGTHS MUST BE A MINIMUM EQUAL TO THE ROUGH OPENING WIDTH + REQUIRED BEARING FOR EACH END

N-2 DIMENSIONS ON STRUCTURAL SHEETS
ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS

PERMANENT TRUSS BRACING IS TO BE INSTALLED AT LOCATIONS AS SHOWN ON THE SEALED TRUSS DRAWINGS.

LATERAL BRACING IS TO BE RESTRAINED PER BCSI1-03, BCSI-B1, BCSI-B2, & BCSI-B3. BCSI-B1, BCSI-B2, & BCSI-B3 ARE FURNISHED BY THE TRUSS SUPPLIER, WITH THE SEALED

DIMENSIONS:
Stated dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution.
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permission and consent of Mark Disosway.

CERTIFICATION: I hereby certify that I have

examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with the 7th Edition Florida Building Code Residential (2020) to the best of my knowledge.

LIMITATION: This design is valid for one building, at specified location.

DIGITAL SIGNATURE ISSUED BY: IdenTrust

MARK DISOSWAY P.E. 53915
Monday, February 21, 2022
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JOB NUMBER: 220212

S-2 OF 2 SHEETS