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

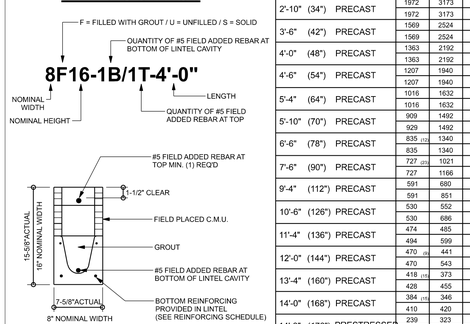
1. Provide full mortar bed and head joints.
2. Shore filled lintels as required.
3. Installation of lintel must comply with the architectural and/or structural documents.
4. U-Lintels are manufactured with 5 1/2" long notches at the ends to accomodate vertical cell reinforcing and grouting.
5. All lintels 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:

$$\frac{\text{Applied vertical load}}{\text{Safe vertical load}} + \frac{\text{Applied horizontal load}}{\text{Safe horizontal load}} \leq 1.0$$

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



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 less than 6 1/2 inches.
2. N.R. = Not Rated
3. Safe loads are superimposed allowable loads.
4. Safe loads based on grade 40 or grade 60 field rebar.
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.

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 foot
10. All safe loads based on simply supported span.
11. The number in the the parenthesis indicates the percent reduction for grade 40 field added rebar.
Example 7'-6" lintel type 8F32-1B safe gravity load = 6472#0.0468(15)%0.0781; w/ 15% reduction 6472 ⇒ (.85) = 5501 plf

SAFE GRAVITY LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

SAFE LOAD - POUNDS PER LINEAR FOOT

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	2231	3069	4605	6113	7547	8974	10394	11809
3'-6"	(42")	PRECAST	2231	3069	4605	6113	7547	8974	10394	11809
4'-0"	(48")	PRECAST	1966	3069	3719	5163	6607	8054	9502	10951
				2693	4605	6113	7547	8974	10394	11809
4'-6"	(54")	PRECAST	1599	2561	2751	3820	4890	5961	7034	8107
				1969	2110	2931	3753	4576	5400	6224
5'-4"	(64")	PRECAST	1217	2189	4375	6113	7547 (7)	8672	10294	11809
				1349	1438	1999	2560	3123	3686	4249
5'-10"	(70")	PRECAST	1062	1663	3090	5365	7547 (9)	7342 (13)	8733 (19)	10127 (19)
				1105	1173	1631	2090	2549	3009	3470
6'-6"	(78")	PRECAST	908	1451	2622	4360	7168 (45)	6036 (19)	7181 (19)	8328 (20)
				1238	2177	3480	3031	3707	4383	5061
7'-6"	(90")	PRECAST	743	1238	2177	3480	5381	8360	10394 (37)	8825 (14)
				1011	1729	2632	2205	2698	3191	3685
9'-4"	(112")	PRECAST	554	1011	1729	2661	3898	5681	8467 (44)	6472 (15)
				699	1160	1625	2564	3486	2818	3302
10'-6"	(126")	PRECAST	475	752	1245	1843	2564	3486	4705 (37)	6390 (47)
				535	890	1247	2093	2777	2163	2536
11'-4"	(136")	PRECAST	362	643	1052	1533	2093	2781	3643 (38)	4754 (45)
				582	945	1366	1846	2423	3127	4006
12'-0"	(144")	PRECAST	337	582	945	1366	1846	2423	3127	4006
				540	873	1254	1684	2193	2805	3552
13'-4"	(160")	PRECAST	296	540	873	1254	1684	2193	2805	3552
				471	755	1075	1428	1838	2316	2883
14'-0"	(168")	PRECAST	279	471	755	1075	1428	1838	2316	2883
				424	706	1002	1326	1697	2127	2630
14'-8"	(176")	PRESTRESSED	N.R.	442	706	1002	1326	1697	2127	2630
				NR	NR	NR	NR	NR	NR	NR
15'-4"	(184")	PRESTRESSED	N.R.	458	783	1370	1902	2245	2517	2712
				NR	NR	NR	NR	NR	NR	NR
17'-4"	(208")	PRESTRESSED	N.R.	412	710	1250	1733	2058	2320	2513
				NR	NR	NR	NR	NR	NR	NR
19'-4"	(232")	PRESTRESSED	N.R.	300	536	950	1326	1609	1849	2047
				NR	NR	NR	NR	NR	NR	NR
21'-4"	(256")	PRESTRESSED	N.R.	235	418	750	1037	1282	1515	1716
				NR	NR	NR	NR	NR	NR	NR
22'-0"	(264")	PRESTRESSED	N.R.	180	340	598	845	1114	1359	1468
				NR	NR	NR	NR	NR	NR	NR
24'-0"	(288")	PRESTRESSED	N.R.	165	315	550	784	1047	1285	1399
				NR	NR	NR	NR	NR	NR	NR
				129	250	450	654	884	1092	1222

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

SAFE LOAD - POUNDS PER LINEAR FOOT

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
2'-10"	(34")	PRECAST	1972	3173	4460	5747	7034	8321	9608
3'-6"	(42")	PRECAST	1972	3173	4460	5747	7034	8321	9608
4'-0"	(48")	PRECAST	1569	2524	3547	4569	5591	6613	7636
			1569	2524	3547	4569	5591	6613	7636
4'-6"	(54")	PRECAST	1363	2192	3079	3966	4853	5740	6627
			1363	2192	3079	3966	4853	5740	6627
5'-4"	(64")	PRECAST	1207	1940	2724	3508	4292	5077	5861
			1207	1940	2724	3508	4292	5077	5861
5'-10"	(70")	PRECAST	1016	1632	2290	2949	3607	4265	4924
			1016	1632	2290	2949	3607	4265	4924
6'-6"	(78")	PRECAST	909	1492	2093	2694	3295	3897	4498
			929	1492	2093	2694	3295	3897	4498
7'-6"	(90")	PRECAST	835 (12)	1340	1880	2419	2959	3498	4038
			835	1340	1880	2419	2959	3498	4038
9'-4"	(112")	PRECAST	727 (20)	1021	1634 (12)	2102 (11)	2571 (10)	3039 (10)	3508 (8)
			727	1166	1634	2102	2571	3039	3508
10'-6"	(126")	PRECAST	591	680	1133 (13)	1471 (13)	1811 (11)	2152 (14)	2494 (14)
			591	851	1326	1705	2084	2463	2842
11'-4"	(136")	PRECAST	530	552	914 (13)	1185 (13)	1458 (12)	1732 (13)	2007 (13)
			530	686	1183	1526	1865	2204	2544
12'-0"	(144")	PRECAST	474	485	798 (13)	1034 (13)	1272 (12)	1510 (13)	1749 (13)
			494	599	1028	1422	1738	2053	2369
13'-4"	(160")	PRECAST	470 (8)	441	723 (13)	936 (14)	1151 (13)	1366 (13)	1582 (13)
			470	543	928	1349	1649	1948	2247
14'-0"	(168")	PRECAST	418 (13)	373	606 (14)	783 (14)	962 (14)	1141 (14)	1321 (14)
			428	455	770	1145	1444	1718	1993
14'-8"	(176")	PRESTRESSED	384 (18)	346	559 (18)	723 (14)	887 (14)	1052 (14)	1218 (14)
			410	420	709	1050	1434 (8)	1694 (8)	1954 (7)
15'-4"	(184")	PRESTRESSED	239	323	519 (13)	671 (13)	823 (13)	976 (14)	1129 (14)
			246	390	655	968	1324 (8)	1625 (11)	1874 (11)
17'-4"	(208")	PRESTRESSED	224	302	485 (14)	626 (13)	767 (13)	909 (13)	1052 (13)
			230	364	609	897	1224 (8)	1562 (14)	1801 (14)
19'-4"	(232")	PRESTRESSED	187	255	404 (12)	520 (12)	637 (12)	754 (12)	872 (12)
			192	303	500	732	993 (8)	1268 (14)	1470 (14)
21'-4"	(256")	PRESTRESSED	162	222	347 (11)	446 (11)	546 (12)	646 (12)	746 (12)
			166	261	424	616	831 (8)	1057 (14)	1225 (14)
22'-0"	(264")	PRESTRESSED	142	198	306 (11)	393 (11)	480 (11)	567 (11)	654 (11)
			142	230	369	531	713 (7)	903 (13)	1046 (13)
24'-0"	(288")	PRESTRESSED	137	192	295 (10)	378 (11)	461 (10)	545 (11)	629 (11)
			137	221	354	508	681 (7)	861 (13)	997 (13)
			124	175	267 (14)	341 (10)	416 (10)	491 (10)	566 (10)
			124	200	316	450	600 (7)	756 (13)	875 (13)

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

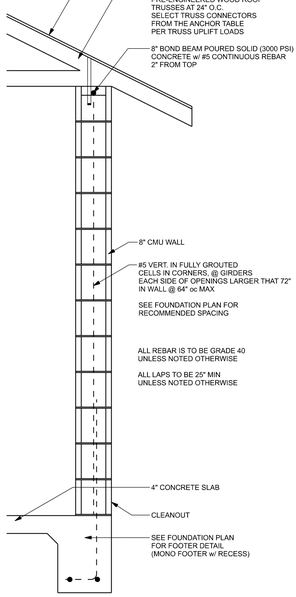
SAFE LOAD - POUNDS PER LINEAR FOOT

LENGTH		TYPE	8RU6	BRF6-0B / BRF6-1B	BRF10-0B / BRF10-1B	BRF14-0B / BRF14-1B	BRF18-0B / BRF18-1B	BRF22-0B / BRF22-1B	BRF26-0B / BRF26-1B	BRF30-0B / BRF30-1B
4'-4"	(52")	PRECAST	1635	1749	3355	3280	4349	5421	6493	7567
				1891	3699	5206	6639	8060	9479	10893
4'-6"	(54")	PRECAST	1494	1596	3063	2992	3968	4946	5924	6904
				1756	3699	5206	6639	8060	9479	10893
5'-8"	(68")	PRECAST	866	920	1770	1716	2277	2839	3402	3966
				1187	2481	4567	6389	8060 (34)	7917 (14)	9311 (13)
5'-10"	(70")	PRECAST	810	859	1653	1600	2124	2649	3174	3700
				1113	2342	4242	6639 (10)	8060 (28)	7402 (19)	8706 (13)
6'-8"	(80")	PRECAST	797	901	1825	3120	5048	7747	9448	7360
				901	1825	3120	5048	7915	9479	10893 (12)
7'-6"	(90")	PRECAST	669	755	1490	2459	3776	5743	7239	5623
				755	1490	2459	3776	5743	8998 (19)	10893 (28)
9'-8"	(116")	PRECAST	411	466	999	1568	2253	3129	4091	3146
				526	999	1568	2253	3129	4150	5891 (47)

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

SAFE LOAD - POUNDS PER LINEAR FOOT

LENGTH		TYPE	BRF6-1T / BRF6-2T	BRF10-1T / BRF10-2T	BRF14-1T / BRF14-2T	BRF18-1T / BRF18-2T	BRF22-1T / BRF22-2T	BRF26-1T / BRF26-2T	BRF30-1T / BRF30-2T
4'-4"	(52")	PRECAST	905	1748	2635	3522	4409	5296	6183
			905	1748	2635	3522	4409	5296	6183
4'-6"	(54")	PRECAST	867	1675	2525	3374	4224	5074	5924
			867	1675	2525	3374	4224	5074	5924
5'-8"	(68")	PRECAST	675	1301	1960	2618	3277	3935	4594
			675	1301	1960	2618	3277	3935	4594
5'-10"	(70")	PRECAST	655	1262	1900	2538	3176	3815	4453
			655	1262	1900	2538	3176	3815	4453
6'-8"	(80")	PRECAST	570	1012	1651	2204	2758	3312	3865
			570	1097	1651	2204	2758	3312	3865
7'-6"	(90")	PRECAST	506	797	1462 (8)	1952 (7)	2442 (6)	2931 (6)	3257
			506	967	1462	1952	2442	2931	3421
9'-8"	(116")	PRECAST	395	491	931 (12)	1301 (18)	1640 (12)	1980 (13)	2322 (16)
			395	589	1135	1514	1893	2272	2652



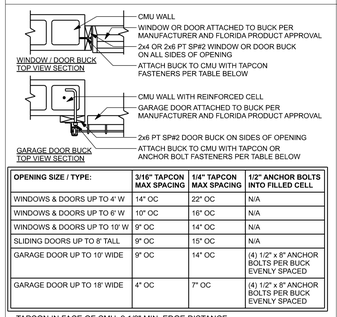
TYPICAL EXTERIOR WALL

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

ROOF SHEATHING FASTENING TABLE (RAFTER / TRUSS SG = 0.49)

Wind Speed	Sheathing Thickness Plywood Or OSB	Required Nail	Nail spacing along panel edges	Nail spacing along intermediate 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

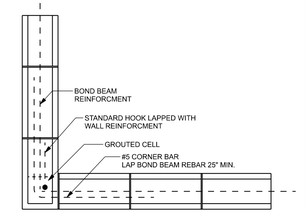
Note:
For sheathing located a minimum of 4 feet from the perimeter edge of the roof, including 4 feet on each side of ridges and hips, nail spacing is permitted to be 6 inches on center along panel edges and 6 inches on center along intermediate supports in the panel field.
Note:
This table specifies 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.



OPENING SIZE / TYPE:	3/16" TAPCON MAX SPACING	1/4" TAPCON MAX SPACING	1/2" ANCHOR BOLTS INTO FILLED CELL
WINDOWS & DOORS UP TO 4' W	14" OC	22" OC	N/A
WINDOWS & DOORS UP TO 6' W	10" OC	16" OC	N/A
WINDOWS & DOORS UP TO 10' W	9" OC	14" OC	N/A
SLIDING DOORS UP TO 8' TALL	9" OC	15" OC	N/A
GARAGE DOOR UP TO 10' WIDE	9" OC	14" OC	(4) 1/2" x 8" ANCHOR BOLTS PER BUCK EVENLY SPACED
GARAGE DOOR UP TO 18' WIDE	4" OC	7" OC	(4) 1/2" x 8" ANCHOR BOLTS PER BUCK EVENLY SPACED

- 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 FLORIDA PRODUCT APPROVAL.

DOOR & WINDOW BUCK ATTACHMENT



CORNER CONTINUITY OF BOND BEAM AND WALL REINFORCEMENT

(BASED ON FBC FIG. R609.2.4)
SCALE: 3/4" = 1'-0"

GRADE & SPECIES TABLE

		Fb	E
2x8	SP #2	925	1.4
2x10	SP #2	800	1.4
2x12	SP #2	750	1.4
GLB	24F-V3 SP	2600	1.9
LSL	TIMBERSTRAND	1700	1.7
LVL	MICROLAM	2950	2.0
PSL	PARALAM	2900	2.0

CONNECTOR TABLE

Uplift SP	Uplift SPF	Truss Connector	To Plate	To Truss/Rafter
615	485	SDWC15600	-	-
415	290	H3	4-8dx1 1/2"	4-8dx1 1/2"
575	495	H2.5A	5-8dx1 1/2"	5-8dx1 1/2"
1340	1015	H10A	9-10dt 1/2"	9-10dt 1/2"
720	620	LTS12-20	6-10dt 1 1/2"	6-10dt 1 1/2"
1000	860	MTS12-30	7-10dt 1 1/2"	7-10dt 1 1/2"
1450	1245	HTS20-30	12-10dt 1 1/2"	12-10dt 1 1/2"
Uplift SP	**Uplift SPF**	**Strap Ties**	**To One Member**	**To Other Member**
1235	1235	LSTA21	8-10d	8-10d
1640	1455	MSTA24	9-10d	9-10d
1030	1030	CS20	7-10d	7-10d
Uplift SP	**Uplift SPF**	**Stud Plate Ties**	**To Stud**	**To Plate**
585	535	SP1	6-10d	4-10d
1065	605	SP2	6-10d	6-10d
771	771	LSTA24	10-10d	wrap under or over plate
1235	1235	LSTA24	14-10d	wrap under or over plate
Uplift SP	**Uplift SPF**	**Holdowns @ Stemwall**	**To Stud / Post**	**Anchor**
1825	1800	DTT2Z	8-SDS 1/4"x1 1/2"	1/2"x12" Titen HD
4235	3640	HTT4	18-16dx2 1/2"	1/2"x12" Titen HD
Uplift SP	**Uplift SPF**	**Holdowns @ Mono**	**To Stud / Post**	**Anchor**
1825	1800	DTT2Z	8-SDS 1/4"x1 1/2"	1/2"x6" Titen HD
4235	3640	HTT4	18-16dx2 1/2"	1/2"x12" Titen HD
Uplift SP	**Uplift SPF**	**Post Bases @ Stemwall**	**To Post**	**Anchor**
1900		ABU44	12-16d	5/8"x12" Drill & Epoxy
2450		ABU66	12-16d	5/8"x12" Drill & Epoxy
Uplift SP	**Uplift SPF**	**Post Bases @ Mono**	**To Post**	**Anchor**
1900		ABU44	12-16d	5/8"x7" Drill & Epoxy
2450		ABU66	12-16d	5/8"x7" Drill & Epoxy

MASONRY TRUSS ANCHOR TABLE

OBTAIN UPLIFT REQUIREMENTS FROM TRUSS MANUFACTURER'S ENGINEERING

UPLIFT LBS.	TRUSS CONNECTOR MASONRY *	
< 1205	TA22	10-10d x 1 1/2"
< 1605	TA22	11-10d
< 860	MTSM20	4 - 1/4"x2 1/4" TITEN IN BLOCK 7 - 10d IN TRUSS
< 1175	HTSM20	4 - 1/4"x2 1/4" TITEN IN BLOCK 10 - 10d IN TRUSS
< 1040	META20	7-10d, 1 1/2"
< 1490	META20	10-10d, 1 1/2"
< 1780	HETA20	7-16d
< 1780	LGT2	7 - 1/4"x2 1/4" TITEN IN BLOCK 14 - 16d SINKER IN GIRDER
< 2130	HHETA20	17-10d, 1 1/2"
< 2310	HHETA24	21-10d, 1 1/2"
< 3965	MGT	22-10d TO TRUSS 5/8 AB TO WALL 15" EMBEDMENT
< 10980	HGT-2	16-10d TO TRUSS (2) 3/4 AB TO WALL 15" EMBEDMENT
< 10530	HGT-3	16-10d TO TRUSS (2) 3/4 AB TO WALL 15" EMBEDMENT

GENERAL NOTES:

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 NOT TO EXCEED 3'.

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.

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.)

REBAR: ASTM A 615, GRADE 60, DEFORMED BARS, FY = 60 KSI. ALL LAP SPLICES 48 * DB (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 .113" X 2 3/8" RING SHANK NAILS @ 6" OC ON EDGES & INTERMEDIATE 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 LOAD 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.

CONFIRM SITE CONDITIONS, FOUNDATION BEARING CAPACITY, GRADE AND BACKFILL HEIGHT, WIND SPEED AND DEBRIS ZONE, AND FLOOD ZONE.

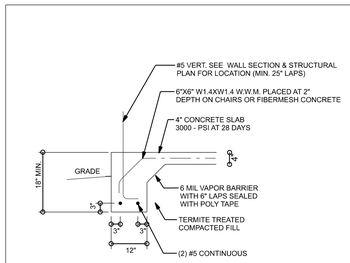
PROVIDE MATERIALS AND CONSTRUCTION TECHNIQUES, WHICH COMPLY WITH FBCR REQUIREMENTS FOR THE STATED WIND VELOCITY AND DESIGN PRESSURES.

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, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS.

ROOF SYSTEM DESIGN:

THE SEAL ON THESE PLANS FOR COMPLIANCE WITH FBCR, IS BASED ON REACTIONS, UPLIFTS, AND BEARING LOCATIONS IN TRUSS 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 FBCR REQUIRED LOADS AND ANY SPECIAL LOADS. THE BUILDER IS RESPONSIBLE TO REVIEW EACH INDIVIDUAL TRUSS MEMBER AND THE TRUSS ROOF SYSTEM



F1 S-2 ALT. MONOLITHIC FOOTING

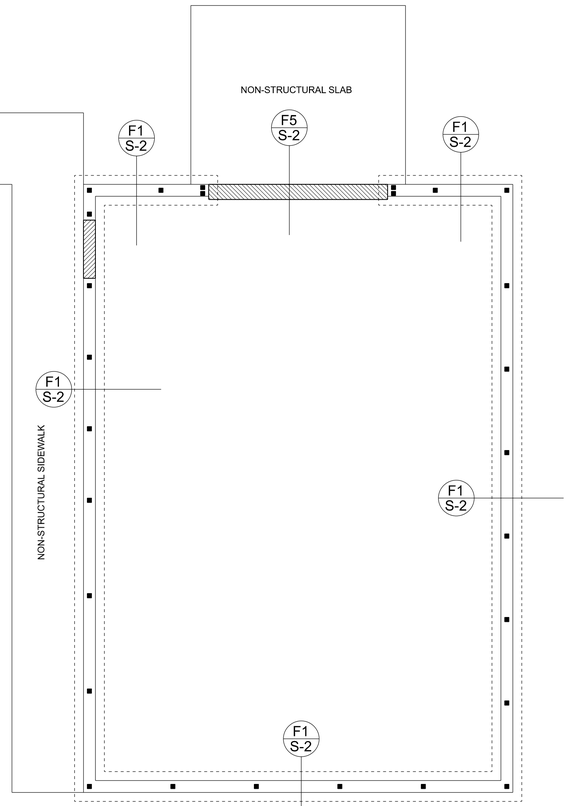
SCALE: 1/2" = 1'-0"

MASONRY NOTE:
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 THE ENGINEER IN WRITING.

	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 approval
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 metal ties not completely embedded in mortar or grout, 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.

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.

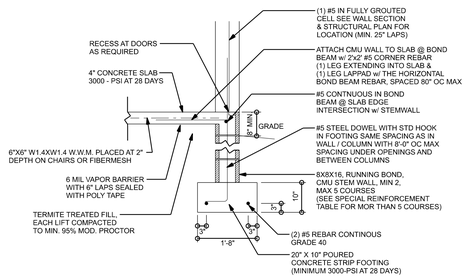
STEMWALL HEIGHT (FEET)	UNBALANCED BACKFILL HEIGHT	VERTICAL REINFORCEMENT FOR 8" CMU STEMWALL (INCHES O.C.)			VERTICAL REINFORCEMENT FOR 12" CMU STEMWALL (INCHES O.C.)		
		#5	#7	#8	#5	#7	#8
3.3	3.0	96	96	96	96	96	96
4.0	3.7	96	96	96	96	96	96
4.7	4.3	88	96	96	96	96	96
5.3	5.0	56	96	96	96	96	96
6.0	5.7	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

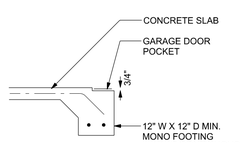
SCALE: 1/4" = 1'-0"

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.
FN - 2	CONTRACTOR SHALL VERIFY NEED FOR INTERIOR BEARING 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 S-2 STEM WALL FOOTING

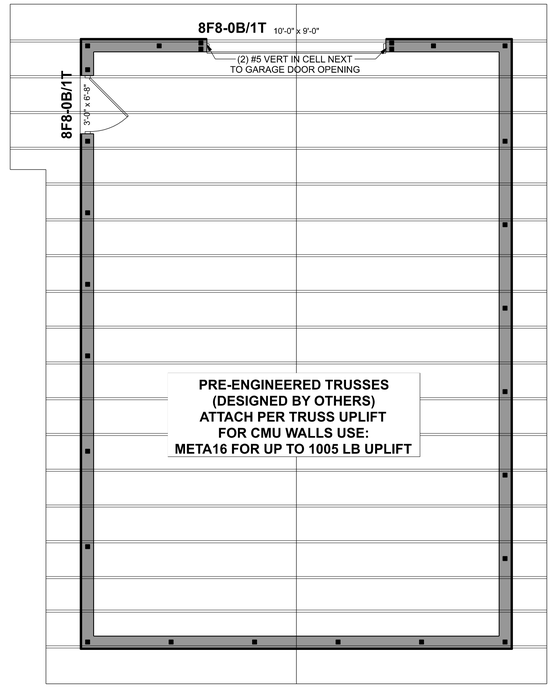
SCALE: 1/2" = 1'-0"



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 S-2 GARAGE DOOR POCKET FOOTING

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



STRUCTURAL LAYOUT

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

STRUCTURAL PLAN NOTES

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

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

SN-3 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 TRUSS PACKAGE

1ST FLOOR TOTAL SHEAR WALL SEGMENTS

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

Bryan Zecher Construction

Farnell Garage

PROJECT ADDRESS:
839 SW Seminole Ter
Lake City Florida 32024

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

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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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220212

S-2
OF 2 SHEETS