

## MATERIALS

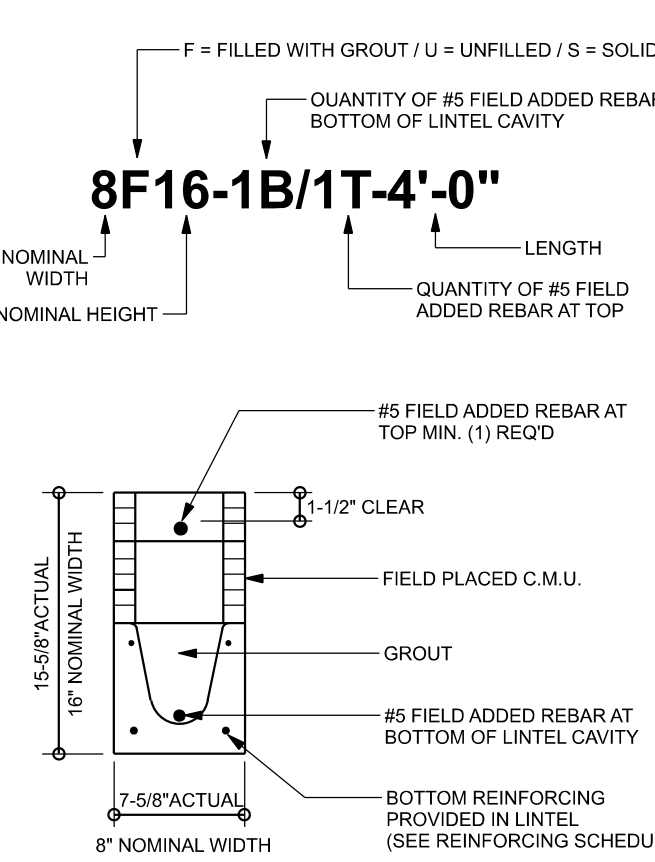
1. Fc 8" precast lintel = 3500 psi
2. Fc prestressed lintel = 6000 psi
3. Grout per ASTM C476 Fc = 3000 psi w/ maximum 3/8 inch aggregate & 8 to 11 inch slump
4. Concrete Masonry Units (CMU) per ASTM C90 minimum net area compressive strength = 1900 psi
5. Rebar per ASTM A615 grade 60
6. Prestressing 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 field lintels as required.
3. Installation of lintel must comply with the architectural and/or structural documents.
4. U-Intels are manufactured with 5 1/2" long notches at the ends to accommodate vertical call 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. 03-0605.05
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 1 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.

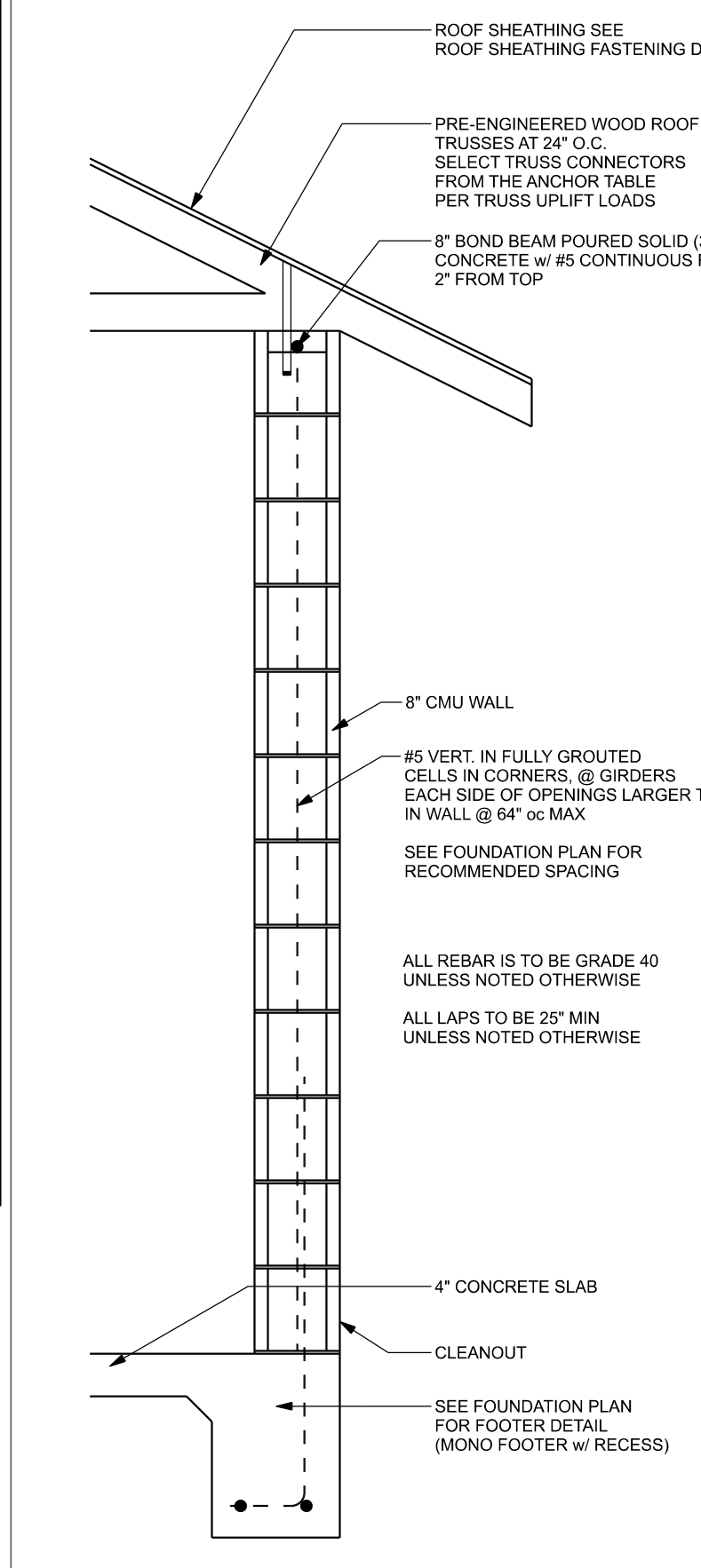
7. For composite lintel heights not shown, use safe load from next lower height shown.
8. For lintels lengths not shown, use safe load from next longest length shown
9. All safe loads in units of pounds per linear foot
10. All safe loads based on simply supported span.
11. The number in the the parenthesis indicates the percent reduction for grade 40 field added rebar.  
Example 7'-0" lintel type 8F32-1B safe gravity load = 6472/H.0469:(15)H.0781; w/ 15% reduction 6472 x (.85) = 5501 pf

SAFE GRAVITY LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS														
		SAFE LOAD - POUNDS PER LINEAR FOOT												
LENGTH	TYPE	8U8	8F8-0B		8F12-0B		8F16-0B		8F20-0B		8F24-0B		8F28-0B	
			8F8-1B	8F8-1B	8F12-1B	8F12-1B	8F16-1B	8F16-1B	8F20-1B	8F20-1B	8F24-1B	8F24-1B	8F28-1B	8F28-1B
2'-10" (34")	PRECAST	2231	3069	4005	6113	7547	8974	10394	11809	13224	14639	16054	17469	18884
3'-6" (42")	PRECAST	2231	3069	4005	6113	7547	8974	10394	11809	13224	14639	16054	17469	18884
4'-0" (48")	PRECAST	1966	2693	2761	3820	4890	5961	7034	8104	9174	10244	11314	12384	13454
4'-6" (54")	PRECAST	1599	1989	2110	2931	3753	4576	5400	6224	7047	7871	8694	9518	10341
5'-4" (64")	PRECAST	1217	1663	3290	5365	7547	9729	11911	14093	16275	18457	20639	22821	25003
5'-10" (70")	PRECAST	1062	1103	1713	1631	2090	2549	3008	3467	3926	4385	4844	5303	5762
6'-6" (78")	PRECAST	908	1238	2177	3480	5381	8360	10394	12418	14442	16466	18490	20514	22538
7'-6" (90")	PRECAST	743	1011	1729	2632	4205	6268	8331	10394	12457	14520	16583	18646	20709
8'-4" (112")	PRECAST	554	699	1160	1825	2564	3486	4781	6104	7427	8750	10073	11396	12719
10'-6" (126")	PRECAST	475	635	890	1247	2093	2771	3643	4754	5865	6976	8087	9198	10309
11'-4" (136")	PRECAST	362	543	1052	1533	2093	2781	3643	4754	5865	6976	8087	9198	10309
12'-0" (144")	PRECAST	337	582	945	1366	1846	2423	3127	4006	4985	5964	6943	7922	8901
13'-4" (160")	PRECAST	296	540	873	1254	1684	2193	2805	3552	4300	5047	5795	6542	7290
14'-0" (168")	PRECAST	279	471	755	1075	1428	1838	2316	2883	3450	4017	4584	5151	5718
14'-6" (176")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
15'-4" (184")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
17'-4" (208")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
19'-4" (232")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
21'-4" (256")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
22'-0" (264")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
24'-0" (288")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

LENGTH	TYPE	SAFE LOAD - POUNDS PER LINEAR FOOT										
		8F8-1T	8F12-1T	8F16-1T	8F20-1T	8F24-1T	8F28-1T	8F32-1T	8F8-2T	8F12-2T	8F16-2T	8F20-2T
2'-10" (34")	PRECAST	1972	3173	4460	5747	7034	8321	9608	1972	3173	4460	5747
3'-6" (42")	PRECAST	1569	2524	3547	4569	5591	6613	7636	1569	2524	3547	4569
4'-0" (48")	PRECAST	1383	2192	3079	3966	4853	5740	6627	1383	2192	3079	3966
4'-6" (54")	PRECAST	1207	1940	2724	3508	4292	5077	5861	1207	1940	2724	3508
5'-4" (64")	PRECAST	1016	1632	2290	2949	3607	4265	4924	1016	1632	2290	2949
5'-10" (70")	PRECAST	809	1462	2093	2694	3295	3897	4498	809	1462	2093	2694
6'-6" (78")	PRECAST	635	1340	1980	2479	2959	3486	4038	635	1340	1980	2479
7'-6" (90")	PRECAST	527	1102	1634	2102	2571	3039	3508	527	1102	1634	2102
9'-4" (112")	PRECAST	391	880	1133	1471	1811	2152	2494	391	880	1133	1471
10'-6" (126")	PRECAST	330	759	1002	1242	1482	1723	1964	330	759	1002	1242
11'-4" (136")	PRECAST	270	643	886	1129	1371	1613	1854	270	643	886	1129
12'-0" (144")	PRECAST	240	543	786	1029	1271	1513	1754	240	543	786	1029
13'-4" (160")	PRECAST	209	442	685	928	1170	1412	1654	209	442	685	928
14'-0" (168")	PRECAST	189	384	569	754	939	1124	1309	189	384	569	754
14'-6" (176")	PRESTRESSED	239	323	519	715	911	1107	1303	239	323	519	715
15'-4" (184")	PRESTRESSED	246	390	655	968	1324	1625	1926	246	390	655	968
17'-4" (208")	PRESTRESSED	224	302	485	720	955	1190	1425	224	302	485	720
19'-4" (232")	PRESTRESSED	187	255	404	620	836	1052	1268	187	255	404	620
21'-4" (256")	PRESTRESSED	166	261	424	616	831	1057	1273	166	261	424	616
22'-0" (264")	PRESTRESSED	142	198	308	451	593	735	877	142	198	308	451
24'-0" (288")	PRESTRESSED	137	182	295	438	580	722	864	137	182	295	438

LENGTH	TYPE	SAFE LOAD - POUNDS PER LINEAR FOOT										
		8R8-0B	8R10-0B	8R14-0B	8R18-0B	8R22-0B	8R26-0B	8R30-0B	8R8-1B	8R10-1B	8R14-1B	8R18-1B
4'-4" (52")	PRECAST	1635	1749	3355	5280	6349	7421	8493	1635	1749	3355	5280
5'-8" (68")	PRECAST	1494	1756	3699	5206	6639	8069	9479	1494	1756	3699	5206
5'-0" (60")	PRECAST	866	1167	2481	4567	6389	8211	10033	866	1167	2481	4567
5'-10" (70")	PRECAST	810	1113	2342	4422	6539	8659	10779	810	1113	2342	4422
6'-8" (80")	PRECAST	797	901	1625	3120	5048	7147	9448	797	901	1625	3120
7'-6" (90")	PRECAST	669	755	1490	2459	3776	5143	7239	669	755	1490	2459
9'-8" (116")	PRECAST	411	466	999	1568	2253	3129	4091	411	466	999	1568

LENGTH	TYPE	SAFE LOAD - POUNDS PER LINEAR FOOT										
		8R8-1T	8R10-1T	8R14-1T	8R18-1T	8R22-1T	8R26-1T	8R30-1T	8R8-2T	8R10-2T	8R14-2T	8R18-2T
4'-4" (52")	PRECAST	805	905	1748	2635	3522	4409	5296	805	905	1748	2635
4'-6" (54")	PRECAST	867	967	1875	2825	3714	4604	5494	867	967	1875	2825
5'-8" (68")	PRECAST	675	775	1301	1960	2618	3277	3935	675	775	1301	1960
5'-10" (70")	PRECAST	655	755	1262	1900	2538	3176	3815	655	755	1262	1900
6'-8" (80")	PRECAST	570	670	1097	1651	2204	2758	3312	570	670	1097	1651
7'-6" (90")	PRECAST	506	606	997	1462	1952	2442	2931	506	606	997	1462
9'-8" (116")	PRECAST	395	495	891	1301	1791	2281	2771	395	495	891	1301



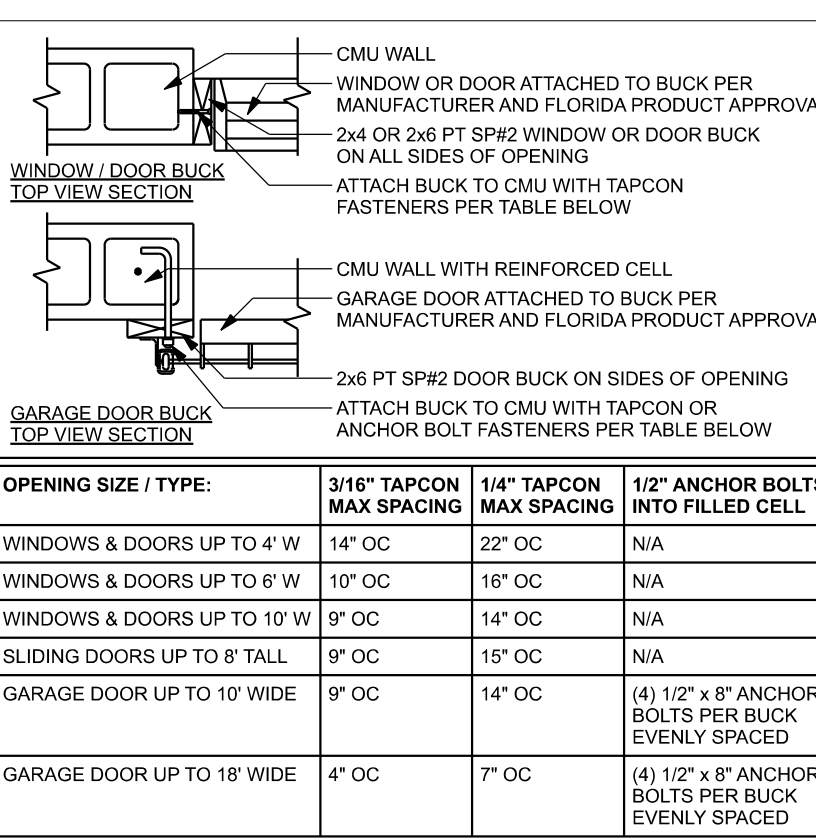
## TYPICAL EXTERIOR WALL

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

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

Wind Speed	Sheathing Thicknesses Along Or OSB	Required Nail	Nail spacing along panel edges	Nail spacing in the panel field
120 mph Exp. B	7/16"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	12" oc
120 mph Exp. C	7/16"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
120 mph Exp. D	19/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
130 mph Exp. B	7/16"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
130 mph Exp. C	15/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
130 mph Exp. D	19/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
140 mph Exp. B	7/16"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
140 mph Exp. C	19/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
140 mph Exp. D	19/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc

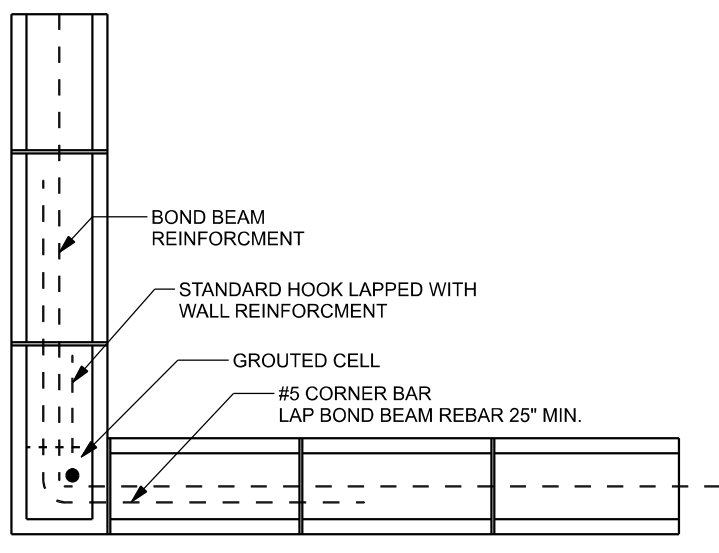
Note:  
For sheathing located a minimum of 4 feet from the perimeter edge of the roof, including 4 feet on each side of ridges and hips, nail spacing is permitted to be 6 inches on center along panel edges and 6 inches on center along intermediate supports in the panel field.  
Note:  
This table specifies the code minimum thickness of roof sheathing. The thickness of the sheathing may need to be increased based on the type of roofing material being used. See manufacturer 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"



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

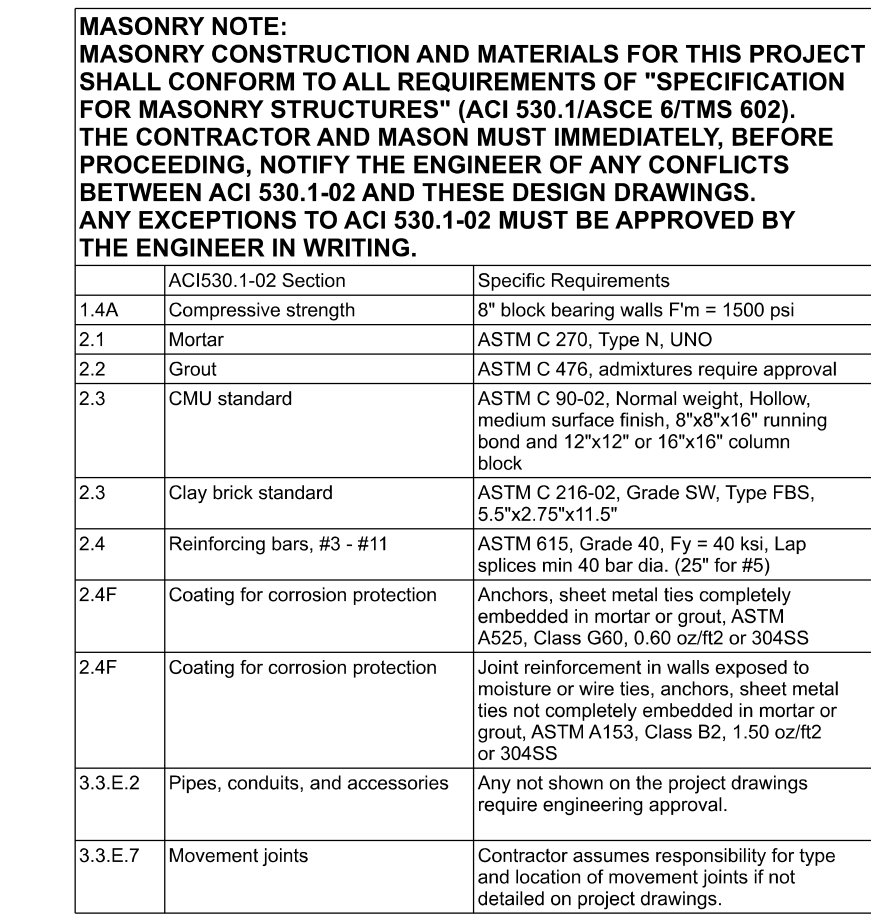
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120 mph Exp. B	7/16"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	12" oc
120 mph Exp. C	7/16"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
120 mph Exp. D	19/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
130 mph Exp. B	7/16"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
130 mph Exp. C	15/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
130 mph Exp. D	19/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
140 mph Exp. B	7/16"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
140 mph Exp. C	19/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	6" oc	6" oc
140 mph Exp. D	19/32"	ASTM F1667 RSR5-01 (2.38" x 0.113")	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 on the type of roofing material being used. See manufacturer Florida product approval.

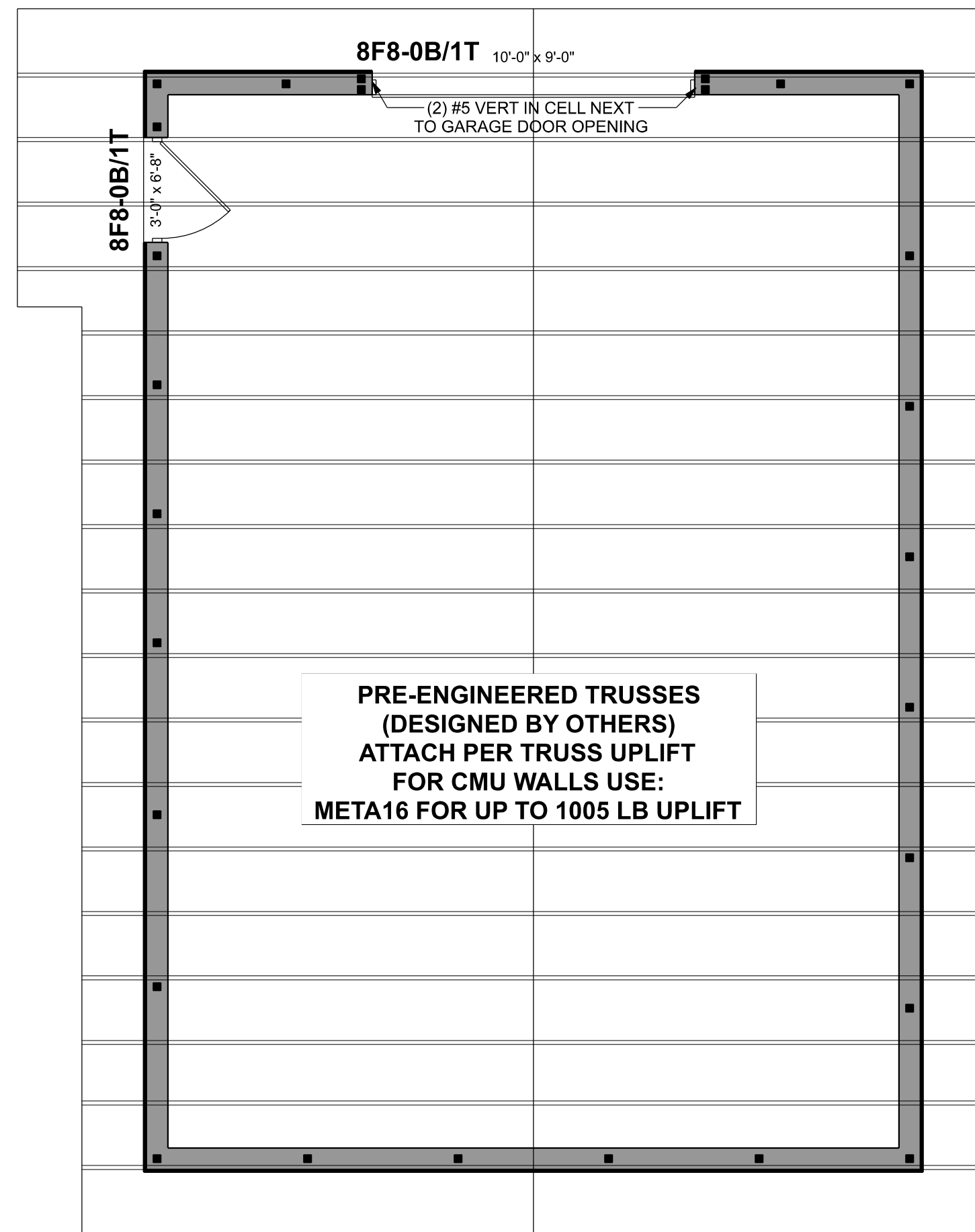
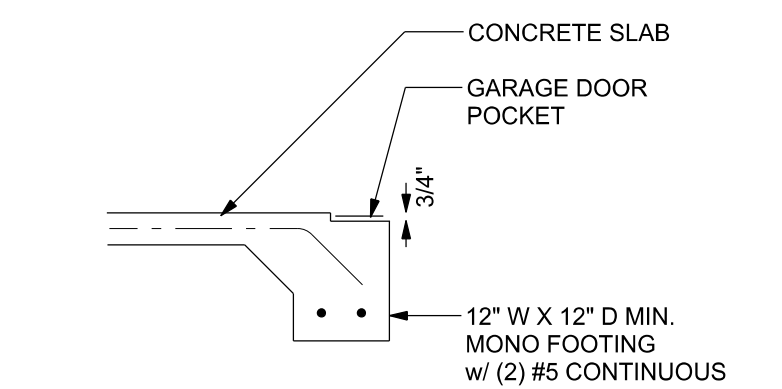
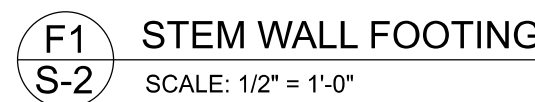
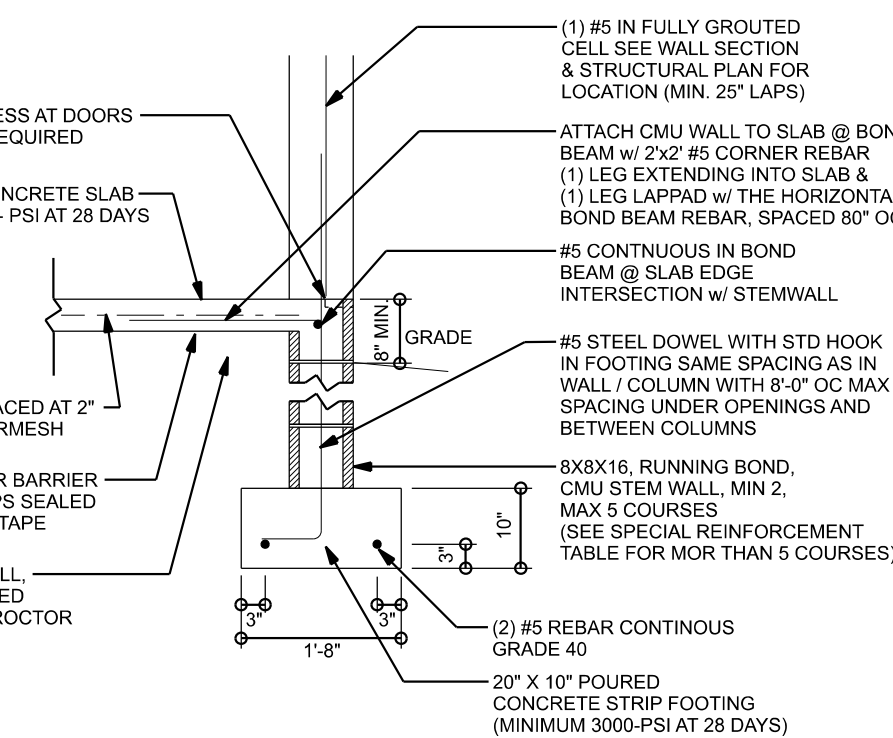
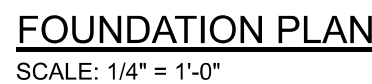


CONNECTOR TABLE				
Uplift SP	Uplift SPF	Truss Connector	To Plate	To Truss/Rafter
815	465	SDWC15600	-	-
415	290	H3	4-8d x 1 1/2"	4-8d x 1 1/2"
575	495	H2.5A	5-8d x 1 1/2"	5-8d x 1 1/2"
1340	1015	H10A	9-10d x 1 1/2"	9-10d x 1 1/2"
720	620	LTS12-20	6-10d x 1 1/2"	6-10d x 1 1/2"
1000	860	MTS12-30	7-10d x 1 1/2"	7-10d x 1 1/2"
1450	1245	HTS20-30	12-10d x 1 1/2"	12-10d x 1 1/2"
Uplift SP	Uplift SPF	Strap Ties	To One Member	To Other Member
1235	1235	LSTA21	6-10d	6-10d
1640	1455	MSTA24	9-10d	9-10d
1030	1030	CSD20	7-10d	7-10d
Uplift SP	Uplift SPF	Stud Plate Ties	To Stud	To Plate
585	535	SP1	6-10d	4-10d
1065	805	SP2	6-10d	6-10d
771	771	LSTA24	10-10d	wrap under or over plate
1235	1235	LSTA24	10-10d	wrap under or over plate
Uplift SP	Uplift SPF	Holdowns @ Stemwall	To Stud / Post	To Anchor
1625	1800	DTT22	8-SDS 14x1 1/2"	12"x12" Titen HD
4235	3640	HTT4	18-16d x 1 1/2"	12"x12" Titen HD
Uplift SP	Uplift SPF	Holdowns @ Mono	To Stud / Post	To Anchor
1625	1800	DTT22	8-SDS 14x1 1/2"	12"x12" Titen HD
4235	3640	HTT4	18-16d x 1 1/2"	12"x12" Titen HD
Uplift SP	Uplift SPF	Base @ Stemwall	To Stud	To Anchor
1900	ABU44		12-16d	5/8"x12" Drill & Epoxy
2450	ABU66		12-16d	5/8"x12" Drill & Epoxy
Uplift SP	Uplift SPF	Base @ Mono	To Stud	To Anchor
1900	ABU44		12-16d	5/8"x7" Drill & Epoxy
2450	ABU66		12-16d	5/8"x7" Drill & Epoxy





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 under 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 vertical reinforcement at 48"OC vertically or a horizontal bond beam with #4s continuous at mid height. For higher parts of the wall 12" CMU may be used with reinforcement as shown in the table below.								
STEM WALL HEIGHT (FEET)	UNBALANCED BACKFILL HEIGHT	VERTICAL REINFORCEMENT FOR 8" CMU STEM WALL (INCHES O.C.)			VERTICAL REINFORCEMENT FOR 12" CMU STEM WALL (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	



**STRUCTURAL LAYOUT**  
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

- |      |                                                                                                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 BC311-03, BC311-1, BC311-2, BC311-3, BC311-8, BC311-9, BC311-10, BC311-11, BC311-12, & BC311-13 ARE FURNISHED BY THE TRUSS SUPPLIER, WITH THE SEALED TRUSS PACKAGE |

Bryan Zecher Construction

Farnell Garage

**PROJECT ADDRESS:**  
839 SW Seminole Ter  
Lake City Florida 32024

<p><b>DIMENSIONS:</b> State dimensions supersede scaled dimensions. Refer all questions to Mark Disoway P.E. for resolution. Do not proceed without clarification.</p> <p><b>COPYRIGHTS AND PROPERTY RIGHTS:</b> Mark Disoway P.E. hereby expressly reserves its common law copyrights and property right in these instruments of service. This document is not to be reproduced, altered or copied in any form or manner without first the express written permission and consent of Mark Disoway.</p> <p><b>CERTIFICATION:</b> 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 International (2020) to the best of my knowledge.</p> <p><b>LIMITATION:</b> This design is valid for one building, at specified location.</p>	<p><b>DIGITAL SIGNATURE</b> ISSUED BY: IdenTrust</p> <p><b>MARK DISOWAY P.E. 53915</b></p> <p>Monday, February 21, 2022</p> <p><b>THIS PDF HAS DIGITAL SIGNATURE AND ELECTRONIC SEAL. <u>PRINTED COPIES ARE NOT CONSIDERED SIGNED OR SEALED. YOU MUST VERIFY SIGNATURE ON THIS PDF.</u></b></p> <p><b><u>CLICK HERE TO VERIFY.</u></b></p> 
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