

CONTINUOUS FOOTING DETAILS

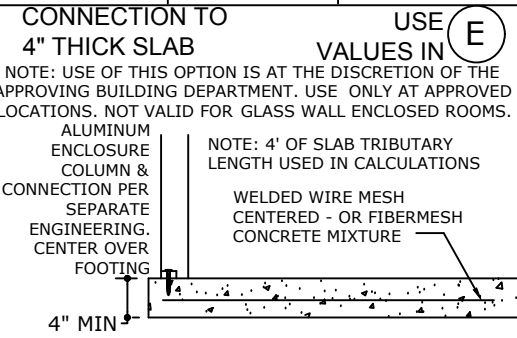
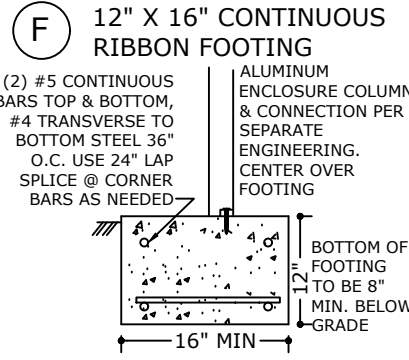
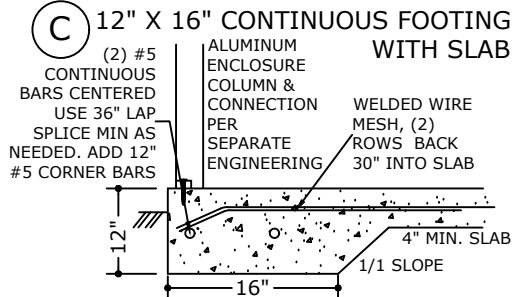
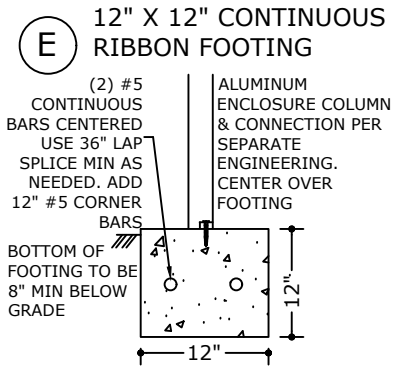
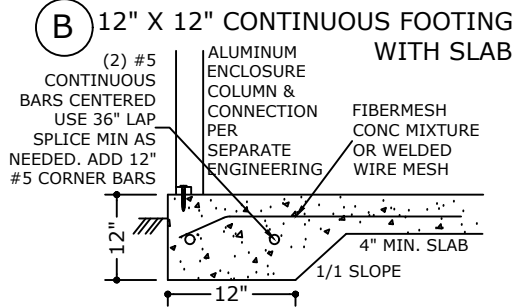
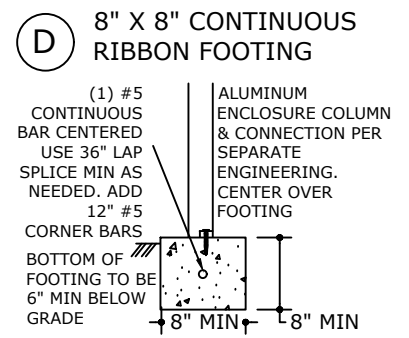
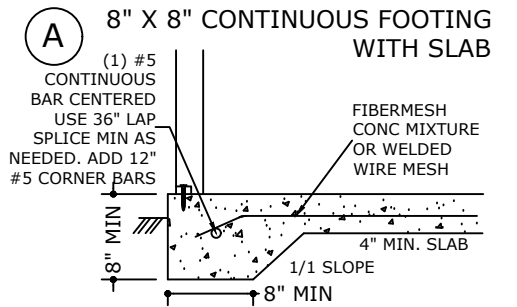


TABLE 1: CONTINUOUS FOOTING SIZING TABLE

TABLE SOLVES FOR MAXIMUM ROOF PANEL CLEAR SPAN FOR EACH FOOTING TYPE, FT

WIND VELOCITY	ROOF & WALL TYPE	ASCE 7-10 UPLIFT, PSF	FOOTING TYPE:					
			A	B	C	D	E	F
ALL WIND ZONES	SCREEN ROOF SCREEN WALLS	10	31'-11"	41'-10"	47'-10"	7'-11"	17'-11"	23'-11"
110B, 110C, 120B, 130B*, 120C*	SOLID ROOF-OPEN WALL	7.25	20'-0"	20'-0"	20'-0"	11'-0"	20'-0"	20'-0"
	SOLID ROOF - SCREEN WALL	10	20'-0"	20'-0"	20'-0"	7'-11"	17'-11"	20'-0"
	SOLID ROOF - SOLID WALL	16.2	19'-8"	20'-0"	20'-0"	4'-11"	11'-1"	14'-9"
120C, 130B, 140B*, 130C*	SOLID ROOF-OPEN WALL	7.74	20'-0"	20'-0"	20'-0"	10'-3"	20'-0"	20'-0"
	SOLID ROOF - SCREEN WALL	12	20'-0"	20'-0"	20'-0"	6'-7"	14'-11"	19'-11"
130C, 140B, 150B*, 140C*	SOLID ROOF-OPEN WALL	9.36	20'-0"	20'-0"	20'-0"	8'-6"	19'-2"	20'-0"
	SOLID ROOF - SCREEN WALL	15	20'-0"	20'-0"	20'-0"	5'-3"	11'-11"	15'-11"
140C, 150B, 160B*, 150C*	SOLID ROOF-OPEN WALL	11.14	20'-0"	20'-0"	20'-0"	7'-2"	16'-1"	20'-0"
	SOLID ROOF - SCREEN WALL	18	17'-8"	20'-0"	20'-0"	4'-5"	9'-11"	13'-3"
150C, 160B, 160C*	SOLID ROOF-OPEN WALL	13.08	20'-0"	20'-0"	20'-0"	6'-1"	13'-8"	18'-3"
	SOLID ROOF - SCREEN WALL	21	15'-2"	19'-11"	20'-0"	3'-9"	8'-6"	11'-4"
160C, 170B, 170C*	SOLID ROOF-OPEN WALL	15.17	20'-0"	20'-0"	20'-0"	5'-3"	11'-10"	15'-9"
	SOLID ROOF - SCREEN WALL	24	13'-3"	17'-5"	19'-11"	3'-3"	7'-5"	9'-11"
170C, 180C*	SOLID ROOF-OPEN WALL	20.14	15'-10"	20'-0"	20'-0"	3'-11"	8'-11"	11'-10"
	SOLID ROOF - SCREEN WALL	28	11'-4"	14'-11"	17'-1"	2'-10"	6'-4"	8'-6"
	SOLID ROOF-SOLID WALL	43.98	7'-3"	9'-6"	10'-10"	1'-9"	4'-1"	5'-5"

TABLE 1 & 2 DESIGN NOTES:

TABLES CAN ALSO BE USED WITH INTERMEDIATE CARRY BEAM. USE TOTAL ROOF SPAN WHEN SOLVING FOR INTERMEDIATE FOOTING & SPAN FROM CARRY BEAM TO END OF ENCLOSURE FOR OUTER FOOTING.

UPLIFT PRESSURES HAVE BEEN CALCULATED USING ASCE 7-10 FOR 200SQFT ROOF AREA MRH=15' MONOSLOPE SLOPED ROOF USING MWFRS. DESIGN DEAD LOAD=1PSF. RISK CATEGORY FOR SCREEN ROOF = I, OPEN & ENCLOSED = II. TRIBUTARY LENGTH OF 4" SLAB USED IN EQUATIONS = 4'-0".

F.S. AGAINST UPLIFT = 1.67 APPLIED TO ALL LOADS. COMPLIES WITH FBC 1621 IN HVHZ AREAS.

SITE SPECIFIC ENGINEERING REQUIRED FOR ANY VALUES NOT COINCIDING WITH LIMITS OF CORRESPONDING MASTER PLAN SHEETS.

TABLE 2: ISOLATED PAD FOOTING SIZING TABLE

TABLE SOLVES FOR MINIMUM PAD FOOTING SIZE

WIND VELOCITY	ROOF & WALL TYPE	ASCE 7-05 UPLIFT, PSF	ROOF SPAN												
			MAXIMUM COLUMN SPACING												
			12' 8'	12' 10'	12' 12'	16' 8'	16' 10'	16' 12'	20' 8'	20' 10'	20' 12'	20' 12'	20' 12'		
ALL WIND ZONES	SCREEN ROOF SCREEN WALLS	10	H	H	H	H	H	H	H	H	H	H	H	H	H
110B, 110C, 120B, 130B*, 120C*	SOLID ROOF-OPEN WALL	7.25	G	G	H	G	H	H	H	H	H	H	H	H	H
	SOLID ROOF - SCREEN WALL	10	H	H	H	H	H	H	H	H	H	H	H	H	H
	SOLID ROOF - SOLID WALL	16.2	H	H	H	H	H	H	H	H	I	I	I	I	I
120C, 130B, 140B*, 130C*	SOLID ROOF-OPEN WALL	7.74	G	G	H	H	H	H	H	H	H	H	H	H	H
	SOLID ROOF - SCREEN WALL	12	H	H	H	H	H	H	H	H	H	H	H	H	H
130C, 140B, 150B*, 140C*	SOLID ROOF-OPEN WALL	9.36	G	H	H	H	H	H	H	H	H	H	H	H	H
	SOLID ROOF - SCREEN WALL	15	H	H	H	H	H	H	H	H	H	H	H	H	H
140C, 150B, 160B*, 150C*	SOLID ROOF-OPEN WALL	11.14	H	H	H	H	H	H	H	H	H	H	H	H	H
	SOLID ROOF - SCREEN WALL	18	H	H	H	H	H	H	H	H	H	H	H	H	H
150C, 160B, 160C*	SOLID ROOF-OPEN WALL	13.08	H	H	H	H	H	H	H	H	H	H	H	H	H
	SOLID ROOF - SCREEN WALL	21	H	H	H	H	H	H	H	H	H	H	H	H	H
160C, 170B, 170C*	SOLID ROOF-OPEN WALL	15.17	H	H	H	H	H	H	H	H	H	H	H	H	H
	SOLID ROOF - SCREEN WALL	24	H	H	I	H	I	I	I	I	I	I	I	I	I
170C, 180C*	SOLID ROOF-OPEN WALL	20.14	H	H	H	H	H	H	H	H	H	H	H	H	H
	SOLID ROOF - SCREEN WALL	28	H	I	I	I	I	I	I	I	I	I	I	I	I
	SOLID ROOF - SOLID WALL	43.98	I	I	I	I	X	X	X	X	X	X	X	X	X

NOTE: FIELDS IN THIS TABLE MARKED WITH "X" ARE NOT COVERED BY THE FOOTING OPTIONS ON THIS SHEET AND WILL REQUIRE ADDITIONAL ENGINEERING.
* INDICATES WIND VELOCITY FOR CATEGORY II (SOLID ROOF, SOLID WALL)

GENERAL NOTES:

THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2014 FLORIDA BUILDING CODE FOR USE WITH ALUMINUM ENCLOSURES WITH SCREEN OR PAN / COMPOSITE ALUMINUM ROOF SYSTEMS ONLY. DESIGN PRESSURES PER ASCE 7-10.
** ALTERATIONS, ADDITIONS, HIGHLIGHTING, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.

SOIL TO BE COMPACTED TO 98% OPTIMUM DENSITY BY MECHANICAL MEANS. MINIMUM SOIL BEARING PRESSURE = 2,500 PSF. CERTIFICATION OF SOIL BEARING PRESSURE SHALL BE BY OTHERS.

SLAB ON GRADE SHALL BE 4" MIN. THICK. CONCRETE SLAB REINFORCED WITH 6 X 6 - W1.4XW1.4 W.W.F. OR 0.1% FIBERMESH OVER VAPOR BARRIER ON 6" MIN. GRANULAR FILL (U.O.N.). LAP ALL MESH A MINIMUM OF 2 FULL SQUARES.

REINFORCING FOR SLAB ON GRADE SHALL BE SUPPORTED BY PRECAST CONCRETE CUBES, BRICK OR CHAIRS DESIGNED FOR EARTH BEARING AT A MAXIMUM 4'-0" O.C. IN EACH DIRECTION. DEPTH OF SUPPORT SHALL PROVIDE FOR 3/4" MIN. TOP COVER TO REINFORCING.

PROVIDE A GRID OF SAWCUT CONTROL JOINTS AT EVERY 30'-0". CONSTRUCTION JOINTS SHALL BE LOCATED AS REQUIRED BY CONCRETE PLACEMENT.

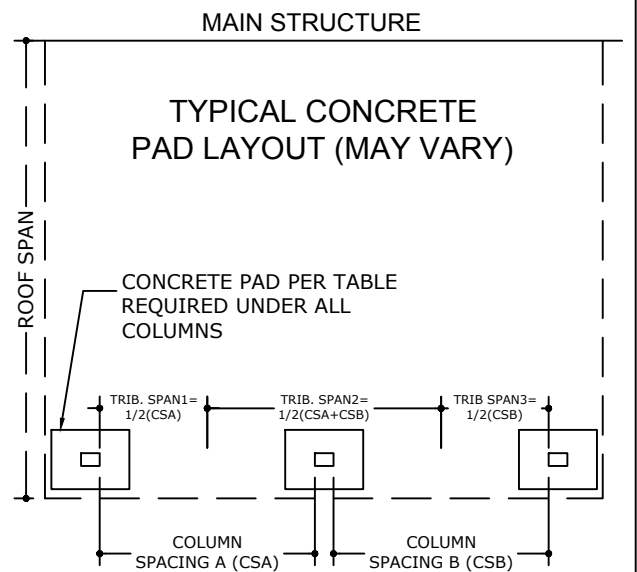
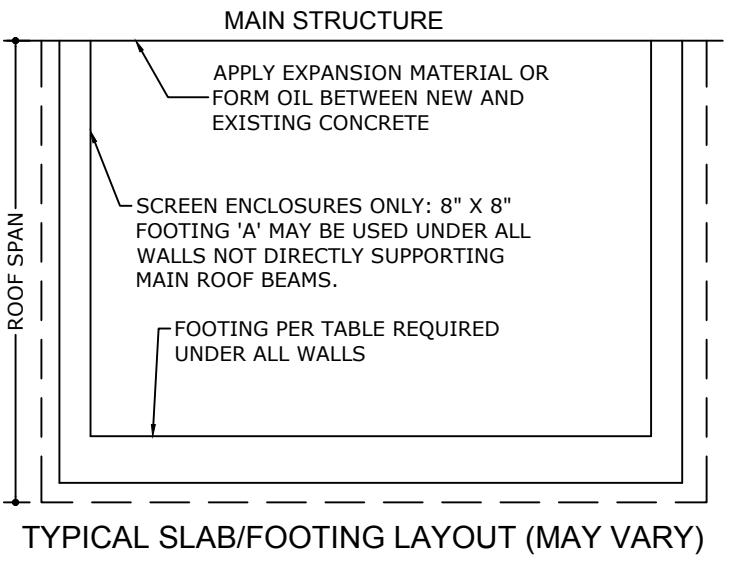
ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS AND RECOMMENDATIONS OF CURRENT ACI 318-11 "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS". CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000PSI. A CERTIFICATE OF MANUFACTURER'S MIX AND STRENGTH IS TO BE PROVIDED TO THE INSPECTOR UPON REQUEST. NO WATER TO BE ADDED AFTER TRUCK LEAVES PLANT WITHOUT APPROVAL OF ENGINEER OR PLANT ENGINEER. PLANT CONTROL IS REQUIRED. MAXIMUM MIX TIME AT POINT OF DEPOSIT IS 90 MINUTES.

ALL REINFORCEMENT SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE NEW BILLET STEEL CONFORMING TO CURRENT REQUIREMENTS OF ASTM A615, GRADE 60 (U.O.N.), FREE FROM OIL, LOOSE SCALE AND LOOSE RUST AND BENT, LAPPED, PLACED, SUPPORTED AND FASTENED ACCORDING TO THE "ACI DETAILING MANUAL" (SP-66) AND THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318-11). SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW.

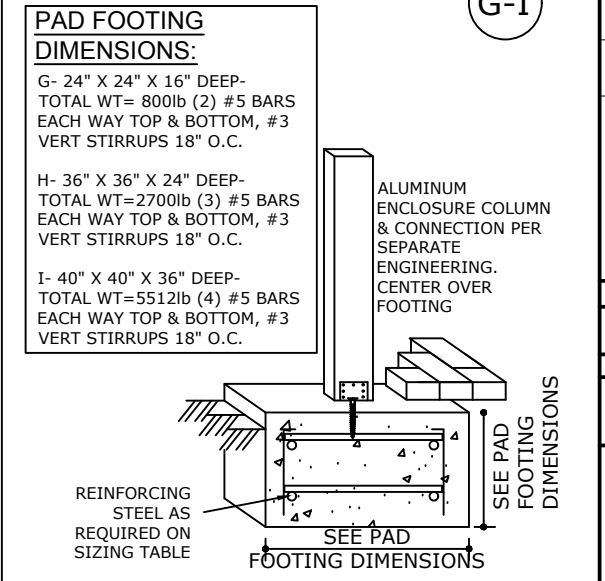
WELDED WIRE MESH SHALL CONFORM TO ASTM A185 (70,000 PSI MINIMUM). ALL WELDED WIRE FABRIC SHALL BE LAPPED TWO FULL MESH PANELS AT ENDS AND SIDES AND TIED SECURELY. MINIMUM REINFORCING STEEL CLEAR COVERAGE SHALL BE AS FOLLOWS. (PER ACI 318, SECTION 7.7.)

FOOTING: TOP = 1 1/2", BOTTOM = 3" (#5 BARS AND SMALLER) SLABS ON SMOOTH, LEVEL SURFACE: TOP = 3/4", BOTTOM = 1 1/2" ALLOW 3 DAYS CURE TIME BEFORE INSTALLING ANCHORS INTO CONCRETE.

THESE TABLES REPRESENT EMPIRICAL UPLIFT CALCULATIONS FOR FOOTING SIZES BASED ON STANDARD WEIGHT (150PCF) CONCRETE. THEY NEGLECT THE BENEFIT OF SKIN FRICTION AND OTHER BENEFICIAL SURCHARGE LOADING. NO WARRANTY, EXPRESSED OR IMPLIED, IS CONTAINED HEREIN AS TO ANY INFORMATION OTHER THAN THAT WHICH IS PUBLISHED HEREIN.



PAD FOOTING DETAIL



C.T. "GUS" TARNOWSKI
PE0050662

VALID FOR (1) JOB(S) ONLY
VALID ONLY WITH RAISED ENGINEER SEAL

ENGINEERING BUSINESS CA 00009677

CIVIL & STRUCTURAL ENGINEERING
7360 N.W. 5th Street
Plantation, FL 33317
Phone (954) 727 - 2027
Fax (954) 727 - 9644

ELITE ALUMINUM CORPORATION
4650 LYONS TECHNOLOGY PARKWAY
COCONUT CREEK, FL 33073

Building Innovation
Panel Products

FOOTING MASTER PLAN SHEET

DRWN/CHKD DATE 07/01/15
WTF CT

REMARKS
FBC2014 ISSUE

COPYRIGHT TARNOWSKI ENGINEERING, INC.

00-EAC-1059
SCALE: N.T.S. 01
PAGE DESCRIPTION:

1 OF 1
C. TARNOWSKI, P.E.