MECHANICALLY FASTENED LATTICE

STRUCTALL TRELLIS MASTER PLAN SHEET FREESTANDING OR HOST-ATTACHED

HOST ATTACHED ELEVATIONS ON S2 KNEEBRACES REQUIRED ALL SIDES ALL DIRECTIONS AS SHOWN (SEE S3) .0" MAX

OTHER INSTALLATION NOTES

- STRUCTURAL ALUMINUM SHALL BE FRAMED PLUMB AND TRUE AND ADEQUATELY BRACED DURING CONSTRUCTION WHERE ALUMINUM IS IN CONTACT WITH OTHER METALS EXCEPT 300 SERIES STAINLESS STEEL, ZINC OR CADMIUM AND THE FAYING SURFACES ARE EXPOSED TO MOISTURE. THE OTHER METALS SHALL BE
- PAINTED OR COATED WITH ZINC, CADMIUM, OR ALUMINUM.

 3. UNCOATED ALUMINUM SHALL NOT BE EXPOSED TO MOISTURE OR RUNOFF THAT HAS COME IN CONTACT WITH OTHER UNCOATED METALS EXCEPT 300 SERIES STAINLESS STEEL, ZINC, OR CADMIUM.
- ALUMINUM SURFACES TO BE PLACED IN CONTACT WITH MASONRY, CONCRETE, WOOD, FIBERBOARD, OR OTHER POROUS MATERIAL THAT ABSORBS WATER SHALL BE PAINTED.

 4. ALUMINUM SHALL NOT BE EMBEDDED N CONCRETE WITH CORROSIVE ADDITIVES SUCH AS CHLORIDES IF THE ALUMINUM IS ELECTRICALLY CONNECTED TO STEEL. ALUMINUM EMBEDDED N CONCRETE
- SHALL BE WRAPPED WITH 10 M L PIPE WRAP OR PLASTIC TAPE.

 5. AS AN ALTERNATIVE TO THE PREVIOUS REQUIREMENTS FOR ALUMINUM IN CONTACT WITH OTHER MATERIALS, ALUMINUM SHALL BE SEPARATED FROM THE MATERIALS OF THIS SECTION BY A NONPOROUS
- ISOLATOR COMPATIBLE WITH THE ALUMINUM AND THE DISSIMILAR MATERIAL.

 6. BOLT HOLES SHALL BE DRILLED THE SAME NOMINAL DIAMETER AS THE BOLT + 1/16"
- 7. STAINLESS STEEL FASTENERS SHALL BE ASTM F593 316 SS COLD WORKED CONDITION. PROVIDE (5) PITCHES MINIMUM PAST THE THREAD PLANE FOR ALL SCREW CONNECTIONS. ALL FASTENER CONNECTIONS TO METAL SHALL PROVIDE 2XDIAMETER EDGE DISTANCE AND 3XDIAMETER SPACING.
- SELF-DRILLING SCREWS SHALL BE TEK BRAND / ALL POINTS FASTENERS, UNLESS OTHERWISE NOTED.

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DESIGN NOTES:

WORK HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2015/2018 INTERNATIONAL BUILDING CODES, 6th EDITTON (2017) & 7th EDITTON (2020) FLORIDA BUILDING CODES. SITE SPECIFIC APPLICATIONS SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN IN ACCORDANCE WITH ASCE 7-10 OR ASCE 7-16 AS APPLICABLE FOR CORRESPONDING CODE. PERFORMANCE VALUES LISTED APPLY TO BOTH CODES

GENERAL NOTES:

- CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY AND GOVERN. DESIGN CRITERIA OR SPANS BEYOND STATED HEREIN MAY REQUIRE ADDITIONAL SITE SPECIFIC SEALED ENGINEERING.
- 2. THE EXISTING HOST STRUCTURE MUST BE CAPABLE OF SUPPORTING THE LOADED SYSTEM AS VERIFIED BY THE ENGINEER & OR ARCHITECT OF RECORD, et.al, THE HOST STRUCTURE WHICH IS DESIGNED, CERTIFIED, AND INSPECTED BY OTHERS MUST PROVIDE SUFFICIENT, CAPACITY FOR THIS SPECIFIED DECK SYSTEM. NO WARRANTY OR GUARANTEE TO THESE CONDITIONS. EITHER EXPRESSED OR IMPLIED, IS OFFERED WITH THIS CERTIFICATION.
- 3. THE CONTRACTOR SHALL CAREFULLY CONSIDER POSSIBLE IMPOSING LOADS ON ROOF, INCLUDING BUT NOT LIMITED TO ANY CONCENTRATED LOADS WHICH MAY JUSTIFY GREATER DESIGN CRITERIA.
- 4. THE INSTALLATION OF ANY ACCESSORIES THAT DO NOT AFFECT THE STRUCTURAL INTEGRITY OF THE STRUCTURE ARE OUTSIDE THE SCOPE OF THIS CERTIFICION AND NOT REQUIRED TO BE CERTIFIED UNDER THIS STRUCTURAL DRAWING. THEY MAY BE INSTALLED AS DESIRED PER MFR. SPECIFICATIONS.
- 5. ALL FASTENERS TO BE #14 OR GREATER ASTM F593 COLD WORKED 316 STAINLESS STEEL UNLESS NOTED OTHERWISE. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3.7.2 BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE
- FEDERAL, STATE, AND/OR LOCAL CODES. Fy= 65 KSI MIN.

 6. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS. EMBEDMENT SHALL BE AS NOTED HEREIN. MINIMUM EMBEDMENT AND
- EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES. 7. ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY. MATERIALS:

- ALUMINUM TO BE 6063-T6 OR BETTER.
 THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- 10 ALL LIGHT GALIGE STEEL MEMBERS SHALL CONFORM TO ASTM A36 AND CURRENT EDITION
- 11. ALL CONCRETE AND EPOXY TO REACH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI
- 12. HOST STRUCTURE, MECHANICAL, EGRESS, ELECTRICAL, WIRING, FAN BEAMS, FANS, OR ANY ACCESSORY ATTACHMENTS
- ANY ACCESSORY ALIACMMENTS HERE IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HERMIN, LICENSED ENGINEER OR REGISTREED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS.
- FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
 12. DIMENSIONS ARE SHOWN TO ILLUSTRATE DESIGN FORCES AND OTHER DESIGN CRITERIA. THEY MAY VARY SLIGHTLY BUT SHALL REMAIN IN CONFORMANCE WITH THE LIMITATIONS OF THIS PLAN. THE CONTRACTOR IS TO VERIFY ALL FIELD DIMENSIONS PRIOR TO INSTALLATION, AND VERIEV THAT PROPOSED DIMENSIONS AND FIELD CONDITIONS AGREE WITH THIS PROPOSED PLAN. USE OF THIS DOCUMENT CONSTITUTES ACCEPTANCE OF THE PROPOSED SYSTEM LAYOUT, COMPONENTS SELECTED, AND INSTALLATION. THESE DRAWINGS ARE NOT INTENDED TO BE USED AS FABRICATION OR SHOP DRAWINGS.
- 13 ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY LISE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT
- WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.

 14. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

VISIT ECALC.IO/26255

FOR ENGINEER CERTIFIED ORIGINALS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THE QR CODE TO THE RIGHT >

VISIT ENGINEERINGEXPRESS.COM/STRUCTALL FOR ADDITIONAL PLANS, REPORTS & RESOURCES



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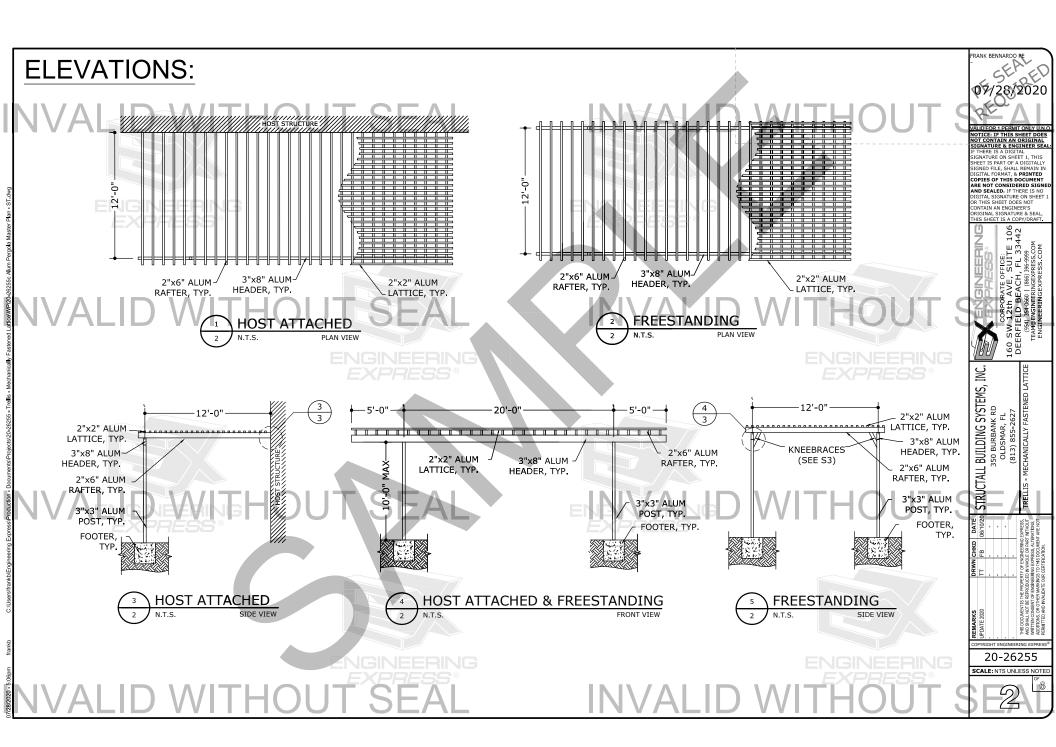
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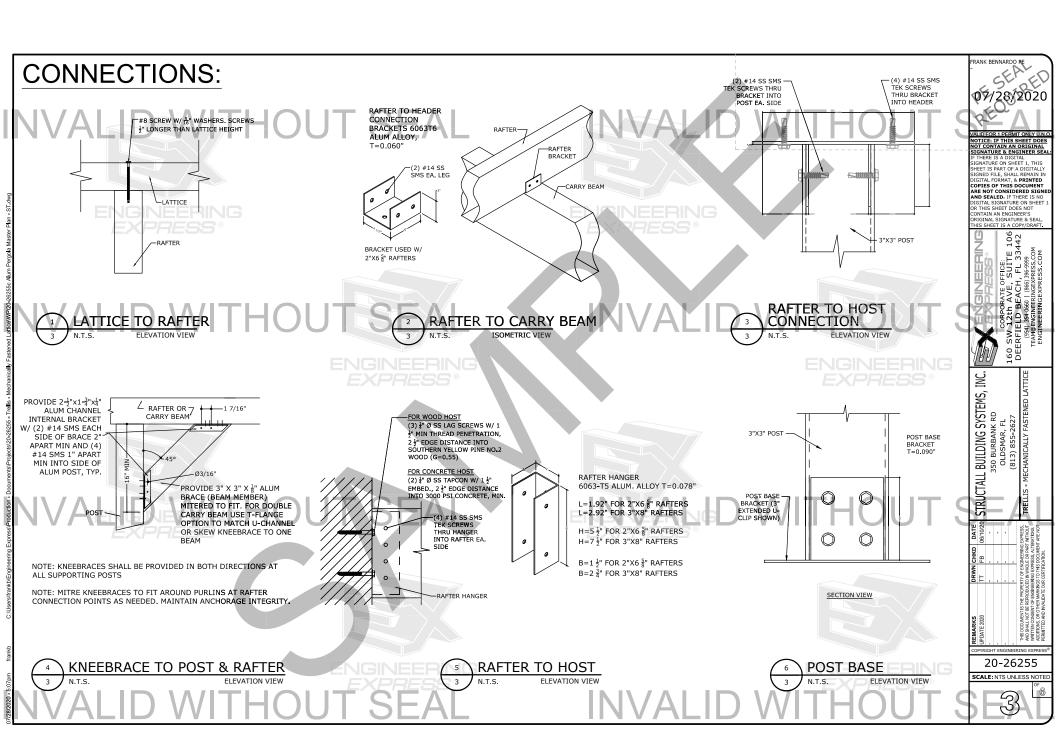
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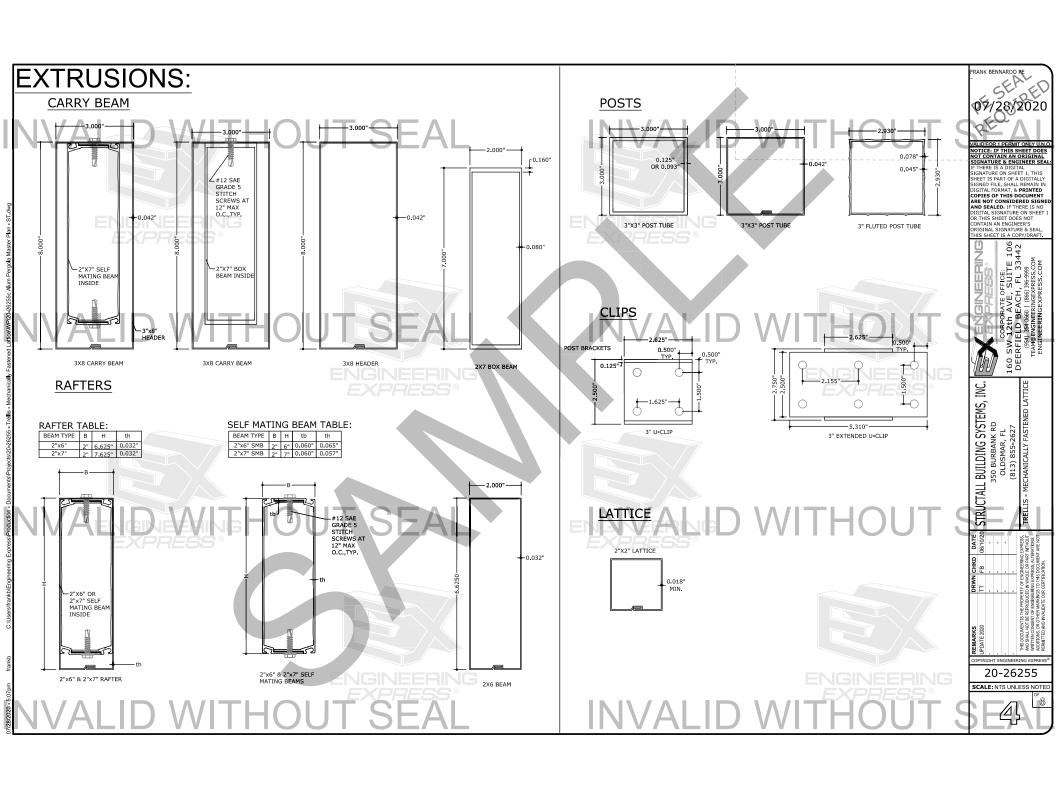
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TABLES:

SELF MATING BEAM SCHEDULE:

BEAM TYPE	В	Н	tb	th		
2"x6" SMB	2"	6"	0.060"	0.065"		
2"x7" SMB	2"	7"	0.060"	0.057"		
4						



2"x6" & 2"x7" RAFTER

	TOTAL ALLOWABLE RAFTER SPAN TABLE						
BEAM TYPE	Purlin Spacing	Load Rafter Spacing, in		Rafter Span			
2"x6" Beam		20	24	20'-0''			
		30	24	20'-0''			
	4"	40	24	20'-0''			
		50	24	20'-0''			
~		60	24	19'-4''			

		TOTAL ALLOWABLE RAFTER SPAN TABLE							
	BEAM TYPE	Purlin Spacing	Load (PSF)	Rafter Spacing, in	Rafter Span				
	2"x7" Beam		20 //	24	20'-0''				
		4"	30	24	20'-0''				
			31 40 ER	N 24	20'-0"				
			50	5 24	20'-0''				
			60	24	19'-10''				

	3"—	
1	AERO	-0.042"
	2"X7" SELF MATING BEAM INSIDE	

3X8 CARRY BEAM

	CARRY BEAM CLEAR SPAN TABLE						
BEAM TYPE	Purlin Load (PSF)		Rafter Span (PSF)	CARRY BEAM SPAN			
		20	10	17'-4"			
		20	20	12'-10''			
der		20	10	14'-2''			
Header		30	20	10'-6''			
	4"	10	10	12'-3''			
3"x8"		40	20	9'-1''			
m	ENG		10	11'-0''			
		SINEERI	VG 20	8'-1''			

TABLE NOTES:

- WORK DESIGNED PER 2015 ALUMINUM **DESIGN MANUAL**
- DEFLECTION LIMITS SET TO L/60
- TABLED CONSIDER LOAD OVER ENTIRE SURFACE DUE TO BUILD-UP OF SNOW & ICE.
- SNOW DRIFT SHALL BE CONSIDERED SEPARATELY BY THE SITE SPECIFIC DESIGN & FACTORED INTO TOTAL LOADS HEREIN. CONSULT AN ENGINEER OR ARCHITECT FOR ANY DISCREPANCIES OR DIFFERENCES IN DESIGN TO ACTUAL FIELD CONDITIONS.
- 5. SPANS ARE CLEAR SPANS, SPACING IS C/C.
- GREATER PURLIN SPACING MAY BE USED

WITHOUT AFFECTING TABLE RESULTS.

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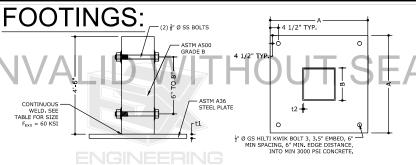
160 SW 12th AVE, SUITE 106 PSW 12th AVE, SUITE 106 PSW 12th AVE, SUITE 106 PSW 15th AVE, SUITE 105 PSW 15th AVE, SUITE 105 PSW 15th AVE 105 PSW 15th AVE

STRUCTALL BUILDING SYSTEMS, INC. 1350 BURBANK RD OLDSMAR, FL (813) 855-2627 TRELLIS - MECHANICALLY FASTENED LATTICE

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ALLOWED ON MAX. MAXIMUM DIMENSION PLATE SIZE STUB POST STUB POST MINIMUM CONSTRAINED THICKNESS THICKNESS WELD SIZE OF LONG FOOTING SIZE D (IN) SIDE OF CANOPY (FT) 0.375 2.5 0.125 0.125

- NOTE:

 WELDED MOMENT-RESISTING STEEL BASE PLATE, ALTERNATIVE TO POST EMBEDMENT IN CONCRETE FOOTING WHERE APPLICABLE. WELDED POST BRACKET MUST BE FABRICATED IN ACCORDANCE FBC/IBC SECTION 1704.2.5.1 BY AN APPROVED FABRICATOR TO THE SATISFACTION OF THE CODE OFFICIAL
- SATISFACTION OF THE GOOD OFFICENCY
 CONNECTION OFFICENCY THE GOOD THE GOOD OFFICENCY
 MAXIMUM DIMENSION OF LONG SIDE OF CANOPY TO COMPLY WITH MAXIMUM ALLOWABLE SPANS IN MASTER CHARTS
 MAXIXISF ROW MAXIMUM PRESTANDING CANOPY SIZE TAKING 115 MPH YULL WIND SPEED, EXPOSURE 'C', POST HEIGHT = 10 FT &
 BEAM DEPTH 8 IN. HOST ATTACHED CANOPY VALID UP TO 150MPH EXPOSURE 'C'.
 ADDITIONAL REGISTERING REQUIRED BEYOND THIS WIND LIMIT.

WELDED STEEL BASEPLATE ELEVATION VIEW



EMBEDDED IN FOOTER ELEVATION VIEW VALID UP TO 170MPH EXPOSURE 'C' WITH KNEEBRACES AS SHOWN

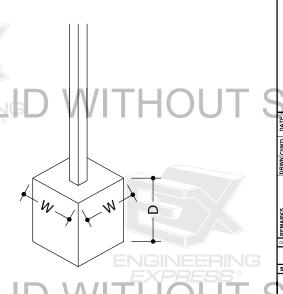
POST SET 12 INTO CONCRETE 3000 PSI POST PER PLA KWIK BOLT 3, 2 ½" EMBEDMENT, 6" MIN EDGE DISTANCE, 4.5" SPACING. CONCRETE INTO 3000 PSI CONCRETE, MIN. (VERIFIED BY OTHERS) (1) #5 REBAR THROUGH POST, TYP. (2) #5 REBAR ON EITHER SIDE OF POST (2) #3 REBAR SURROUNDING #5 REBARS, ON EITHER 3. .4. SIDE OF POST -(2) #5 REBAR - W (SQUARE OR ROUND) -

TABLE ISOLATED FOOTINGS

GROUND SNOW	ISOLATED FOOTING DIMENSIONS									
(PSF)	WIND PRESSURE (PSF)		10		> 1	15		0	25	
	DIMENSION		W	D/	w	D	W	D	w	D
		13.0 '	14.0 "	14.0 "	-	-	-	-	-	-
10		12.0 '	14.0 "	14.0 "	18.0 "	14.0 ''	-	-	-	1
		10.0 '	14.0 "	14.0 ''	16.0 "	14.0 ''	18.0 "	14.0 ''	18.0 "	16.0
		8.0 '	14.0 "	12.0 "	16.0 "	14.0 ''	16.0 "	15.0 "	18.0 "	15.0
	\ 	10.0 '	12.0"	12.0 "	\top					
V F	HEN	9.0	12.0 "	12.0 "	15.0"	14.0 "	16.0 "	14.0 "	18.0 ''	14.0
20	Ω Q	8.0 '	12.0 "	12.0 "	14.0 "	14.0 "	15.0 "	15.0"	16.0"	16.0
	SIL	6.0 '	12.0 "	12.0 "	14.0 "	12.0 ''	14.0 "	14.0 "	15.0 "	14.0
	CARRY BEAM C/C SPACING (FOR MAX RAFTER PROJECTION)	4.0 '	12.0 "	12.0 "	12.0 "	12.0"	14.0 "	12.0"	14.0 "	12.0 '
		9.0 '	12.0 "	12.0 ''	14.0 "	14.0"	-	-	-	- 1
30		8.0 '	12.0 "	12.0 ''	14.0 "	14.0 "	15.0 "	14.0 "	16.0 "	15.0
30		6.0 '	12.0 "	12.0 "	14.0 "	12.0"	14.0 "	14.0"	15.0 "	15.0
		4.0 '	12.0 "	12.0 "	12.0 "	12.0"	14.0 "	12.0"	14.0 "	12.0
	A ARI	8.0 '	12.0 "	12.0 ''	14.0 "	14.0 "	16.0 "	12.0"	-	12000
40	O (FOI	7.0 '	12.0 "	12.0 "	14.0 "	12.0"	14.0"	14.0"	16.0 "	12.0
40		6.0 '	12.0 "	12.0 "	14.0 "	12.0"	14.0 "	14.0"	16.0 "	12.0
60		4.0 '	12.0 "	12.0 ''	12.0 "	12.0 ''	12.0"	12.0"	14.0"	12.0 '
	l	7.0 '	12.0 "	12.0 ''	14.0 "	12.0 ''	14.0 "	12.0 "	E	JFE
		6.0 '	12.0 "	12.0 ''	12.0 "	12.0 ''	14.0 "	12.0 "	14.0 "	14.0
		5.0 '	12.0 "	12.0 "	12.0 "	12.0 "	14.0 "	12.0 "	14.0 ''	12.0
		4.0 '	12.0"	12.0"	12.0"	12.0 ''	12.0"	12.0"	14.0 ''	12.0

ISOLATED FOOTING NOTES

- W= WIDTH, D= DEPTH, SQUARE FOOTING (FOR ROUND FOOTINGS W=DIAMETER).
- CONCRETE TO BE 3,000 PSI MIN.
- MINIMUM SOIL BEARING CAPACITY 2,000 PSI.
- SEE DETAIL 5/4 & 3/6 FOR MORE INFORMATION.
- 5. ADHERE TO ALL FROST LINE **EMBEDMENTS TO PREVENT** HEAVE. CONSULT LOCAL CODES FOR PLACEMENT BELOW GRADE.



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