

CODES AND STANDARDS

1. WIND LOADS AS PER:

A. FLORIDA RESIDENTIAL BUILDING CODE 7TH EDITION (2020) WITH AN ULTIMATE DESIGN WIND SPEED OF 150 MPH, EXPOSURE B, NOMINAL DESIGN WIND SPEED OF 117 MPH, BUILDING RISK CATEGORY I.

2. ROOF LIVE LOAD DESIGN IS 20 PSF.

3. THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE:

A. FLORIDA BUILDING CODE 7TH EDITION (2020).

B. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318/ 2014 EDITION).

C. MANUAL OF STANDARD PRACTICE FOR WELDING REINFORCING STEEL, INSERTS & CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION, AWS, D1.4/ LATEST EDITION.

D. SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) AISC 13TH EDITION (ASD).

4. MATERIALS AND ASSEMBLY TEST AS FOLLOWS:

A. EXTERIOR WINDOWS, SLIDING AND PATIO GLASS DOORS SHALL BE TESTED BY AN APPROVED INDEPENDENT TESTING LABORATORY, AND SHALL BE LABELED WITH AN APPROVED LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT CERTIFICATION AGENCY, TESTING LABORATORY, EVALUATION ENTITY OR FLORIDA STATE WIDE PRODUCT APPROVAL NUMBER TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

ANSI/AAMA/NWDA 101/1.S. 2-97 OR TAS 202

B. EXTERIOR DOOR ASSEMBLIES SHALL BE TESTED FOR STRUCTURAL INTEGRITY IN ACCORDANCE WITH ASTM E330 AT A LOAD OF 1.5 TIMES THE REQUIRED DESIGN PRESSURE LOAD.

C. SECTIONAL GARAGE DOORS SHALL BE TESTED FOR DETERMINATION OF STRUCTURAL PERFORMANCE UNDER UNIFORM STATIC AIR PRESSURE DIFFERENCE IN ACCORDANCE WITH ANSI/DASMA 115 OR TAS 201.202 AND 203.

5. STEEL FRAMES SHALL BE SPACED NO MORE THAN 56" O.C. U.N.O. ON PLAN, ALL TUBE STEEL SHAPE STRENGTHS ARE 46 KSI STEEL. ALL CUPS ARE 36 KSI STEEL.

6. STEEL WELD STRENGTH SHALL BE 55 KSI TYP. ALL WELDS SHALL BE 1/8" MINIMUM FILLET WELDS.

7. ANCHORING BUILDING:

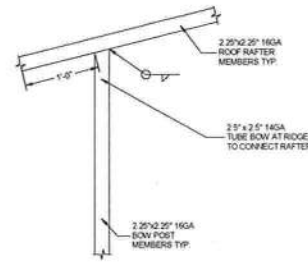
A. BUILDING SHALL BE ATTACHED WITH HELICAL ANCHORS PER THE HELICAL ANCHOR DETAIL.

B. WHEN EMBEDDED INTO ASPHALT HELICAL ANCHORS OR 30" LONG #5 REBAR WITH A NUT WELDED TO THE TOP, SHALL BE INSTALLED AT 12" ON CENTER FROM EACH SIDE AND THE BALANCE 56" ON CENTER.

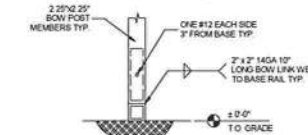
C. WHEN PLACED ON A 4" CONCRETE SLAB, A 1/2" EXPANSION ANCHOR WITH 2-1/2" OF EMBEDMENT SHALL BE INSTALLED 12" FROM EACH SIDE AND THE BALANCE 56" ON CENTER. CONCRETE SHALL BE MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.

8. ALL STEEL TO STEEL FASTENERS ARE TO BE 12-14 x 1/4 HWU ULTRA-2 TCP3 CS.

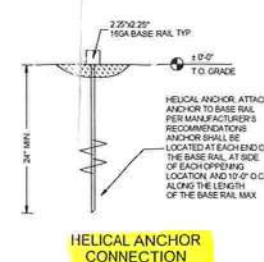
9. EACH LOCATION WHERE THE FRAME IS JOINED TOGETHER WILL HAVE 2 SCREWS ON EACH SIDE OF THE JOINT.



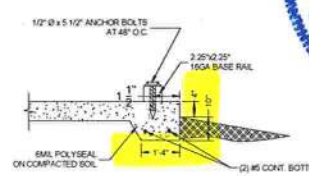
TEE SPLICE CONNECTION



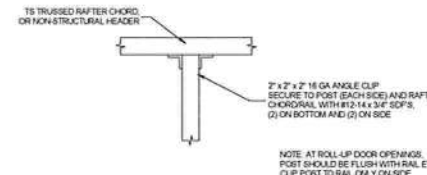
BOW/BASE RAIL SPLICE CONNECTION



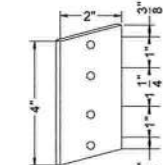
HELICAL ANCHOR CONNECTION



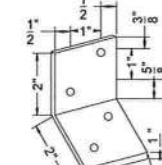
CONCRETE SLAB CONNECTION



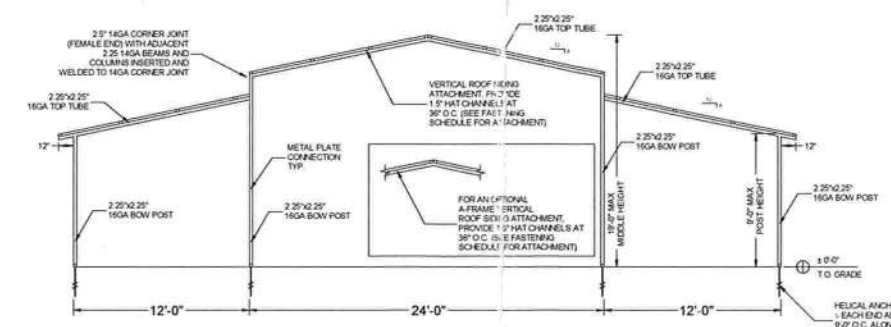
POST TO NON-STRUCTURAL HEADER, BASE, RAIL OR WINDOW RAIL CONNECTION DETAIL. SCALE: NTS



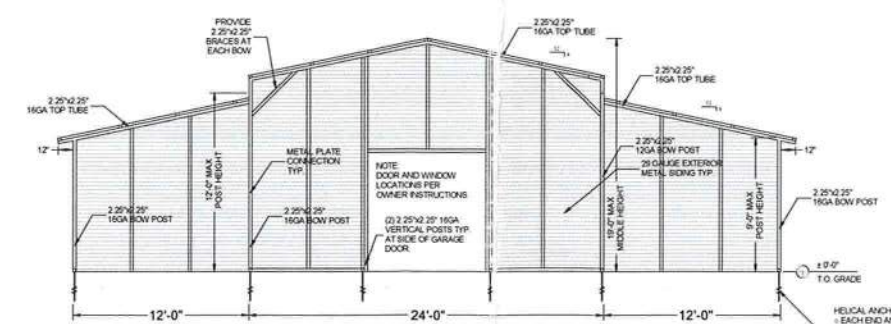
METAL CONNECTOR PLATE



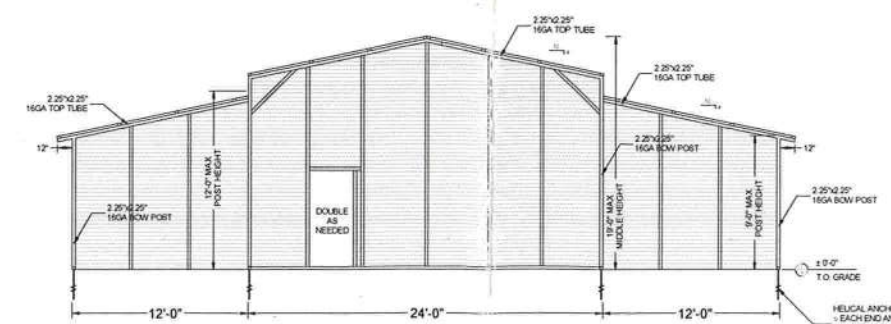
METAL CLIP ANGLE



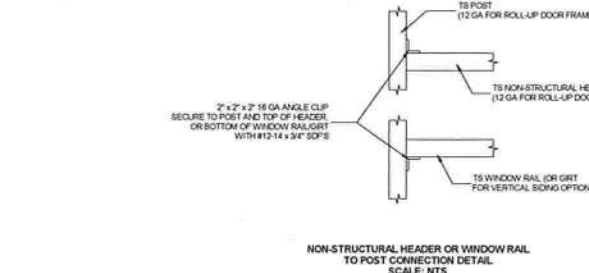
"A" FRAME 24 FT BOW SECTION BARN



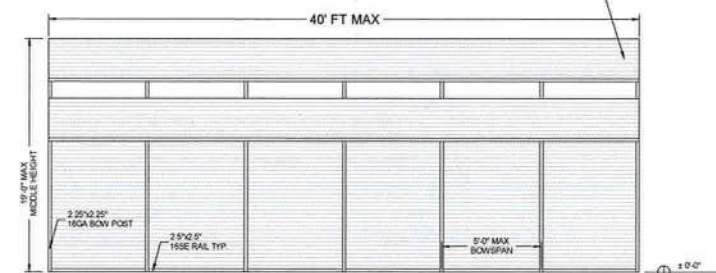
"A" FRAME 24 FT BARN FRONT ELEVATION



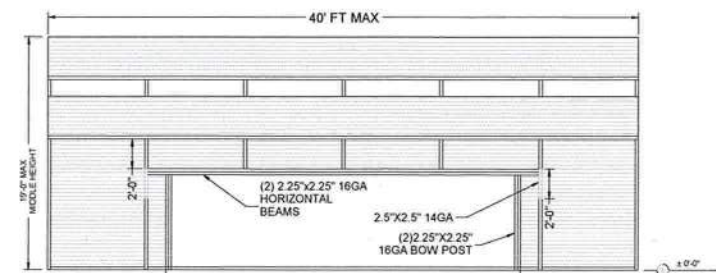
"A" FRAME 24 FT BARN REAR ELEVATION



NON-STRUCTURAL HEADER OR WINDOW RAIL TO POST CONNECTION DETAIL. SCALE: NTS



"A" BARN SIDE ELEVATION



"A" BARN SIDE ELEVATION

WALL AND OPENING PRESSURES COMPONENTS AND CLADDING (VASD)

OPENING TYPE	HEIGHT	WIDTH	CODE	TYPE	MATERIAL	PRESURE (PSF)
WINDOW	38 3/8"	37"	23	SINGLE HUNG	* ALUM.	+21.0 / -28.1
DOOR	96"	36"	S. - 750	SINGLE CURTAIN	STEEL	+20.1 / -26.3
DOOR	96"	72"	S. - 750	SINGLE CURTAIN	STEEL	+19.2 / -24.6
DOOR	96"	104"	S. - 750	SINGLE CURTAIN	STEEL	+18.6 / -23.4
DOOR	96"	120"	S. - 750	SINGLE CURTAIN	STEEL	+18.2 / -22.6
DOOR	96"	144"	S. - 3100	SINGLE CURTAIN	STEEL	+18.1 / -22.2

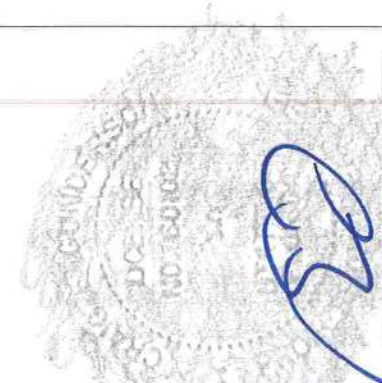
* - PROVIDE BARRIER BETWEEN ALUMINUM AND STEEL TO PREVENT CORROSION

CONNECTOR SCHEDULE

CONNECTION	Ø	LENGTH	TYPE	MATERIAL	SPACING FROM EA CORNER	TYP. SPACING
METAL SIDING ROOF	1/4"	3/4"	SELF TAPPING	GALV. MTL SCREW	1-1/2"	10" O.C.
METAL SIDING WALL	1/4"	3/4"	SELF TAPPING	GALV. MTL SCREW	1-1/2"	10" O.C.
TUBE TO TUBE	1/4"	3/4"	SELF TAPPING	GALV. MTL SCREW	(2) SCREWS EA. TUBE	

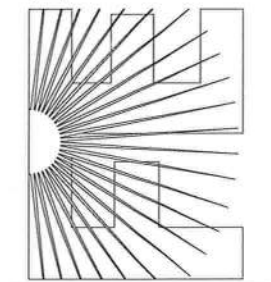


GENERIC PLANS ARE NOT VALID WITHOUT A RAISED SEAL & BLUE INK SIGNATURE.



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PROJECT DESCRIPTION:
HORIZONTAL A-BARN ENCLOSURE

DESIGN DATE:	03/18/2022	PAGE	1
REVISION 1:	DATE		
REVISION 2:	DATE		
SCALE:	NTS		