

APPLICABLE CODES:

1. 2023 FLORIDA BUILDING CODE, BUILDING, EIGHTH EDITION
2. 2023 FLORIDA BUILDING CODE, RESIDENTIAL, EIGHTH EDITION

APPLICABLE STANDARDS:

1. ASCE 7-22: MINIMUM DESIGN LOADS ON BUILDINGS AND OTHER STRUCTURES
2. ACI 318-19: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
3. AISC STEEL CONSTRUCTION MANUAL (15TH EDITION)
4. TMS 402-16: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
5. AWS D1.1: STRUCTURAL WELDING

DESIGN LOADS:

1. DEAD LOAD = 1.5 PSF
2. ROOF LIVE LOAD = 12 PSF
3. WIND LOAD

A. RISK CATEGORY = II

B. WIND EXPOSURE CATEGORY = C

C. ULTIMATE WIND SPEED = 140 MPH

D. GROUND SNOW LOAD = 1 PSF

INSTALLATION NOTES AND SPECIFICATIONS:

1. THESE PLANS BELONG EXCLUSIVELY TO THE STRUCTURE, INCLUDING MAIN WIND FORCE RESISTING SYSTEM (TWFRS), COMPONENTS AND CLADDING (CRCL), AND BASE RAIL ANCHORAGE. OTHER DESIGN ISSUES, INCLUDING BUT NOT LIMITED TO PROPERTY SET-BACKS, ELECTRICAL, PLUMBING, INGRESS/EGRESS, FINISH FLOOR SLOPES AND ELEVATIONS, OR OTHER LOCAL ZONING REQUIREMENTS ARE THE LIABILITY OF OTHERS.
2. THESE STRUCTURES ARE ENGINEERED AS CAPABLE OF SUPPORTING DEAD LOAD OF THE STRUCTURE AND LIVE AND WIND LOADS. UPGRADES NOT SPECIFICALLY ADDRESSED HEREIN, SUCH AS WINDOWS, DOORS, OR ANOTHER COMPONENT NOT LISTED IN THE INTERNATIONAL BUILDING CODE APPROVED PRODUCT LIST, AND NOT PROVIDED AND INSTALLED BY THE CONTRACTOR, WHICH CAUSE ADDITIONAL LOADS ON THE STRUCTURE SHALL BE AT THE OWNER'S RISK. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR FAILURE OR STRUCTURAL DAMAGE DUE TO THE EXTRA LOAD.
3. ALL STEEL TUBING SHALL BE 50 KSI GALVANIZED STEEL WITH MINIMUM YIELD STRENGTH OF 54 KSI. ALL FASTENERS SHALL BE ZINC COATED HARDWARE.
4. END WALL COLUMNS (POST) AND SIDE WALL COLUMNS ARE EQUIVALENT IN SIZE AND SPACING UNO.
5. SPECIFICATIONS APPLICABLE TO 29 GA METAL PANELS FASTENED DIRECTLY TO 2.5"x2.5"x14 GA TUBE STEEL ITS FRAMING MEMBERS FOR VERTICAL PANELS. 29 GA METAL PANELS SHALL BE FASTENED DIRECTLY TO 18 GA HAT CHANNELS UNO.
6. AVERAGE FASTENER SPACING ON CENTERS ALONG RAFTERS OR PURLINS AND POSTS, INTERIOR = 9" AND END = 6" MAX.
7. FASTENERS CONSIST OF #12-14x3/4" SELF-DRILLING SCREWS (SDS), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20'-0" OR LESS, AND ROOF SLOPES OF 18:4" (4:12) PITCH OR LESS. SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
8. ANCHORS SHALL BE INSTALLED THROUGH THE BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN AND GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBARS WITH WELDED NUT X 36" LONG AND MAY BE USED IN SUITABLE SOILS. OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SOILS AND MUST BE USED IN UNSUITABLE SOILS AS NOTED. SOIL NAILS MAY BE USED FOR WIND SPEEDS LESS THAN OR EQUAL TO 140 MPH.
9. MAXIMUM RAFTER SPACING IS 4'-0" UNO.
10. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:
11. SOIL SITE CLASS = D

R = 3.25 $I_e = 1.0$ $S_{ds} = 0.087 g$ $V = C_{sw}$ $S_{di} = 0.084 g$

CONTRACTOR TO VERIFY THAT THE FINISHED FLOOR ELEVATION FOR THE PROPOSED STRUCTURE IS AT OR ABOVE THE GREATER OF THE FOLLOWING ELEVATIONS:

I) BFE (BASE FLOOD ELEVATION) + 2'-0"

II) DFE (DESIGN FLOOD ELEVATION)

III) THE MINIMUM ELEVATION MANDATED BY THE BUILDING CODES ADOPTED BY THE AUTHORITY HAVING JURISDICTION.

DRAWING INDEX

PAGE NO.	DESCRIPTION
1	TITLE PAGE WITH INDEX
2	ELEVATION VIEWS
3	TRUSS DESIGN LAYOUT
4	PURLIN LAYOUT
5	CONNECTION DETAILS (1'-2')
6	BASE RAIL AND FOUNDATION ANCHORAGE
7	RAFTER END WALL, SIDE WALL AND OPENING FRAMING
8	CONNECTION DETAILS (4'-13')
9	BOX EAVE RAFTER LEAN-TO OPTIONS
10	CONNECTION DETAILS (13'-17')
11	BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION
12	OPTIONAL HELICAL ANCHORING DETAIL

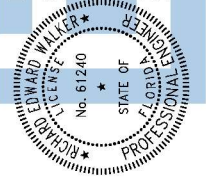
ENCLOSED METAL BUILDING DESIGN

MAXIMUM 50'-0" WIDE X 100'-0" LONG X 20'-0" HIGH (EAVE)

BOX EAVE FRAME

PROPOSED BUILDING DIMENSION:
50'-0" WIDE x 100'-0" LONG x 17'-0" HEIGHT

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Richard E Walker
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WEBB VARIANCE
LDVAR-2025-25
SAMPLE Elevation
Drawings of
Proposed Barn

FLORIDA ENGINEERING LLC
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PROJECT NO. 2509138
CA CERT. #30782

CONTRACTOR:
GA SOUTHERN STEEL BUILDINGS
1086 GENE MCQUEEN RD
MOUTRIE GA 31788
PROJECT ADDRESS:
WEBB
3849 OLD DIXIE HWY
AUBURNDALE, FLORIDA, 33823

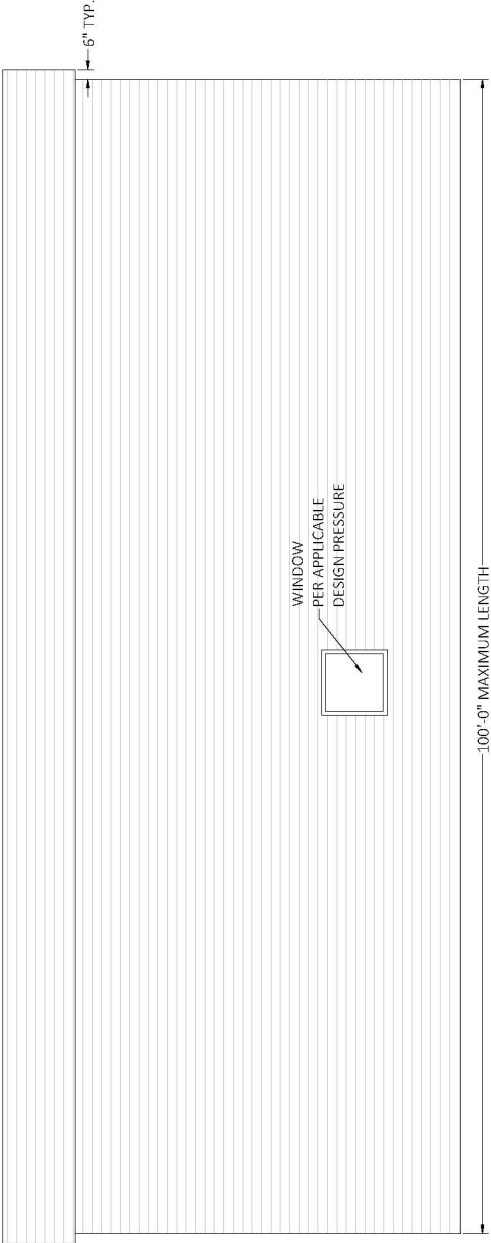
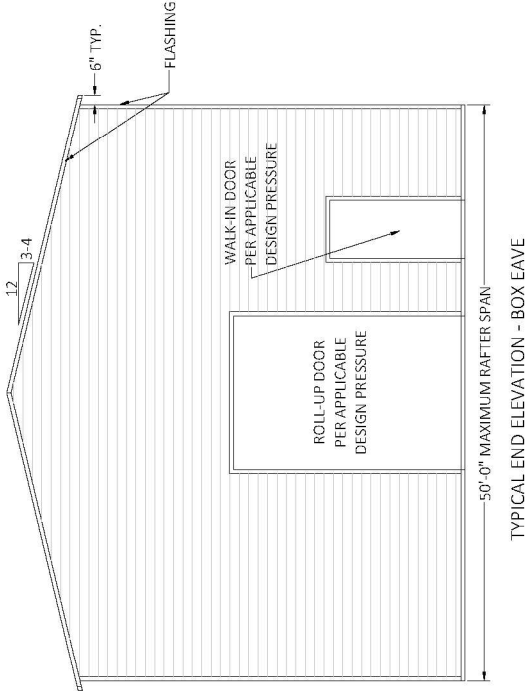
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REVISION 1:	DATE
REVISION 2:	DATE
DRAWN BY:	JS
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SHEET:	1 of 12

THE ENGINEERING ON THESE PLANS IS SITE SPECIFIC FOR (1) STRUCTURE ONLY AT THE PROVIDED ADDRESS(ES).

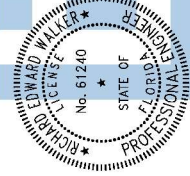
CONTRACTOR TO PROVIDE BUILDING CODE APPROVED PRODUCTS TO MEET OR EXCEED THE DESIGN PRESSURES AS TABULATED.

ADJUSTED C & C WIND PRESSURES (ROOF, ASD, PSF)				ADJUSTED C & C WIND PRESSURES (WALL, ASD, PSF)			
EFFECTIVE WIND AREA (SQ. FT.):	10.00	EFFECTIVE WIND AREA (SQ. FT.):	200.00	EFFECTIVE WIND AREA (SQ. FT.):	10.00	EFFECTIVE WIND AREA (SQ. FT.):	10.00
ALL ZONES (POSITIVE) =	NA	ALL ZONES (POSITIVE) =	NA	ALL ZONES (POSITIVE) =	35.9	ALL ZONES (POSITIVE) =	35.9
ZONE 1 (OVERHANG) =	NA	ZONE 1 (OVERHANG) =	NA	ZONE 1 (OVERHANG) =	35.9	ZONE 1 (OVERHANG) =	35.9
ZONE 1 (NEGATIVE) =	-59	ZONE 1 (NEGATIVE) =	-28.5	ZONE 1 (NEGATIVE) =	-46.2	ZONE 1 (NEGATIVE) =	-46.2
ZONE 2 (OVERHANG) =	-82.2	ZONE 2 (OVERHANG) =	-46.3	ZONE 2 (OVERHANG) =	20.00	ZONE 2 (OVERHANG) =	20.00
ZONE 2 (NEGATIVE) =	-75.2	ZONE 2 (NEGATIVE) =	-35.9	ZONE 2 (NEGATIVE) =	34.7	ZONE 2 (NEGATIVE) =	34.7
ZONE 3 (OVERHANG) =	-98.3	ZONE 3 (OVERHANG) =	-53.7	ZONE 3 (OVERHANG) =	-37.0	ZONE 3 (OVERHANG) =	-37.0
ZONE 3 (NEGATIVE) =	-96	ZONE 3 (NEGATIVE) =	-54.4	ZONE 3 (NEGATIVE) =	-42.7	ZONE 3 (NEGATIVE) =	-42.7
ZONE 3 (OVERHANG) =	-119.1	ZONE 3 (OVERHANG) =	-72.2	ZONE 3 (OVERHANG) =	50.00	ZONE 3 (OVERHANG) =	50.00
EFFECTIVE WIND AREA (SQ. FT.):	20.00	EFFECTIVE WIND AREA (SQ. FT.):	300.00	EFFECTIVE WIND AREA (SQ. FT.):	33.0	EFFECTIVE WIND AREA (SQ. FT.):	33.0
ALL ZONES (POSITIVE) =	NA	ALL ZONES (POSITIVE) =	NA	ALL ZONES (POSITIVE) =	-35.4	ALL ZONES (POSITIVE) =	-35.4
ZONE 1 (OVERHANG) =	NA	ZONE 1 (OVERHANG) =	NA	ZONE 1 (OVERHANG) =	-39.5	ZONE 1 (OVERHANG) =	-39.5
ZONE 1 (NEGATIVE) =	NA	ZONE 1 (NEGATIVE) =	NA	ZONE 1 (NEGATIVE) =	100.00	ZONE 1 (NEGATIVE) =	100.00
ZONE 2 (OVERHANG) =	-51.9	ZONE 2 (OVERHANG) =	-24.3	ZONE 2 (OVERHANG) =	-34.1	ZONE 2 (OVERHANG) =	-34.1
ZONE 2 (NEGATIVE) =	-46.3	ZONE 2 (NEGATIVE) =	-35.9	ZONE 2 (NEGATIVE) =	-37.0	ZONE 2 (NEGATIVE) =	-37.0
ZONE 3 (OVERHANG) =	-88	ZONE 3 (OVERHANG) =	-54.4	ZONE 3 (OVERHANG) =	200.00	ZONE 3 (OVERHANG) =	200.00
ZONE 3 (NEGATIVE) =	-83.5	ZONE 3 (NEGATIVE) =	-54.4	ZONE 3 (NEGATIVE) =	30.6	ZONE 3 (NEGATIVE) =	30.6
ZONE 3 (OVERHANG) =	-105.4	ZONE 3 (OVERHANG) =	-71.5	ZONE 3 (OVERHANG) =	-32.9	ZONE 3 (OVERHANG) =	-32.9
EFFECTIVE WIND AREA (SQ. FT.):	50.00	EFFECTIVE WIND AREA (SQ. FT.):	500.00	EFFECTIVE WIND AREA (SQ. FT.):	-34.9	EFFECTIVE WIND AREA (SQ. FT.):	-34.9
ALL ZONES (POSITIVE) =	NA	ALL ZONES (POSITIVE) =	NA	ALL ZONES (POSITIVE) =	300.00	ALL ZONES (POSITIVE) =	300.00
ZONE 1 (OVERHANG) =	NA	ZONE 1 (OVERHANG) =	NA	ZONE 1 (OVERHANG) =	29.9	ZONE 1 (OVERHANG) =	29.9
ZONE 1 (NEGATIVE) =	NA	ZONE 1 (NEGATIVE) =	NA	ZONE 1 (NEGATIVE) =	-32.2	ZONE 1 (NEGATIVE) =	-32.2
ZONE 2 (OVERHANG) =	-42.6	ZONE 2 (OVERHANG) =	-40.5	ZONE 2 (OVERHANG) =	-33.1	ZONE 2 (OVERHANG) =	-33.1
ZONE 2 (NEGATIVE) =	-54.1	ZONE 2 (NEGATIVE) =	-35.9	ZONE 2 (NEGATIVE) =	500.00	ZONE 2 (NEGATIVE) =	500.00
ZONE 3 (OVERHANG) =	-74.4	ZONE 3 (OVERHANG) =	-52.1	ZONE 3 (OVERHANG) =	29.0	ZONE 3 (OVERHANG) =	29.0
ZONE 3 (NEGATIVE) =	-87.2	ZONE 3 (NEGATIVE) =	-70.6	ZONE 3 (NEGATIVE) =	-31.3	ZONE 3 (NEGATIVE) =	-31.3
ZONE 3 (OVERHANG) =	-87.2	ZONE 3 (OVERHANG) =	-70.6	ZONE 3 (OVERHANG) =	1000.00	ZONE 3 (OVERHANG) =	1000.00
EFFECTIVE WIND AREA (SQ. FT.):	100.00	EFFECTIVE WIND AREA (SQ. FT.):	1000.00	EFFECTIVE WIND AREA (SQ. FT.):	30.6	EFFECTIVE WIND AREA (SQ. FT.):	30.6
ALL ZONES (POSITIVE) =	NA	ALL ZONES (POSITIVE) =	NA	ALL ZONES (POSITIVE) =	-32.9	ALL ZONES (POSITIVE) =	-32.9
ZONE 1 (OVERHANG) =	NA	ZONE 1 (OVERHANG) =	NA	ZONE 1 (OVERHANG) =	30.6	ZONE 1 (OVERHANG) =	30.6
ZONE 1 (NEGATIVE) =	-35.6	ZONE 1 (NEGATIVE) =	-24.3	ZONE 1 (NEGATIVE) =	-31.3	ZONE 1 (NEGATIVE) =	-31.3
ZONE 2 (OVERHANG) =	-54.6	ZONE 2 (OVERHANG) =	-40.5	ZONE 2 (OVERHANG) =	1000.00	ZONE 2 (OVERHANG) =	1000.00
ZONE 2 (NEGATIVE) =	-45	ZONE 2 (NEGATIVE) =	-35.9	ZONE 2 (NEGATIVE) =	30.6	ZONE 2 (NEGATIVE) =	30.6
ZONE 3 (OVERHANG) =	-64.1	ZONE 3 (OVERHANG) =	-52.1	ZONE 3 (OVERHANG) =	-31.3	ZONE 3 (OVERHANG) =	-31.3
ZONE 3 (NEGATIVE) =	-73.4	ZONE 3 (NEGATIVE) =	-70.6	ZONE 3 (NEGATIVE) =	1000.00	ZONE 3 (NEGATIVE) =	1000.00

ENCLOSED METAL BUILDING DESIGN
MAXIMUM 50'-0" WIDE X 100'-0" LONG X 20'-0" HIGH (EAVE)
BOX EAVE FRAME



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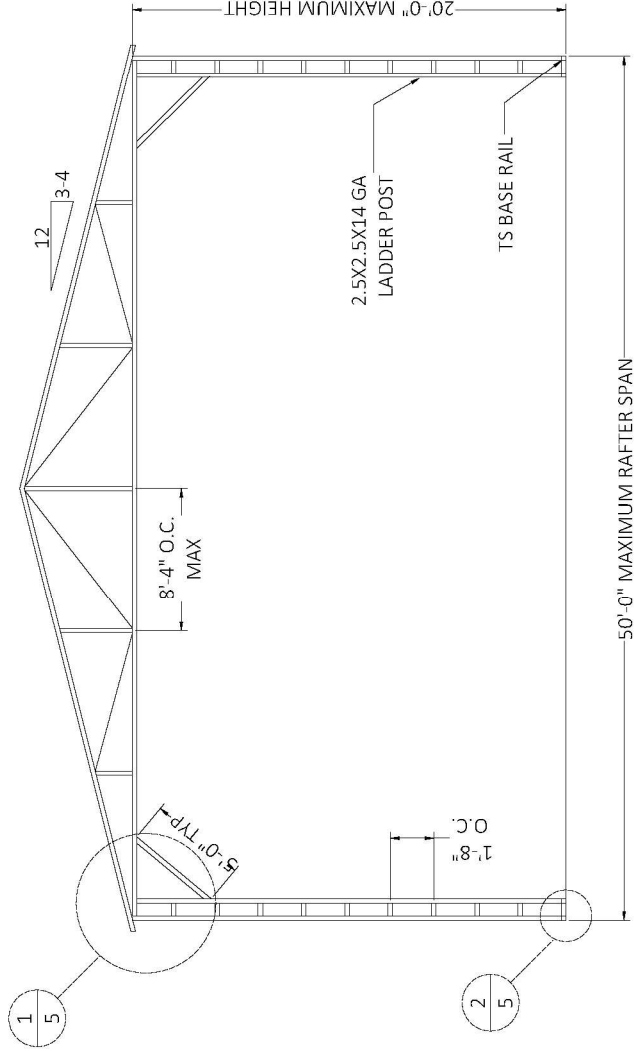
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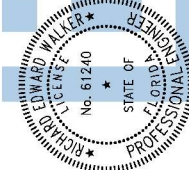
MEMBER LEGEND/NOTE:

1. TS COLUMN = 2.5X2.5X14 GA U.N.O.
2. TRUSS MEMBERS = 2.5X2.5X14 GA U.N.O.
3. PURLIN = PER PAGE-4
4. TS BRACE = 2.5"X2.5"X14GA TUBE
5. END WALL COLUMN = 2.5X2.5X14GA LADDER
6. MAX. RAFTER SPACING = 4'-0"



TRUSS LAYOUT- BOX EAVE

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OF 12	