FOUNDATION & CONCRETE SPECIFICATIONS:

1. ALL CONCRETE AND FOUNDATIONS ATTACHED TO THE HOST STRUCTURE SHALL HAVE A PRE INSPECTION.
2. ALL CONCRETE GRADE BEAMS AND FOOTINGS SHALL BE 3000 PSI MINIMUM.
3. ALL CONCRETE FILLED SUPPORTED SLABS SHALL BE 2500 PSI MINIMUM, 3 1/2" NOMINAL THICKNESS.
4. FIBERMESH (3/4" PER CUBIC YARD MIN.) MEETING APPROPRIATE ACI AND ASTM REQUIREMENTS MAY BE USED IN LIEU OF WELDED WIRE MESH (W.W.M.).
5. ALL SLABS ON GRADE SHALL BE A MINIMUM OF 4" THICK WITH FIBERMESH.
6. ALL REINFORCING SHALL CONFORM TO ASTM A615, BE GRADE 60 (60 KSI MIN.) DEFORMED BARS, #3 BARS MAY BE GRADE 40 (40 KSI MIN.)
7. ALL OVER POUR CONCRETE FILLED SUPPORTED SLABS SHALL BE 3000 PSI MIN., 2" MINIMUM. THICKNESS.
8. SOIL BEARING PRESSURE SHALL BE A MINIMUM OF 1500 PSF.

THE FOLLOWING SPECIFICATIONS ARE APPLICABLE TO THIS PROJECT:

10. WHERE CONCRETE SPECIFICATIONS ARE REQUIRED, WHETHER IN THE SCREEN ENCLOSURE SCOPE OR NOT, BY ONE OR MORE REGULATORY AGENCIES, THE FOLLOWING SPECIFICATIONS ARE APPLICABLE:

a.) CONCRETE SHALL CONFORM TO ASTM C94 FOR THE FOLLOWING COMPONENTS:
i. PORTLAND CEMENT TYPE 1 - ASTM C 150
ii. AGGREGATES - LARGE AGGREGATE 3/4 MAX. - ASTM C 33
iii. AIR ENTRAINING +/- 1 % - ASTM C 260
iv. WATER REDUCING AGENT - ASTM C 494
v. CLEAN POTABLE WATER
vi. OTHER ADMIXTURES NOT PERMITTED
b.) METAL ACCESSORIES SHALL CONFORM TO:
i. REINFORCING BARS - ASTM A615, GRADE 60
ii. WELDED WIRE FABRIC - ASTM A185
c.) CONCRETE SLUMP AT DISCHARGE CHUTE NOT LESS THAN 3" OR MORE THAN 5". WATER ADDED AFTER BATCHING IS NOT PERMITTED.
d.) PREPARE & PLACE CONCRETE PER AMERICAN CONCRETE INSTITUTE MANUAL OF STANDARD PRACTICE, PART 1, 2, & 3 INCLUDING HOT WEATHER RECOMMENDATIONS.
e.) MOIST CURE OR POLYETHYLENE CURING PERMITTED.
f.) PRIOR TO PLACING CONCRETE, TREAT THE ENTIRE SUBSURFACE AREA FOR TERMITES IN COMPLIANCE WITH THE FBC.
g.) CONCRETE SLABS SHALL BE PLACED OVER A 6 MIL. POLYETHYLENE VAPOR BARRIER.

11. WHEN PAVERS ARE UNDER ALUMINUM MEMBERS, CONTRACTOR SHALL EPOXY TO DECK OR GROUT TO DECK w/ 3000 PSI GROUT WITH BONDING AGENT.
12. MINIMUM CONCRETE STRENGTH 3000 PSI UNLESS NOTED OTHERWISE.
13. IF UTILIZING EXISTING CONCRETE FOR FOUNDATION, CONCRETE SHALL BE A MINIMUM OF 4" IN THICKNESS, VISIBLY FREE OF ANY STRUCTURAL EXCESSIVE CRACKING, SPALLING OR OTHER DETERIORATION.

MASONRY SPECIFICATIONS:

1. CONCRETE MASONRY UNITS (CMU) SHALL BE STANDARD HOLLOW UNITS AND SHALL BE 2000 PSI MINIMUM BASED ON TYPE M OR S MORTAR.
2. ALL MORTAR SHALL BE TYPE M OR S.
3. ALL GROUT SHALL BE 2000 PSI MINIMUM AND HAVE MAXIMUM COARSE AGGREGATE SIZE OF 3/8".
4. PROVIDE CLEAN-OUTS FOR REINFORCED CELLS CONTAINING REINFORCEMENT WHEN GROUT POUR EXCEEDS 5'-0" IN HEIGHT.

FOOTER SPECIFICATIONS:

1. PROVIDE 1-1/2" COVERAGE TOP, SIDES, BOTTOM AND 1" BETWEEN ADJACENT REBAR LAPS.
2. PROVIDE MIN. 3" COVERAGE OF REBAR FOR ALL CONCRETE IN CONTACT WITH THE EARTH & 1-1/2" OTHERWISE.
3. FOOTING CONCRETE SHALL BE MIN. 3000 PSI AT 28 DAYS
4. FOOTING REINFORCING SHALL CONFORM TO ASTM A615, BE GRADE 60 (60 KSI MIN.) DEFORMED BARS, #3 BARS MAY BE GRADE 40 (40 KSI MIN.)
5. MINIMUM REBAR LAP SPLICE (40d) d= DIAMETER OF REBAR
6. PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURE TO CITY / CO. REQUIREMENTS.
7. PROVIDE 1500 PSF BEARING (TYPICAL) UNDER FOUNDATION.

ALUMINUM SPECIFICATIONS:

1. ALUMINUM EXTRUSIONS SHALL BE 6005 T5 ALLOY UNLESS OTHERWISE NOTED.
2. ALL SELF MATING BEAM SECTIONS ARE TO BE STITCHED WITH #12 SCREWS 6" FROM ENDS & 24" CENTER TO CENTER.
3. ROOF BRACING SHALL BE A MINIMUM 2"X2"X.050".
4. THE MINIMUM NORMAL THICKNESS OF PROTECTOR PANELS (KICKPLATES) SHALL BE AN INDUSTRY STANDARD OF 0.024 INCHES.
5. SCREEN MATERIAL SHALL BE 18/14 SCREEN UNLESS APPROVED BY FLORIDA ENGINEERING LLC.
6. 1"x2" & 1"x3" ARE NON-STRUCTURAL MEMBERS MAY BE USED INTERCHANGEABLY.
7. DOOR LOCATION MAY BE DETERMINED/ RELOCATED BY CONTRACTOR IN THE FIELD. NOT TO AFFECT DESIGN SPANS AND STRUCTURAL MEMEBRS SHOWN.

MISCELLANEOUS:

1. SCREENED ENCLOSURES CONTAINING SWIMMING POOLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF FBC R4501.17 RESIDENTIAL SWIMMING BARRIER REQUIREMENTS.
2. ALUMINUM ADDITIONS ARE NOT TO BE INSTALLED ON A MANUFACTURED HOME, TRAILER HOME, OR PRE-FAB HOME. IF THE EXISTING STRUCTURE IS ONE OF THESE, A SEPARATE 4TH WALL SUPPORT SYSTEM IS SO TO BE ENGINEERED SO THAT NO ADDITIONAL LOADING IS PLACED ON THE MANUFACTURED HOME.
3. THE ENGINEERING ON THESE PLANS IS SITE SPECIFIC FOR (1) STRUCTURE ONLY AT THE PROVIDED ADDRESS(ES).

FASTENER SPECIFICATIONS:

1. FASTENERS ARE REQUIRED TO BE SAE GRADE 2 OR BETTER ZINC PLATED. (CONCRETE ANCHORS ARE TO BE 410 S.S. TAPCONS OR BETTER, INSTALLED TO MFG. SPECIFICATIONS)
2. WHERE WOOD DECK IS PRESENT USE 1/4" X 3-1/2" GALV. LAG SCREWS IN LIEU OF MASONRY ANCHORS. UNLESS OTHERWISE SPECIFIED.
3. FOR 1"x2" NON-STRUCTURAL MEMBERS ATTACHED TO HOST
a.) FOR MASONRY/CONCRETE APPLICATION USE GALVANIZED 1/4" X 2-3/4" TAPCONS 6" FROM ENDS & 24" CENTER TO CENETER.
b.) FOR WOOD APPLICATION USE #14 X 2-3/4" WOOD SCREW AT 6" FROM ENDS & 24" CENTER TO CENETER.
c.) FOR ALUMINUM APPLICATION USE #10 X 1-1/2" SMS OR TEK 6" FROM ENDS & 24" CENTER TO CENETER..
d.) WHERE 1"x2" INSTALLED THROUGHOUT AN "OPEN VIEW" SPACING SHALL BE REDUCED TO 6" FROM ENDS & 18" C.C.

RESPONSIBILITIES:

1. ALL SITE WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH APPLICABLE BUILDING CODES, LOCAL ORDANANCES, AND THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
2. FOR FASTENERS WHICH ARE NOT VISIBLE AFTER INSTALLATION, THE CONTRACTOR SHALL VERIFY AND ENSURE INSTALLATION HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND IN ACCORDANCE WITH THE ATTACHED DETAILS.
3. CONTRACTOR TO PROVIDE NOA'S & INSTALL ALL MATERIALS AS PER MANUFACTURER'S SPECIFICATIONS.
4. INTEGRITY OF EXISTING/ HOST STRUCTURE SHALL NOT BE COMPROMISED WITH THE ATTACHMENT OF THE PROPOSED STRUCTURE.
5. IT IS THE OWNERS RESPONSIBILITY TO MAINTAIN THE SCREENS & FASTENERS TO MANUFACTURING SPECIFICATIONS.
6. METAL WITHIN 5FT OF THE WATERS EDGE REQUIRE A CONTINIOUS BOND PER NEC NFPA 70: NATIONAL ELECTRIC CODE 680.43(D)(4): ALL METAL SURFACES THAT ARE WITHIN 1.5M (5FT) OF THE INSIDE WALLS OF THE SPA OR HOT TUB AND THAT ARE NOT SEPERATED FROM THE SPA OR HOT TUB AREA BY A PERMANENT BARRIER SHALL BE BONDED TOGETHER.

DESIGN CRITERIA:

APPLICABLE CODES, REGULATIONS & STANDARDS:

1. THE 2023 FLORIDA BUILDING CODE 8TH EDITION, SPECIFICALLY CHAPTER 16 STRUCTURAL DESIGN, CH. 20 ALUMINUM & CH. 23 WOOD.
2. AA ASM 35 & SPECIFICATIONS FOR ALUMINUM STRUCTURES, PART 1-A OF THE ALUMINUM DESIGN MANUAL PREPARED BY THE ALUMINUM ASSOCIATION, INC. WASHINGTON D.C. 2005 ED.
3. ASCE 7-22 & SEI 7
4. NDS NATIONAL DESIGN SPECIFICATION FOR WOOD.
5. ACI318 CONCRETE REFERENCE MANUAL.

WIND LOADS:

1. BUILDING OCCUPANCY CATEGORY, PARAGRAPH 1604.5 & TABLE 1604.5: RISK CATEGORY: I
2. BASIC WIND SPEED, TABLE 1609C, STATE OF FLORIDA DEBRIS REGION & BASIC WIND SPEED, PARAGRAPH 1609.3.1 & TABLE 1609.3.1 EQUIVALENT BASIC WIND SPEED: 110
MPH EXPOSURE CATEGORY, PARAGRAPH 1609.4.3: C
3. WIND LOADS PER FBC TABLE 2002.4 (MWFRS)
VULT = 110 MPH & EXPOSURE = C

FOR 20 X 20 X 0.013" MESH SCREEN	
HORIZONTAL PRESSURES ON WINDWARD SURFACES =	21 PSF
HORIZONTAL PRESSURES ON LEEWARD SURFACES =	16 PSF
VERTICAL PRESSURES ON SCREEN SURFACES =	7 PSF
VERTICAL PRESSURES ON SOLID SURFACES =	21 PSF
FOR 18 X 14 X 0.013" MESH SCREEN, APPLIED FACTOR =	.88
FOR ALLOWABLE STRESS DESIGN, APPLIED FACTOR =	.6

DESIGN LOADS:	
1. DEAD LOADS =	MEMBER SELF-WEIGHT
2. LIVE LOADS	
a. PRIMARY MEMBERS =	300 LB. VERT. LOAD
b. SECONDARY MEMBERS =	200 LB. VERT. LOAD
c. SCREEN ROOF =	5 PSF
d. SOLID ROOF =	20 PSF

ALUMINUM MEMBERS DIMENSIONS:

HOLLOW SECTIONS
2 x 2: 2" x 2" x 0.050"
2 x 3: 2" x 3" x 0.050"
2 x 4: 2" x 4" x 0.050"
2 x 5: 2" x 5" x 0.050"

OPEN BACK SECTIONS
1 x 2: 1" x 2" x 0.044"
1 x 3: 1" x 3" x 0.045"

SNAP SECTIONS
2 x 2 SNAP: 2" x 2" x 0.045"
2 x 3 SNAP: 2" x 3" x 0.050"
2 x 4 SNAP: 2" x 4" x 0.045"

SELF MATING (SMB)
2 x 4 SMB: 2" x 4" x 0.046" x 0.100"
2 x 5 SMB: 2" x 5" x 0.050" x 0.116"
2 x 6 SMB: 2" x 6" x 0.050" x 0.120"
2 x 7 SMB: 2" x 7" x 0.055" x 0.120"
2 x 8 SMB: 2" x 8" x 0.072" x 0.224"
2 x 9 SMB: 2" x 9" x 0.072" x 0.224"
2 x 9(H) SMB: 2" x 9" x 0.082" x 0.306"
2 x 10 SMB: 2" x 10" x 0.092" x 0.374"

RECTANGULAR TUBES
2 x 6 R.T. : 2" x 6" x 0.125" (6063-T52)
2 x 8 R.T. : 2" x 8" x 0.125" (6063-T52)
2 x 8 (H) R.T. : 2" x 8" x 0.250" (6063-T52)
2 x 10 R.T. : 2" x 10" x 0.125" (6063-T6)
2 x 10 (H) R.T. : 2" x 10" x 0.250" (6063-T6)

ALL MAY NOT APPLY

DETAIL "A" MEMBER DIMENSIONS

SHEET NO.	DRAWING INDEX
S/01	GENERAL NOTES
S/02	PLAN/ ELEVATIONS
S/03	DETAILS
S/04	DETAILS
S/05	DETAILS

This item has been digitally signed and sealed by Richard E. Walker, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

RICHARD EDWARD WALKER
LICENSE
No. 61240
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Richard E Walker
Date: 2026.05.29 15:15:58-04'00'

FLORIDA ENGINEERING LLC
4161 TAMIAMI TRAIL, UNIT 101
PORT CHARLOTTE, FLORIDA 33952
(941) 391-5980
FLEng.com
Orders@FLEng.com
CA CERT. #30782

PROJECT NO. 2613816

CONTRACTOR:
ALPHA BUILDERS OF NORTH FLORIDA LLC

PROJECT ADDRESS:
NEYLON
296 SE NATURE DR
LAKE CITY FLORIDA, 32025

DESIGN DATE:	05/26/2026
REVISION 1:	DATE
REVISION 2:	DATE
DRAWN BY:	JDG
SCALE:	NTS
SHEET:	01