

# CONTRACTOR: RICHARDSON ALUMINUM, LLC. **DESIGN CRITERIA:**

Applicable Codes, Regulations, and Standards

- 1 The 2010 Florida Building Code, specifically Chapter 16 Structural Design, Chapter 20 Aluminum, and Chapter 23 Wood.
- 2, AA ASM 35 and Specifications for Aluminum Structures, Part 1-A of the Aluminum Design Manual prepared by The Aluminum Association, Inc. Washington, D C, 2005 Edition

3 ASCE 7-10

### Wind Loads

- 1 Building Occupancy Category, Paragraph 1604 5 and Table 1604 5 Risk Category 1.
- 2 Basic Wind Speed, Table 1609C, State of Florida Debris Region & Basic Wind Speed, Paragraph 1609 3 1 and Table 1609 3 1 Equivalent Basic Wind Speed VULT = 110 MPH, VASD = 85 MPH
- 3 Exposure Category, Paragraph 1609 4 3 Exposure C
- 4 Building Category for Aluminum Structures, Paragraph 2002 6 Building Category 1 - Screen Room / Patio Cover: Non-Habitable, Unconditioned

#### **Foundation Design**

Existing concrete slab. No additional concrete footing or slab is required to resist the loads imposed upon the existing slab by the proposed construction if the existing slab is a minimum of 4" thick and in sound condition, free from structural cracking, spalling, or other deterioration.

#### Roof Type

- 1 Roof Type MONOSLOPE
- 2 Roof Material 3" x 48" x 0.024" composite panel Elite 2000, 1.0 density foam, Florida Product Approval Number FL 7561-R2.

# **Specifications**

The following specifications are applicable to this project

- 1 All work shall be in accordance with the Florida Building Code, 2010 Edition, and any other applicable local codes and regulations
- 2. The minimum wall thickness of aluminum extrusions shall be in accordance with the Florida Building Code, 2010 Edition and the 2005 Edition of the Aluminum Association Manual, but not less than 0 040 inches
- 3 Aluminum extrusions shall be 6005 T5 Alloy Due to quality control issues, no manufacturer substitution is acceptable without the specific written, signed and sealed authorization of Suncoast Architecture & Engineering,
- 4 Screen Material Design based on 18/14 or 20/20 Better View Any other material must be approved.
- 5 Fasteners are required to be SAE Grade 5 or better zinc plated.
- 6 All Self Mating Beam Sections are to be stitched with either #14 screws 6" from ends and 24" center to center or #12 screws 6" from ends and 12" center to center
- 7 Where concrete specifications are required, whether in the screen enclosure scope or not, by one or more regulatory agency, the following specifications are applicable
  - a. Concrete shall conform to ASTM C94 for the following components
  - 1 Portland Cement Type 1,- ASTM C 150
  - 11 Aggregates Large Aggregate 3/4" max ASTM C 33
  - 111 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
  - 1 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 and place concrete per American Concrete Institute Manual of Standard Practice, Parts 1, 2, and 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 shall be placed over a polyethylene vapor barrier
    h All aluminum components embedded within concrete shall be coated with a bituminous paint or epoxy.
- 8 The minimum nominal thickness of protector panels (kickplates) shall be an industry standard of 0 024 inches.
- All flashing and weatherproofing shall be provided by the contractor





