Three Season Enclosure Architectural/Technical Data

Engineering Manual Table of Contents

Engineering Certification/Registration

List of Code References

Component Detail

Specifications

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PROFESSIONAL ENGINEERING REGISTRATIONS

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LIST OF REFERENCES

ENGINEERING ANALYSIS & DESIGN

BUILDING CODE COMPLIANCE FOR LOADS

DESIGN LOADS
3. “National Building Code”, BOCA
4. “ASCE –7 – 02” American Society of Civil Engineers (ASCE)

DESIGN LOAD COMBINATIONS
3. “National Building Code”, BOCA
4. “Standard Building Code”, SBCCI
AVR Room Details
ANCHORING NOTES:

- AT UNIT GANGINGS ON WOOD DECK:
  (2) - 3/8" DIA. X 3-1/2" LONG GALVANIZED LAGS W/ WASHERS

- FLOOR EXPANDER TO WOOD DECK:
  LELAND INDUSTRIES OR FASTENERS; #10 X 2-INCH LONG SCREWS WITH DT-1700 COATING; STAGGER SCREWS @ 18" O.C. ALONG FLOOR EXPANDERS, TYP.

SEC 2

TRANSOM OVER WINDOW OVER
GLASS KNEEWALL ON WOOD DECK
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400.7
AVR Screen Room with Integral Railing System

AVR—SR SCREEN ENCLOSURE WITH INTEGRAL RAILING
FRONT ELEVATION

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SECTION THROUGH INTEGRAL RAILING SYSTEM

FIXED SCREEN UNIT @ HEAD CONNECTION
THREE SEASON & SCREEN ENCLOSURE SPECIFICATIONS

SECTION 13123 (09/95)

PART 1 GENERAL
1.01 WORK INCLUDES
   A. Furnish prefabricated, pre-engineered aluminum screened or glazed structure
      with integral safety railing.

1.02 REFERENCES
   A. Conform with the following codes, specifications and standards.  (where applicable)
      1. Architectural Aluminum Manufacturers Association (AAMA)
      3. American National Standards Institute (ANSI)
      4. International Code Council (ICC)
      5. International Conference of Building Officials (ICBO)
      7. Southern Building Code Congress International (SBCCI)
      8. Aluminum Association
      9. National Fenestration Rating Council (NFRC)
     10. Safety Glazing Certification Council (SGCC)
     11. National Sunroom Association (NSA)

1.03 PERFORMANCE REQUIREMENTS
   A. Wind loading - Withstands wind loads based on ASCE-7 guidelines.
   B. Live/snow loading - Withstands vertical roof loads based on the greater of
      20 psf live load or roof snow loads based on ICC/ICBO/BOCA/SBCCI guidelines
      (when applicable).
   C. Live loading on railings – withstanding live loads on railings based on
      ICC/ICBO/BOCA/SBCCI guidelines and when tested per ASTM E935.

1.04 SUBMITTALS
   A. Shop Drawings - Submit for Architects review and approval prior to fabrication,
      including pertinent details for installation, anchorage of framing members, glazing,
      sealing, flashing and adaptation of systems to specific project.
   B. Engineering Calculations - Submit engineering calculations to the Architect,
      stamped and certified by registered professional engineer attesting adequacy of
      system to meet required loads.

1.05 SAMPLES
   A. Submit sample to represent:
      1. Minimum quality of work.
      2. Color of aluminum finish.
1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to jobsite in manufacturers packaging.
B. Store off ground in dry under covered area, protected from weather conditions.

1.07 WARRANTY

A. Provide complete manufacturer's warranty; 10 years on defects of materials and 1 year on installation labor, if installation is completed by manufacturer. See manufacturers complete warranty, available upon request.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Patio Enclosures, Inc., Macedonia, Ohio 1-800-468-0720.

*2.02 MATERIALS-THREE SEASON (Optional Screen Room)

A. Structure Note: Optional Screen Room use #1,3,4,5 only.
   1. Master Frame shall be 3 1/16" deep.
   2. Full units shall be comprised of one movable glass panel, one fixed glass panel and one movable screen panel.
   3. Structural sections: Shall be extruded aluminum 6063, 6060, 6061, 6005 or 6105 alloy.
   4. Screen panel frame shall be 3/4" thick and mounted in a separate non-slip track. Screen cloth shall be black painted aluminum.
   5. Moving screen panels shall have two fixed nylon wheels.
   6. Moving glass panels shall have two adjustable steel wheels surrounded by a nylon tire, fixed glass panels shall have two fixed nylon wheels.
   7. Window and door units shall be custom manufactured to order.
   8. Option to adjust height includes glass kneewall or glass transom.

B. WEATHER SEAL
   1. Polypropylene woven pile.

C. FASTENERS
   1. A list of fasteners and related components shall be provided upon request of the Architect from Patio Enclosures, Inc.

D. SILICONE SEALANT
   1. Silicone shall meet or exceed federal specifications TT-S-001543A.
   2. Sealants shall match color of adhering surfaces as approved by the Architect.

*E. GLAZING
   1. Full length door units will be 1/8" or 5/32" tempered glass, depending on size.
   2. Vertical glass shall be single-glazed clear.
   3. Option Glass: Low-E, Bronze Tint, Azurlite® or as selected by designee.
2.03 FINISH
A. All visible aluminum extrusions shall be maintenance free, exterior grade PPG Duracron paint finish.
B. Paint finished is electro statically applied, and baked.
C. Color: Bronze, Sandstone or White.

* Optional Foam Roof System. (Manufactured by P.E.I.)
  a. Panels shall be 3", 4-5/8", or 6" overall thickness and consist of expanded high density polystyrene (EPS) insulation sandwiched between 2 sheets of .023" aluminum.
  b. Paint for the aluminum sheets shall be an electro statically applied baked enamel finish, with an additional Krystal-Kote to provide increased durability and efficient water run-off.
  c. Color: white/white, sandstone/sandstone or sandstone/white.
  d. Flush-mount skylites using tempered/tempered IGU shall be an available option.
  e. Minimum pitch shall be 1/2" per foot.
  f. Panels shall be connected by a thermally broken structural I-Beam.
  g. Roof deflection of PEI Roof Systems under design load shall not exceed 1/120 of its clear span.
  h. Engineering calculations shall be available upon the Architect’s request from PEI (stamped and certified by a Registered Professional Engineer).
  i. Roof system shall have passed a full scale fire test by a testing laboratory accredited by all major model code groups.

PART 3 EXECUTION
3.01 INSPECTION
A. Sunroom contractor shall examine surrounding structure and the conditions under which the work is to be performed, and notify the General Contractor and Architect in writing of any conditions detrimental to the proper and timely completion of job. Sunroom construction shall not proceed until any and all unsatisfactory conditions have been corrected in an acceptable manner to the sunroom contractor.
B. Surrounding and attaching structures (basewall, building wall etc.) shall be plumb, level and square, plus or minus 1/2".

3.02 INSTALLATION
A. Shall be in accordance with manufacturer's installation instructions.

3.03 FINAL CLEANING
A. After each work date, leave immediate area neat.
B. Remove excess sealant compounds from aluminum and glass surfaces promptly after completion.