

**Balcony Door Replacement Rules as adopted by the Board at a Board of Directors Meeting held on
February 28, 2012.**

PART 1 - GENERAL

1.1 SUMMARY

- A. All replacements of balcony doors shall comply with this rule.

1.2 OPERATION AND PERFORMANCE REQUIREMENTS

- A. Operation: Architectural Grade Sliding Glass Door Assembly; three panel design: Operable/Fixed/Fixed. Panel sizes to be equal per opening.
- B. Performance: Door assembly shall have independent laboratory certification indicating conformance to the applicable ANSI/AAMA standards under the appropriate size and test parameters established for the specified operation and performance category.
1. SGD-AW50 (123 x 95) Architectural Grade Sliding Glass Door
 2. Air Infiltration: after the AAMA 910 life cycle test, maximum .1 cfm/sq.ft. (fixed) and maximum .3 cfm/sq.ft (operable) when tested per ASTM E283 at a static air pressure difference of 6.24 psf.
 3. Water Penetration: after the AAMA 910 life cycle test, no uncontrolled water leakage when tested per ASTM E547 (four cycles) and ASTM E331 at a static air pressure difference of 10 psf.
 4. Uniform Deflection: no more than L/175 when tested per ASTM E 330 at a static pressure difference of 50 psf.
 5. Uniform Structural Load Test: Following each specified loading, door assembly to be completely operable and functioning without damage to fasteners, hardware parts, supports, actuating mechanisms or any other component rendering the door assembly inoperable. A maximum .2% permanent deformation per member is allowable when tested per ASTM E 330 at a static pressure difference of 75 psf.
 6. Condensation Resistance: Provide door assembly units with framing of thermally broken construction that have been tested for thermal performance in accordance with AAMA 1503 showing a condensation resistance factor (CRF) of 58 or greater.

1.3 SUBMITTALS

- A. The unit owner shall submit the following documents to the Association before signing a contract to purchase or install a balcony door.
1. Information pertaining to the proposed balcony door. The submittal shall include manufacturer's cut sheets and test reports indicating compliance with the performance requirements set forth in this rule.
 2. Statement letter on installer's letterhead indicating that installer has reviewed these requirements and have agreed to provide a product that meets or exceeds performance criteria stated.

3. Balcony door replacements shall comply with the Association's rules and regulations governing construction in units.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Owner shall use an installer acceptable to the aluminum door assembly manufacturer for installation of the doors. The installer must provide evidence that it has completed installation of aluminum door assemblies similar in design and extent to those described in this rule and whose work has resulted in construction with a record of successful in-service performance.
- B. Manufacturer Qualifications: The balcony door manufacturer shall be capable of fabricating aluminum door assemblies that meet or exceed performance requirements indicated. Performance shall be documented by labels, test reports, and calculations.

1.5 WARRANTY

- A. Warranty: Minimum - 5 years against sealant failures, finish degradation, water/air infiltration, operation, and hardware components. Insulating seals on glass unit – 20 years.

PART 2 - PRODUCTS

2.1 DOOR AND FRAME

- A. Material: Aluminum with thermal separation, poured and de-bridge or thermal strut systems.
- B. Subframe Receptors: Provide receptors matching window units, including snap-on receptor closures, not less than 0.062-inch-thick extruded aluminum. Weld or backseal and dress smooth with concealed mechanical joint fasteners where pre-attached to door units.
- C. Subsill / Tank: Provide subsill or receptor tank design of not less than 0.062 inch thick extruded aluminum. Subsill or receptor tank shall meet or exceed water penetration resistance performance specified for door assembly systems. Where specified, receptor tanks shall be provided with corresponding pre-manufactured end dams mechanically fastened at end locations.
- D. End Dams: For end dams at the subsill level, provide aluminum sheet, minimum 0.062" thickness. End dams shall be factory cut to match subsill/tank profiles and be mechanically fastened.
- E. Sliding Glass Door Weather Stripping: Provide operable panels with a double row of sliding weather stripping in horizontal rails and single- or double-row weather stripping in meeting or jamb stiles, as required to meet specified performance requirements. Provide compression-type weather stripping at perimeter of each movable panel where sliding-type weather stripping is not appropriate.

2.2 HARDWARE

- A. Provide manufacturer's standard hardware fabricated from, stainless steel, or other corrosion-resistant material compatible with aluminum; designed to smoothly operate, tightly close, and securely lock sliding aluminum-framed glass doors.

Do not use aluminum in frictional contact with other metals. Where exposed, provide solid bronze; extruded, cast or wrought aluminum; solid white metal with special coating finish; or nonmagnetic stainless steel.

1. Roller Assemblies: Provide movable panels with roller and roller assemblies that comply with AAMA 906.3. Provide manufacturer's standard hardware utilized during the life cycle testing (AAMA 910) component of the architectural grading but not less than stainless steel roller components and ball bearings. All rolling hardware shall be adjustable. Provide stainless steel cap for raised track beads.
2. Sill Cap/Track: Extruded-aluminum track with anodized finish, or stainless steel cap of thickness, dimensions, and profile indicated; designed to comply with performance requirements indicated and to drain to the exterior; with manufacturer's standard finish.
3. Door Pulls: Provide manufacturer's standard extruded-aluminum pull grips.
4. Locks: Install manufacturer's standard pull and keyless locking device on each moveable panel, lockable from the inside only. Adjust locking device to allow unobstructed movement of the panel across adjacent panels in the direction indicated.

2.3 FASTENERS

- A. Minimum 3/8" diam. stainless steel at 2'-0" o.c. max - concealed. All fastener heads to be surface sealed to prevent water infiltration. Countersink fasteners where required to be visible with door in the open position or where required to avoid impacting proper door operation.

2.4 GLAZING

- A. Provide glazing in conformance to:
 1. Insulated Glass. Units shall be dual edge sealed.
 2. Overall Unit Thickness: 1 inch (25 mm)
 3. Thickness of Each Glass Lite: Min. 5.0 mm
 4. Outdoor Lite: Bronze Tinted; Fully tempered float glass
 5. Interspace Content: Air
 6. Indoor Lite: Low-E coated clear; Fully tempered float glass
 7. Visible Light Transmittance: 42%
 8. Winter Nighttime U-Factor: 0.29 maximum.
 9. Summer Daytime U-Factor: 0.29 maximum.
 10. Solar Heat Gain Coefficient: 0.35 maximum

2.5 INSECT SCREENS

- A. General: Design door assemblies and hardware to accommodate screens in a tight-fitting, removable arrangement, with a minimum of exposed fasteners and latches. Fabricate insect screens to fully integrate with door assembly frame. Locate screens on outside of door assembly and provide for each operable exterior sash or ventilator.
- B. Sliding Glass Door Insect Screens.
 1. Insect Screen Frames: Provide manufacturer's standard extruded-aluminum of formed-tubular-aluminum members, with concealed fasteners, adjustable rollers, and removable PVC spline/anchor concealing edge of frame.
 - a. Finish: Match sliding aluminum-framed glass door members.
 2. Insect Screen Lock: Install manufacturer's standard pull and keyless locking device on each moveable panel, operable from either direction, lockable from the inside only.

Adjust locking device to allow unobstructed movement of the panel across adjacent panel in the direction indicated.

- C. Aluminum Wire Fabric: 18-by-16 (1.1-by-1.3-mm) mesh of 0.011-inch- (0.28-mm-) diameter, coated aluminum wire.

- 1. Wire-Fabric Finish: Charcoal gray or Black.

2.6 FINISHES.

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. High-Performance Organic Finish (2-Coat Fluoropolymer): AA-C12C40R1x (Chemical Finish: cleaned with inhibited chemicals; Chemical Finish: conversion coating; Organic Coating: manufacturer's standard 2-coat, thermocured system consisting of specially formulated inhibitive primer and fluoropolymer color topcoat containing not less than 70 percent polyvinylidene fluoride resin by weight). Prepare, pretreat, and apply coating to exposed metal surfaces to comply with AAMA 2604 and with coating and resin manufacturers' written instructions.

- 1. Color: Dark Bronze.

2.7 SEALANT

- A. Install two complete perimeter sealant beads: 1) Exterior and 2) Interior.
 - 1. Material: Dow 795 or Sonolastic 150. Color to match door assembly framing.
 - 2. Comply with sealant manufacturer's recommended joint widths/profiles and joint backup products. Any exposed interior sealant beads shall be paintable products if adjacent to paintable surfaces. Any penetrations through sill / subsill components must be sealed. End dams at sill conditions must be provided.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Existing aluminum sliding door and framing components to be completely removed prior to installation of replacement units.
- B. Install door assemblies and frames per manufacturer's written directions consistent with tested procedures.
- C. Interior Finishing: Contractor shall provide interior trim components and drywall repairs necessary to complete interior installation

3.2 PROTECTION

The owner and contractor shall be responsible for damage to, and repair of, all common elements of the building, including but not limited to the exterior of the building, elevators, balconies and hallways resulting from the removal or installation of balcony doors. Any damage or repair to the any common elements of the building resulting from removal of old door assembly units must be reported at once to the Owner and the Association.