

RETRACTABLE AWNINGS

PART I - GENERAL

1.1 SUMMARY

A. All awnings shall be motorized retractable awnings. The customer/homeowner will be allowed one (1) awning per residence. The awning must be located on the western/bay side of the residence and can be mounted on the wall or soffit. No roof mounted awnings are allowed.

1.2 DEFINITIONS

A. Awning: An architectural projection that provides weather protection, identity, or decoration and is wholly supported by the building to which it is attached. An awning is comprised of a lightweight, rigid frame over which a covering is attached.

B. Retractable Awning: A cover with a frame that retracts against a building or other structure to which it is entirely supported.

1.3 PERFORMANCE REQUIREMENTS

A. General: The awning must be designed and fabricated to withstand loads from gravity, wind, ponding, drift, and structural movement, including thermally induced movement; and to resist, without failure, other conditions of in-service use, including exposure to weather.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Obtain awnings by one of the following (or obtain waiver from Board of Directors):

- I. Durasol SunShelter Elite Retractable Awning; Blind King (Michael Ullucci) ph 401- 521-1611
2. Perfecta Toga Retractable Awning; L. F. Pease Awning Company (Don Franklin) ph 401- 438 - 2820

2.2 AWNING FABRICS

A. Products:

1. Sunbrella fabric approved for awnings, including the following:

- a. Stripes: 4922, Alpine/Burgundy Pencil Stripe  
4993, Baycrest Pacific  
4992, Baycrest Sky  
5760, Beaufort Beige/White 6 Bar  
4773, Bisque Brown  
4939, Brass/Black Cherry Classic  
4962, Captain Navy Regimental  
4902, Captain Navy/Natural Classic  
4857, Colonnade Redwood  
4818, Cordell Redwood  
4889, Courtland Pebble  
4954, Heather Beige Classic  
4891, Manhattan Dune  
4921, Mediterranean/Canvas Block Stripe  
4880, Moreland Taupe  
4915, Navy/Taupe Fancy  
4961, Putty Regimental  
4948, Sapphire Vintage Bar Stripe  
4945, Taupe Tailored Bar Stripe  
4887, Westport Grain
- b. Solids: 4620, Beige  
4633, Linen  
4652, Mediterranean Blue

4679, Ocean Blue  
4601, Pacific Blue

2. Other fabrics only by waiver from the Board of Directors. The availability of these fabrics may change over time and replacement fabrics will be identified.

### 2.3 AWNING FRAMES

A. Aluminum Frames: Alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated and with not less than the strength and durability properties of alloy and temper required by structural loads.

1. Aluminum Plate and Sheet: ASTM B 209.
2. Aluminum Extrusions: ASTM B 22 1.
3. Extruded Structural Pipe and Round Tubing: ASTM B 429, standard weight (Schedule 40) unless another weight is indicated or required by structural loads.
4. Drawn Seamless Tubing: ASTM B 210.
5. Aluminum Finish: Mill and/or Manufacturer's standard decorative Baked-enamel or Powder-coat finish at visible areas complying with finish manufacturer's written instructions for surface preparation including pretreatment, application, baking, and minimum dry film thickness.

B. Anchors, Fasteners, Fittings, Hardware, and Installation Accessories: Complying with performance requirements indicated and suitable for exposure conditions, supporting structure, anchoring substrates, and installation methods indicated. Corrosion-resistant or non-corrodible units; weather-resistant, compatible, non-staining materials. Provide as required for awning, assembly, mounting, and secure attachment. Number as needed to comply with performance requirements and to maximize appearance; evenly spaced. Where exposed to view, finish white.

1. Wood Screws: ASME B 18.6. 1.
2. Lag Bolts: ASME B 18.2. 1
3. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
  - a. Material: Stainless steel with bolts and nuts complying with ASTM F 593 and ASTM F 594, Alloy Group I or 2.

### 2.4 RETRACTABLE AWNING MECHANISM

A. Motorized Operation: Provide factory-assembled motorized retractable awning operation systems designed for retracing awnings of type, size, weight, construction, use, and operation frequency indicated. Provide operation systems of size and capacity and with features, characteristics, and accessories suitable for Project conditions and recommended by awning manufacturer, complete with electric motors and factory-prewired motor controls, remote control stations, remote-control devices, power disconnect switches, enclosures protecting controls and all operating parts, and accessories required for reliable operation without malfunction. Include wiring from motor controls to motors. Coordinate operator wiring requirements and electrical characteristics with building electrical system.

B. Comply with NFPA 70.

C. Control Equipment: Comply with NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6.

D. Electric Motors: UL-approved or -recognized, totally enclosed, insulated motor, complying with NEMA MG 1, with thermal-overload protection and internal limit switches; sized by awning manufacturer to start and operate size and weight of awning considering service factor or considering Project's service conditions without exceeding nameplate ratings.

1. Service Factor: According to NEMA MG 1, unless otherwise indicated.
2. Motor Characteristics: Single phase, 110 V, 60 Hz.
3. Coordinate wiring requirements and electrical characteristics of motors with building electrical system.
4. Motor Mounting: Within manufacturer's standard roller enclosure.

E. Remote Controls: Electric controls with NEMA ICS 6, Type 4 enclosure for recessed or flush mounting. Provide the following devices for remote-control activation of awnings:

1. Control Stations: Momentary-contact, three-position, toggle-style, wall switch-operated control station with open, close, and center off functions. Color: White.
2. Radio Controls: Digital system consisting of code-compatible universal coaxial receiver, one per awning and portable single-channel transmitters for operating a single motor with a single button to open and close awning.
3. Wind Controls: Wind sensor, in conjunction with a Remote Receiver tells awning to retract when wind speeds increase. Awning shall automatically retract at wind speeds of 20 mph or greater.

F. Limit Switches: Adjustable switches, interlocked with motor controls and set to automatically stop awning at fully raised and fully lowered positions.

G. Operating Function: Stop and hold awning at any position.

H. Operating Features: Backup gear and crank operator for manual operation during power failures with detachable handle, manufacturer's standard length.

I. Awning Hood: Sheet metal enclosure sized to fit awning roller and operating hardware inside and designed for UV-light, dust, weather, and vandal protection. Finish and color: white.

### **PART 3 - FABRICATION AND INSTALLATION**

#### **3.1 AWNING FABRICATION**

A. Fabrics: Reinforce wear points and hardware attachment points with nonwoven, mesh, or polypropylene mesh webbing.

1. Fabric Edges and Seams: Manufacture's standard hemming and seaming methods.

B. Frames: Preassemble awning frames in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.

1. Form bent-metal comers to smallest radius possible without causing grain separation or otherwise impairing work.
2. Form exposed work true to line and level with accurate angles and surfaces and straight edges.
3. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible. Fabricate slip-fit connections that will be exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
4. Weld comers and connections continuously. Obtain fusion without undercut or overlap. Remove welding flux immediately. At exposed comers and connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
5. Provide for anchor-age of type indicated; coordinate with supporting structure. Space anchoring devices to secure metal fabrications in place and to properly transfer loads.

C. Colors of Metal and Plastic Components Exposed to View: White.

#### **3.2 EXAMINATION OF LOCATION**

A. Field Measurements: Where awning installation is indicated to fit to other work, determine dimensions by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for the entire operating range.

B. Examine substrates, areas, and conditions for compliance with requirements for supporting members, blocking, inserts, installation tolerances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.3 INSTALLATION

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit installation of awnings in exterior locations according to manufacturers' written instructions and warranty requirements.
- B. General: Install awnings and motor controls at locations and in position indicated, securely connected to supports, free of rack, and in proper relation to adjacent construction. Use mounting methods of types described and in compliance with Shop Drawings and fabricator's written instructions.
- C. Attach fabric to frames as recommended by fabricator, to ensure tight, wrinkle-free fit of fabric to frame.
- D. Slip fit frame connections accurately together to form hairline joints and tighten to secure.
- E. Weld frame connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations.
  - 1. Field Welding: Comply with the following requirements:
    - a. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
    - b. Obtain fusion without undercut or overlap.
    - c. Remove welding flux immediately.
    - d. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- F. Anchoring to In-Place Construction: Use anchors, fasteners, fittings, hardware, and installation accessories where necessary for securing awnings to structural support and for properly transferring load to in-place construction.
- G. Corrosion Protection: Coat concealed surfaces of aluminum that will come into contact with grout, concrete, masonry, wood, or dissimilar metals with a heavy coat of bituminous paint.
- H. Coordinate awning installation with flashing and joint-sealant installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed exterior wall and roof assemblies.
- I. Connections: Connect motorized operators to building electrical system.

### 3.4 ADJUSTING

- A. Adjust awnings to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

### 3.5 CLEANING AND PROTECTION

- A. Clean awning surfaces after installation, according to manufacturer's written instructions.
- B. Touchup Painting: Immediately after erection, clean field welds, connections, and abraded areas. Paint uncoated and abraded areas with same or compatible material as used for shop-applied finish painting.
  - 1. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.
- C. Galvanized Surfaces: Clean field welds, connections, and abraded areas and repair galvanizing to comply with ASTM A 780.
- D. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that awnings are without damage or deterioration at time of Substantial Completion.
- E. Replace damaged awnings that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

### 3.6 DEMONSTRATION

A. A factory-authorized service representative shall demonstrate to the Owner how to operate, and maintain awnings.

Stripes

AWNING / MARINE TOP



46" Alpine/B...  
No. 4922-0000

REMOVE



46" Baycrest...  
No. 4993-0000

REMOVE



46" Baycrest...  
No. 4992-0000

REMOVE



46" Beaufort...  
No. 5760-0000

REMOVE



46" Bisque B...  
No. 4773-0000

REMOVE



46" Brass/Bl...  
No. 4939-0000

REMOVE



46" Captain ...  
No. 4962-0000

REMOVE



46" Captain ...  
No. 4902-0000

REMOVE



46" Colonnad...  
No. 4857-0000

REMOVE



46" Cordell ...  
No. 4818-0000

REMOVE



46" Courtlan...  
No. 4889-0000

REMOVE



46" Heather ...  
No. 4954-0000

REMOVE



46" Manhatta...  
No. 4891-0000



46" Mediterr...  
No. 4921-0000



46" Moreland...  
No. 4880-0000



46" Navy/Tau...  
No. 4916-0000



46" Putty Re...  
No. 4961-0000



46" Sapphire...  
No. 4948-0000



46" Taupe Ta...  
No. 4945-0000



46" Westport...  
No. 4887-0000

Solids



46" Beige  
No. 4620-0000

REMOVE



46" Linen  
No. 4633-0000

REMOVE



46" Mediterr...  
No. 4652-0000

REMOVE



46" Ocean Blue  
No. 4679-0000

REMOVE



46" Pacific ...  
No. 4601-0000

END OF SECTION