SECTION 10 71 13.13

EXTERIOR MOTORIZED SCREENS

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* heroal USA Inc.; Exterior motorized zip screens.  
This section is based on the products of heroal USA Inc., which is located at:  
7022 TPC Dr. Suite 100  
Orlando, FL 32822  
Toll Free Tel: 888-437=6257  
Email: [request info (info@heroal.us)](https://admin.arcat.com/users.pl?action=UserEmail&company=heroal+USA+Inc.&coid=50637&rep=&fax=&message=RE:%20Spec%20Question%20(10706her):%20%20&mf=)  
Web: <https://www.heroal.de/us>   
 [ [Click Here](https://www.arcat.com/arcatcos/cos50/arc50637.html) ] for additional information.  
Renowned as a medium-sized company with a long tradition, heroal consists of 800 employees and is a leading specialist in aluminum systems. We provide unique solutions for roller shutters, windows, doors, roller doors, sun protection and curtain walls, and set standards in innovation and quality across the board. The premium engineering behind each "Made in Germany" product has come to symbolize a customer-oriented approach, highly specialized production, and powerful application. Adhering to our sustainable and environmental business approach, heroal uses recycled aluminum and renewable resources in its production, as well as utilizing a combined heat and power plant, and a fleet of high-standard vehicles.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Exterior Motorized Zip Screens.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 04 20 00 - Unit Masonry.
    2. Section 06 10 00 - Rough Carpentry.
    3. Section 08 50 00 - Windows.
    4. Section 26 00 00 - Electrical.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. AAMA 2604/05 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels; 1998.
    2. ASTM International (ASTM):
       1. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
       2. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
       3. ASTM E1886, Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials.
       4. ASTM E1996, Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes.
    3. European Standards (EN): Machinery Directive 2006/42 / EC.
       1. EN 13561 - External blinds and awnings. Performance requirements including safety.
    4. German National Standards (DIN)
       1. DIN 1624 - Flat Products of Steel - Cold Rolled Narrow Strip in Widths Less Than 25.59 inch (650 mm) Of Mild Unalloyed Steels - Technical Delivery Conditions.
       2. DIN 4108 - Thermal Protection and Energy Economy in Buildings - Part 2: Minimum Requirements to Thermal Insulation.
       3. DIN EN ISO 12567 - Thermal performance of windows and doors -- Determination of thermal transmittance by the hot-box method -- Part 1: Complete windows and doors.
       4. DIN 18032-3 - Sports halls - Halls and rooms for sports and multi-purpose use - Part 3: Testing of safety against ball throwing.
    5. Metro-Dade County, FL Building Code Compliance Office Protocol:
       1. TAS 201 - Impact Test Procedures.
       2. TAS 202 - Criteria for Testing Impact and Non-Impact Resistant Building Envelope Components Using Uniform Static Air Pressure.
       3. TAS 203 - Criteria for Testing Products Subject to Cyclic Wind Pressure Loading.
    6. VKF (Swiss Association of Cantonal Fire Insurance Companies) Test Specifications No. 02. The value reflects the mechanical functional capability.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Preparation instructions and recommendations.
        2. Storage and handling requirements and recommendations.
        3. Installation methods.
     3. Shop Drawings: Include details of construction and relationship with adjacent construction.
     4. Verification Samples: For each textile product specified, two samples, minimum size 6 inches (150 mm) square representing actual product, color, and patterns. For each guiderail and cover panel material specified, two samples each, minimum size 6 inches (150 mm) long representing actual product and color.
     5. Operating and maintenance data.
  2. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Minimum 5 year experience manufacturing similar products.
     2. Installer Qualifications: Minimum 2 year experience installing similar products.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
       1. Finish areas designated by Architect.
       2. Do not proceed with remaining work until workmanship is approved by Architect.
       3. Remodel mock-up area as required to produce acceptable work.
  1. PRE-INSTALLATION MEETINGS
     1. Convene minimum two weeks prior to starting work of this section.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
     2. Handling: Handle materials to avoid damage.
  3. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
  4. SEQUENCING
     1. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
  5. WARRANTY
     1. Warranty: Provide manufacturer's standard limited warranty.

1. PRODUCTS
   1. MANUFACTURERS

\*\* NOTE TO SPECIFIER \*\* As one of the leading aluminum system suppliers, heroal develops and produces perfectly coordinated systems for windows, doors, facades, roller shutters, roller doors and sun protection, complemented by louvre and sliding shutters, insect protection and terrace roofs and carports. By minimizing energy consumption during production, maximizing energy conservation during usage as well as ensuring optimum profitability during system manufacturing and an increase in the value of the building, heroal system solutions make a significant contribution to sustainable construction.

* + 1. Acceptable Manufacturer: heroal USA Inc., which is located at: 7022 TPC Dr. Suite 100; Orlando, FL 32822; Toll Free Tel: 888-437=6257; Email: [request info (info@heroal.us)](https://admin.arcat.com/users.pl?action=UserEmail&company=heroal+USA+Inc.&coid=50637&rep=&fax=&message=RE:%20Spec%20Question%20(10706her):%20%20&mf=); Web: <https://www.heroal.de/us>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* Energy saving: Roller shutters save energy on heating and offers passive temperature control. On cold nights, the heat loss is significantly reduced thanks to the air cushion between the window and the roller shutter. In summer, automatically controlled roller shutters ensure that the air-conditioning unit does not need to be used.  
Soundproofing: Thanks to the system combining double-walled aluminum and polyurethane foam filling, heroal roller shutter systems ensure optimum soundproofing. Delete article if not required.

* 1. EXTERIOR MOTORIZED ZIP SCREENS

\*\* NOTE TO SPECIFIER \*\* The heroal VS series is an innovative zip screen system which is installed in front of the window. For shaded areas up to 197 inches (5000 mm) wide or up to 197 inches (5000 mm) in height, with a total area of 161.50 sq. ft (15 sq m). Depending on the type of mesh, translucent or opaque sun protection can be created, which reduces solar radiation by up to 75 percent, while still allowing daylight to penetrate. High wind stability makes the product extremely durable and the wide variety of colors available make it is extremely flexible for use on buildings. Delete zip screen systems paragraph if not required. Delete zip screen systems paragraph if not required.

* + 1. Zip Screen Systems:
       1. Basis of Design: VS Z as manufactured by heroal.
          1. Features:

Particularly weather resistant and low-maintenance.

Material is guided using a zip attached to the fabric.

Motor and Controls: As recommended by manufacturer from selected motor and controls manufacturer. Refer to the appropriate sections in Division 26 that specify motors and controls.

\*\* NOTE TO SPECIFIER \*\* Delete color options not required.

Textile or Other Screen Material: As determined by the Architect from manufacturer's selection.

* + - * 1. Performance Requirements:

Wind Load Resistance: 90 mph (145 km per hour).

* + - * 1. Element Types: One-piece as well as multi-part / coupled elements.
        2. Installation Types: Stem or concealed.

\*\* NOTE TO SPECIFIER \*\* Delete facade integration options not required.

Facade Integration: Prefitted.

Facade Integration: Semi-integrated.

Facade Integration: Fully integrated.

* + - * 1. Built-In Variants Stem Box: Normal, Contra (in the soffit).

\*\* NOTE TO SPECIFIER \*\* Delete box designs option not required.

* + - * 1. Box Designs: 45 degrees, HC / HC N.
        2. Box Designs: 90 degrees, HC / HC N.
        3. Box Sizes: 3.35 to 4.92 inches (85 to 125 mm).

\*\* NOTE TO SPECIFIER \*\* Delete end bar design option not required.

* + - * 1. End Bar Design: Type 1: 1.25 inches (32 mm view).
        2. End Bar Design: Type 2: 1.73 inches (44 mm view) for wide elements.
        3. Guides:

\*\* NOTE TO SPECIFIER \*\* Delete guide options not required.

Rail-guided with zipper (VS Z).

Rail guided without zipper (VS).

Cable-guided without zipper (VS C).

* + - * 1. Guide Rails: 1- and 2-piece guide rails, distance profiles, and center guides depending on the application and system variant.
        2. Tissue Types:

\*\* NOTE TO SPECIFIER \*\* Delete tissue type options not required.

Copaco Serge 600.

Mermet Satine 5500.

Copaco Serge 1 percent.

Serge Ferrari Soltis 88.

Serge Ferrari Soltis 92.

Serge Ferrari Soltis B92 / B702.

Serge Ferrari Stam Opac (Flexilight 6002 Opaque).

Swela Vuscreen 317, 318, 319.

Tempotest Starscreen.

Dickson Orchestra.

* + - * 1. Textiles: Consist of different materials with differing specifications, such as opening factors, and total energy transmission.
        2. Textile Views: Front and back partly different.
        3. Coating (Extruded Profile and Caps): heroal hwr powder coating.
        4. Drives: Standard tube motors with radio and obstacle detection.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with manufacturer's instructions, approved submittals and in proper relationship with adjacent construction.
      2. Test for proper operation and adjust until satisfactory results are achieved.
   4. FIELD QUALITY CONTROL
      1. Test for proper operation and adjust until satisfactory results are obtained.
   5. PROTECTION
      1. Protect installed products until completion of project.
      2. Touch-up, repair or replace damaged products before Substantial Completion.
   6. PRODUCT MAINTENANCE AND USE
      1. Proper maintenance measures shall be taken to ensure a long life for the shutter product. The following cleaning conditions shall be met to qualify for product warranty consideration:
         1. Documented cleaning, two times per calendar year.
         2. Mild alkaline detergent and clean water wash.
         3. Effect may be increased by rubbing with a soft, non-scratch cotton cloth.
         4. Temperature of parts should not exceed 80 degrees F (26.7 degrees C) during cleaning.
         5. Use only isopropyl alcohol for removal of grease or oily substances.
         6. Cleaning solution must not be allowed to react for more than one hour.
         7. After cleaning, all surfaces should be thoroughly rinsed with clean, cold water.
         8. Thoroughly cleaned and lubricated yearly to maintain smooth, trouble free operation.

END OF SECTION