

## GUIDE SPECIFICATIONS

## SUN CONTROL SPECIALTIES □ MANUALLY OPERATED NON-RETRACTABLE LOUVER SKYLIGHT SHADING SYSTEM

Division 10 - Specialties

Section 12.492 □ Manually operated specialty non-retractable louver blinds □ internal / external

**1.0 GENERAL****1.1 RELATED SECTIONS:**

- |       |         |       |                              |
|-------|---------|-------|------------------------------|
| 1.1.1 | Section | 08920 | Glazed aluminum curtain wall |
| 1.1.2 | Section | 08960 | Sloped glazing systems       |
| 1.1.3 | Section | 0□.   | Aluminum cladding            |

Products supplied by this section and installed by other trades:

*Specifier co-ordinate this work with designated trades in other sections of these project specifications.*

- 1.1.4 Aluminum motorized non-retractable louver shading system to be installed to the glazing system as indicated on the architectural drawings.

**1.2 SUMMARY:**

- 1.2.1 Provide manually operated non-retractable louver system, with related specified hardware, to complete the installation to the following locations:  
*Specifier provide the scope of the work*
- 1.2.2 Non-retractable louver system shall be mounted directly to the glazing system as indicated on the architectural drawings
- 1.2.3 Glazing system supplied and installed by other trades shall be coordinated with this trade to ensure smooth integration of the specified system

**1.3 QUALITY ASSURANCE:**

- 1.3.1 All bidders submitting bids on the work of this section shall meet or exceed the quality of materials, components and assemblies herein. Bidders who do not comply with these specifications shall refrain from submitting a bid
- 1.3.2 Alternate bids, alternate products shall be submitted to the Design Consultant ten (10) days prior to tender closing. Alternate bids can only be submitted as an alternate to the specified base bid product
- 1.3.3 Manufacturer shall have a minimum of fifteen (15) years experience in the manufacture of the specified shading system. All work specified under this section shall be supplied by one subcontractor
- 1.3.4 All work specified under this section shall be supplied and installed entirely by one subcontractor using his own resources
- 1.3.5 Non-retractable louver system to be installed by a firm with a minimum of ten (10) years □ experience, specializing in the installation of shading systems
- 1.3.6 Conform to applicable Building Codes, relevant local codes and all other standards noted  
*Specifier provide details of any specific codes to be met*
- 1.3.7 Install one complete sample with accessories on site. Review the installation before proceeding with the remainder of the work. Adjust sample installation, as required, to gain acceptance. Accepted work may form part of the final installation

**1.4 SUBMITTALS AND TEST REPORTS:**

- 1.4.1 Submit fully detailed drawings prepared in AutoCAD 2002 version format showing all components, finishes and other construction conditions, installation, controls and all applicable dimensions according to Section 01300 □ Submittals

- 1.4.2 Submit duplicate samples of the key components of the specified non-retractable louver system with the specified finish. Minimum size 12" (300mm) for review
- 1.4.3 Submit duplicate samples of the specified brackets and attachment methods
- 1.4.4 Submit duplicate copies of operating and maintenance instructions including the name, address and other contact details of local service company

## 1.5 INSPECTION / PREPARATION

- 1.5.1 Verify that the structure necessary to carry the non-retractable louver system is a proper installation and secure
- 1.5.2 Notify general contractor in writing of any deficiencies in the work of other trades that would affect the window treatment system
- 1.5.3 Make accurate measurements at the site before fabrication. Check layout of glazing framing sections, spans and loading capabilities

## 1.6 DELIVERY, STORAGE AND HANDLING:

- 1.6.1 Do not deliver to site until areas to receive the non-retractable louver blinds are completely finished
- 1.6.2 Deliver materials in original protective wrappers or containers, with manufacturer's labels and sealed intact
- 1.6.3 Handle and store materials in accordance with the manufacturer's recommendations, protecting materials and finishes from damage or soiling

## 1.7 WARRANTY:

- 1.7.1 Provide a limited manufacturer's warranty from date of Substantial Completion covering the following periods:
 

Specialty hardware	Five (5) years
Aluminum and steel finishes	Ten (10) years
- 1.7.2 Provide a limited installation warranty from date of Substantial Completion of one (1) year
- 1.7.3 Submit standard manufacturer's maintenance contract for review by the owner

## 2.0 PRODUCTS

### 2.1 MANUFACTURER:

- 2.1.1 Arc Structures, Inc.  
1, 115 28 Street SE  
Calgary, Alberta,  
Canada T2A 5K4  
Tel: 403 204 8699  
Fax: 403 204 8676  
e-mail: [sales@arcstructures.com](mailto:sales@arcstructures.com)  
Web: [www.arcstructures.com](http://www.arcstructures.com)

### 2.2 SYSTEM:

*Specifier select appropriate option*

- 2.2.1 System to comprise:
  1. System with 2" (50mm) aluminum louvers for internal installation, or
  2. System with 2" (50mm) timber louvers for internal installation, or
  3. System with 3" (75mm) extruded aluminum louvers for internal installation, or
  4. System with 3" (75mm) extruded aluminum louvers for external installation, or
  5. System with 3" (80mm) rolled edge aluminum louvers for internal installation, or
  6. System with 3" (80mm) rolled edge aluminum louvers for external installation, or

7. System with 31/2" (88mm) extruded aluminum louvers for internal installation, **or**
8. System with 31/2" (88mm) extruded aluminum louvers for external installation

## 2.3 HARDWARE:

**Specifier please note: This section requires editing to meet specific project requirements. All items which are not required must be deleted.**

### 2.3.1 Rack arms:

- a. Rack arms to be manufactured from extruded aluminum and to incorporate the following components:
  - Extruded aluminum □ T□ bar rack arm profile (35mm x 20mm)
  - Nylon or fiber glass pivot arms
  - Nylon slat clips
  - Extruded aluminum operating strip (12mm x 3mm)
  - Bearing bracket assembly
- b. Rack arms to be supplied to site in fully assembled form, ready for installation

### Drive shaft:

- a. Hexagonal extruded aluminum drive shaft with a dimension of 14mm across flats. Internal 7mm square cavity to accept shaft for gearbox coupling

### Louvers:

- a. Louvers to be manufactured from 0.4 to 0.5mm thick aluminum, double stove enameled
  - 2" (50mm) wide flexible crowned, **or**
  - 3" (80mm) wide rolled edge
- or**
- b. Louvers to be manufactured from 2" (50mm) wide x 1/8" (3mm) thick kiln dried American Basswood, **or**
- c. Louvers to be manufactured from 3" (75mm) wide extruded aluminum, **or**
- d. Louvers to be manufactured from 3" (88mm) wide extruded aluminum are are designed to interlock in the closed position

### Brackets:

- a. Aluminum angles that fix to the rack arm extrusion and incorporate □□ stainless steel studding to allow alignment on site. The studding fixes to a second aluminum angle or plate for installation to the glazing structure.

### Gearbox:

System to incorporate a metal 4:1 reduction gearbox, and fixing components. Gearbox to be operated by:

**Specifier select appropriate option**

A detachable, articulated crank handle, **or**

A hand wheel

## 2.4 MATERIALS

### 2.4.1 Material quality and coatings:

- a. All extruded aluminum components shall be extruded from 6063-T6 quality aluminum
- b. All aluminum components shall have the following finish: **Specifier select appropriate option**
  - Mill finish aluminum, **or**
  - Two (2) coat fluoropolymer finish to a standard non-metallic color, **or**
  - Three (3) coat fluoropolymer finish to a standard metallic color, **or**

- Polyester powder coated finish to a standard color, or
- Clear anodized finish according to AA-M12C22A31
- c. Unexposed aluminum unless otherwise specified: mill finish
- d. Steel components shall be manufactured from mild steel Fe230G while any stainless steel components shall be manufactured from Stainless 18-8
- e. Steel components shall be hot dip galvanized or zinc plated
- f. Slat clips, pivot arms, bearings and other sundry components to be manufactured from moulded nylon 6 or glass re-inforced nylon.

### 3.0 EXECUTION

#### 3.1 FABRICATION:

- 3.1.1 Specialty non-retractable louver blind system components manufactured and assembled allowing for custom installation techniques to suit project requirements
- 3.1.2 Finished assemblies shall be square, true to size and free from twist or other defects that could affect their strength or appearance. Factory applied finish should be uniform, smooth and without blemishes

#### 3.2 INSTALLATION:

- 3.2.1 Install work using skilled tradesman and install in strict accordance with manufacturer's recommendations.
- 3.2.2 All items installed, plumbed, squared and rigidly anchored maintaining uniform clearances and accurate alignment measurements
- 3.2.3 The specialty non-retractable louver blind system shall be pre-measured and the components manufactured off-site

#### 3.3 ADJUSTING AND CLEANING:

- 3.3.1 Adjust components as required to ensure trouble free performance
- 3.3.2 Prior to Substantial Completion clean down once the specialty non-retractable louver blind system
- 3.3.3 Replace work which cannot be satisfactorily repaired, adjusted or cleaned.

END