

**SPECIFIER NOTE:**

The purpose of this guide specification is to assist the specifier in correctly specifying roller window shades and their installation. The specifier needs to edit the guide specifications to fit the needs of specific projects. Contact Crestron to assist in appropriate product selections and for detailing assistance. Throughout the guide specification, there are Specifier Notes to assist in the editing of the file. Red text in brackets indicates a selection needs to be made



## **SECTION 12 24 13.21**

### **ROLLER WINDOW SHADES – HORIZONTAL SHEERS**

#### **PART 1 - GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Manually operated horizontal sheer roller shades.
- B. Motor operated horizontal sheer roller shades

##### **1.2 SUBMITTALS**

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, features, finishes, and operating instructions for roller shades.
- B. Shop Drawings: Show fabrication and installation details for roller shades, including sheer fabric material.
  - 1. Motor-Operated Shades: Include details of installation [and diagrams for power, signal, and control wiring.]
- C. Samples: For each exposed product and for each color and texture to be utilized
- D. Operation and Maintenance Data: For roller shades.

##### **1.3 QUALITY ASSURANCE**

- A. Crestron Shading Systems require installation by a trained and certified specialist, either a trained Crestron Dealer or an authorized shading systems service provider.

##### **1.4 FIELD CONDITIONS**

- A. Do not install roller shades until construction and finish work in spaces, including painting, is complete and dry and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operating hardware of operable glazed units through entire operating range. Notify Architect of installation conditions that vary from Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

## 1.5 WARRANTY

- A. Manufacturer Warranty: Crestron Warrants Digital QMTDC Motors against defects in material or workmanship under normal use for the lifetime of the motor.
- B. Mounting Hardware Warranty: Crestron warrants mounting hardware against defects in material or workmanship under normal use for a period of 5 years.

### SPECIFER NOTE:

Shade Fabrics are warranted by the fabric manufacturer and passed through by Crestron to the end user. Warranty periods vary by manufacturer. Confirm desired warranty period is offered by fabric manufacturer.

- C. Fabric Warranty: Shade fabric warranted against defects in material or workmanship for a for a period of [5] [10] years.

## PART 2 - PRODUCTS

### 2.1 BASIS OF DESIGN

- A. Crestron Horizontal Sheer (CS-SHADE-ROLLER-HSHEER) by Crestron Electronics Inc. Rockleigh, NJ 800-237-2041 [www.crestron.com](http://www.crestron.com)

### 2.2 MANUALLY OPERATED SHADES

- A. Chain-and-Clutch Operating Mechanisms: With metal beaded chain and clutch that stops shade movement when chain is released. Chain has adjustable limit stops and spring loaded jamb/sill mounted chain retainer.
- B. Rollers: aluminum tubes of diameters and wall thicknesses required to accommodate operating mechanisms and weights and widths of fabric indicated without deflection.
  - 1. QMT3 Series: 1.625-inch diameter tube
- C. Mounting Hardware: Brackets, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location.
  - 1. Bracket: CSA - ARCH3 – BRKT QMT3 Series Architectural Shade Hardware

### 2.3 MOTOR-OPERATED SHADES

- A. Motorized Operating System: Provide factory-assembled, shade-operator for conditions indicated, complete with electric motor and motor controls, power disconnect switch, enclosures protecting controls and operating parts, and accessories required. Coordinate operator wiring requirements and electrical characteristics with building electrical system.
- B. Rollers: aluminum tubes of diameters and wall thicknesses required to accommodate operating mechanisms and weights and widths of fabric indicated without deflection.
  - 1. QMT3 Series: 1.625-inch diameter aluminum tube

### C. Motor

#### SPECIFER NOTE:

Depending on field conditions wireless motors may be more appropriate for retrofit conditions so that wires are not exposed. Select either a Wired Motor or a Wireless Motor and remove the other options. Where more than one type of motor is required coordinate locations and identify on Drawings.

1. [Wired BLDC Motors - 24 Volt - Low voltage power: CSM-QMTDC -163-1-CN: Digital QMT Shade Motor for QMT3 Series 0.75 Nm, CRESNET]
2. [Wireless BLDC Motors - 24 Volt - Low voltage power: CSM-QMTDC - 163-1-EX: Digital QMT Shade Motor for QMT3 Series 0.75 Nm, INFINET EX]
3. Motor features include
  - a. Obstacle Detection
  - b. Variable Rotation Speed

### D. Power Supply

#### SPECIFER NOTE:

Select Multiple Motor Power Supply when using any of the Wired Motors, and Dedicated Power Supply option when using a Wireless Motor.

1. [Multiple Motor Power Supply: CSA-PWS-10S-HUB-ENET: 10 Motor Power Supply with Ethernet to CRESNET Bridge and CRESNET Hub]
2. [Dedicated Power Supply: CSA-PWS40 Power Pack for Crestron Shade or Drapery Motors]

### E. Control Cable:

#### SPECIFER NOTE:

Control cables are only required for the Wired Motors and should be deleted for wireless motor shades. Select the cable based on Plenum/Non-Plenum applications. Both non-plenum rated cables have a maximum run of 500 feet. The plenum rated Cable has a maximum run of 130 feet.

1. [CRESNET-NP Series Control Cable, Non-Plenum]
2. [CRESNET-HP-NP Series High Power Control Cable, Non-Plenum]
3. [CRESNET-P Series Control Cable, Plenum-Rated.]

### F. Processor

1. Crestron Control System

### G. Control Interface

#### SPECIFER NOTE:

Crestron Shades are controlled by the processor which is connected to the control interface. The following are just some of the options that can be used based on the specific needs of the project.

1. [Remote Control]
2. [Keyed Control Station]
3. [Individual Switch Control Station]
4. [Group Control Station]
5. [Sun Sensor]
6. [Timer]
7. [Touch Screen]

### H. Mounting Hardware: Brackets, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location.

1. Bracket: CSA- ARCH3 – BRKT QMT3 Series Architectural Shade Hardware

## 2.4 FABRIC

### SPECIFER NOTE:

Crestron has 25 light filtering and 11 room darkening fabric options for Horizontal Sheers. Refer to Website or Crestron Representative for assistance. Color listed below is a representative sample of the information to include in the project specific document.

#### A. Fabric Material

1. [Light-filtering fabric: Regatta White, Horizontal Slub, CSF-LFHS13-HS]
2. [Room Darkening: Picket Fence, Cross Hatch CSF-RDCH01-HS]

## 2.5 ACCESSORIES

### SPECIFER NOTE:

Include only the accessory components that are appropriate for the specific project. If more than one type of installation is used, coordinate the related accessories.

Fascia may be used for both an inside mount and outside mount but is not needed if the shade is pocket mounted

Fascia is used with ARCH brackets only and should be deleted when DÉCOR brackets are used.

#### A. Fascia: Aluminum extrusion that conceals front and part of the bottom of roller and operating mechanism and attaches without exposed fasteners.

1. Shape: Curved
2. Height: Based on Bracket Type
3. Color: [White] [Black] [Gray] [Brown] [Almond]
4. [Fabric Insert]

### SPECIFER NOTE:

Top and Back Cover may be used for inside and outside mount but is not needed if the shade is pocket mounted

#### B. Top / Back Cover: Aluminum extrusion that conceals top and back of roller and operating mechanism.

1. Standard Color: [White] [Black] [Gray] [Brown] [Almond]

### SPECIFER NOTE:

End caps may be used for outside mount but are not needed if the shade is inside or pocket mounted. Standard Colors are available for all motors.

#### C. Endcap Covers: Plastic cap that conceals exposed endcaps.

1. Standard Color: [White] [Black] [Gray] [Brown] [Almond]

**SPECIFER NOTE:**

Pocket should be used for recessed installations and Pocket with Lip should be used when adjacent ceiling is acoustical ceiling panels.

- D. Pocket [with lip]: Rectangular, one-piece aluminum extrusion for recessed single roller
  1. [Pocket with lip at lower edge to support acoustical ceiling panel.]
  2. Color: [White] [Black] [Gray] [Brown] [Almond]

**2.6 ROLLER SHADE FABRICATION**

- A. Product Safety Standard: Fabricate roller shades to comply with WCMA A 100.1, including requirements for flexible, chain-loop devices; lead content of components; and warning labels.
- B. Unit Sizes: Fabricate units in sizes to fill window and other openings as follows:
  1. [Between Jamb Installation: Width equal to jamb-to-jamb dimension of opening in which shade is installed less 1/16 inch per side or 1/8-inch total. Length equal to head-to-sill or - floor dimension of opening in which shade is installed, plus or minus 1/8 inch.]
  2. [Outside of Jamb Installation: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.]
- C. Shade Fabric and Textile Fabrication: Fabricate shades without battens or seams.

**PART 3 - EXECUTION**

**3.1 EXAMINATION**

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, [locations of connections to building electrical system,] and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 ROLLER SHADE INSTALLATION**

- A. Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions.
- B. Electrical Connections: Connect motor-operated roller shades to building electrical system.

**3.3 ADJUSTING**

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

**3.4 CLEANING AND PROTECTION**

- A. Clean roller shade surfaces, after installation, according to manufacturer's written instructions.
- B. Protect shades after installation and prior to project Substantial Completion.
- C. Replace damaged roller shades that cannot be repaired.

## END OF SECTION

**DISCLAIMER:**

This Specification has been written as an aid to the professionally qualified Specifier and Design Professional. The use of this Guide requires the sole professional judgment and expertise of the qualified Specifier and Design Professional to adapt the information to the specific needs for the Building Owner and the Project, to coordinate with their Construction Document Process and to meet all applicable building codes, regulations and laws. CRESTRON EXPRESSLY DISCLAIMS ANY WARRANTY, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OF THIS PRODUCT FOR THE PROJECT.