

**BTX Window Automation
Product Specifications
Roller Shade Systems**

Motorized Sorina M – DC RF Solar-Powered

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Part 1 – General

1.01 Summary:

Scope of work is to provide roller shades that are operated by BTX motorized lift system along with accessories, attachment hardware, and equipment necessary to complete satisfactory installation.

1.02 Turnkey responsibility for motorized roller shade systems:

- A. To ensure control of responsibility for satisfactory performance and installation of the motorized roller shade systems, the design, engineering and installation shall be assigned to a single manufacturer and his authorized dealer/installer.
- B. The base building contractor (main contractor) shall provide and coordinate the following items with the window shade contractor/installer for all window shade systems.
 - 1. Shade pockets recessed into ceiling
 - 2. Power wiring
 - 3. Wire conduits as required
 - 4. Duplex outlets and J-boxes

1.03 Submittals

- A. Manufacturing literature to describe assembly, materials, installation instructions, and specific data. Include any pertinent wiring diagrams.
- B. Shop drawings are to include, but are not limited to, all components, fasteners, and installation methods.
- C. Window Systems are custom-built based on measurements taken in the field.

1.04 Warranty

- A. Manufacturer shall provide five (5) year warranty from the date of installation on all shade motors. All operating control and electronic accessory components shall carry a one (1) year limited warranty against defects in materials and workmanship.

1.05 Delivery and storage

- A. Systems shall be delivered to the site in original manufacturer's containers.
- B. Containers shall be uniquely labeled to identify the corresponding window openings and locations.
- C. All materials shall be stored in a dry, secure place protected from weather, water and heat, surface contaminants, construction traffic and all other potential damage.

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Part 2 – Products

2.01 Manufacturer:

- A. BTX Window Automation
10763 Sanden Drive
Dallas, TX 75238 USA
(800) 422-8839

2.02 Components:

- A. DC RF solar-powered tubular motors shall be asynchronous 24V DC developing 2 NM torque at 23rpm capable of lifting 17 lbs. Power shall be supplied via 5V, 500mA solar panel and requires no electrician or special wiring. The power cord shall connect to motor by means of a 5.5mm DC plug. Motors shall have a fully encapsulated shock resistant motor coil and be moisture resistant and fire resistant. All motors are equipped with a mechanical brake. Motors shall have a thermal protector to prevent overheating. Limit switches shall be easily adjustable in either direction by means of separate adjustment knobs.
- B. Tube shall be 50mm extruded aluminum.
- C. Brackets shall be drop-in with slide bearing for adjustability. Drop-in brackets shall be made of powder-coated steel and allow for adjustment for ease of installation.
- D. Idler insert shall match the tube shape internally and is provided with a round steel, spring-loaded shaft for mounting in the bracket. Inserts are made from injection molded plastic.
- E. Double-sided tube tape is used and for fabric attachment.
- F. Adaptor Set allows the motor to drive the tube and shall be manufactured from injection molded plastic.
- G. Bottom Bar shall be extruded aluminum and inserts into pocket in shade fabric to ensure uniform weight distribution and operation.
- H. Fascia Panel and Backplate shall be extruded aluminum either 3” or 4” in width to enclose motor and roller and give a finished look to the assembly.
- I. Fascia Bracket Set shall be made of stamped steel either 3” or 4” in width and allow for mounting of shade system with fascia panel either inside, outside, or to the ceiling. A self-lubricated bearing will be attached on the idler side bracket.
- J. Side Channels and Sill Channels shall be made of extruded aluminum and prevent light from entering along the edges of the shade for blackout situations. Pile Inserts fit into side channels to further enhance light blocking and reduce wear on shade fabric.

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- K. Shade Pocket and Pocket Enclosure shall be made of extruded aluminum for optional mounting in recessed ceiling pocket.
- L. Fabric shall be specified by designer/decorator/end-user. Please refer to BTX sample cards for specifics on color selection, parameters/guidelines and attributes.

2.03 Controls:

- A. The switching device to activate the system shall be either a BTX RF remote control, wall-switch, or contact closure. Systems can be controlled individually or as a group with the use of the RF control devices. Motors can be integrated with virtually any home automation/lighting control, or building management systems via RJ jack utilizing contact closure.

Part 3 – Execution

3.01 Inspection and Preparation:

- A. Qualified installer shall be responsible for window measurements prior to installation, installation conditions, and preparation of all mounting surfaces.
- B. Solar panel required direct sunlight and all projects must be thoroughly prequalified to test viability, given intended operation period versus collection period. Consult manufacturer for further details.

3.02 Installation:

- A. System installation shall be in accordance with BTX mounting instructions.

3.03 Maintenance:

- A. Lift system components should not require routine maintenance under normal operating conditions.
- B. For fabric care refer to fabric manufacturer's care and use directions.