

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

Motorized RS-20

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Part 1 – General

1.01 Abstract:

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

1.02 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.

1.03 Quality Assurance:

- A. Manufacturer's Qualification
 - 1. BTX Window Automation is the original manufacturer of a unique line of motorized headrail systems, electronic shading devices and controls.
- B. A qualified installer or sub-contractor shall perform installation.
- C. Installation shall conform to Local and National Building Code and any applicable local standards.
- D. Sample system may be provided upon Architect's request and BTX authorization.

1.04 Delivery, Storage, and Handling

- A. Systems to be delivered to installation site or to installer intact in original manufacturer's custom-built containers.
- B. Systems shall be operated under normal room temperature range, humidity, and operating conditions.

1.05 Warranty

- A. Provide BTX standard limited warranty of five (5) years from date of shipment against defects in materials and workmanship of motors and hardware. Electronic and electrical controls are warranted against defects in materials and workmanship for one (1) year from date of shipment from factory.

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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. 9/07/30 and 9/1/30 2" motors shall be asynchronous 110v/60Hz rated at 180 watts developing 7/10 NM torque at 30rpm capable of lifting 55-81 pounds. 9/1.8 motor shall develop 18 NM torque with lift of 147 pounds at 16 rpm. 220v versions of each motor are available. Motors shall have fully encapsulated shock resistant motor coil and be moisture resistant and fire resistant. All motors are UL and CSA recognized and equipped with a self-adjusting conical brake. Each motor is equipped with precision planetary gears and pre-set internal limit switches. Motors shall also have thermal protector for automatic switch off to prevent overheating. Limit switches shall be easily adjustable in either direction by means of separate adjustment knobs.
- B. Tube shall be 55mm to 59mm extruded aluminum BTX Exactatube design utilizing fabric-mounting flange and allows for trouble-free fabric attachment and exact alignment.
- C. Drop-in Motor Bracket shall be zinc-plated steel and allow both the motor end and the idler end to drop into the brackets for ease of installation. A 16mm clip also made from zinc-plated steel shall help to secure the assembly to the brackets.
- D. Fabric Clip shall be 55mm spring steel and allow for fabric attachment.
- E. Drive and Crown Adaptor Set allows the motor to drive the tube and shall be manufactured from injection molded plastic.
- F. Idler insert shall match the tube shape internally and is provided with a round steel shaft for mounting in the end bracket. Inserts are made from injection molded Durethan¹ plastic.
- G. Bottom Bar shall be extruded aluminum and inserts into shade fabric to ensure uniform operation.
- H. Fascia Panel and Backplate shall be extruded aluminum 4" in width to enclose motor and roller and give a finished look to the assembly.
- I. Fascia Drop-in Bracket Set shall be made of stamped zinc-plated steel and allow both the motor end and the idler end to drop into the brackets for ease of installation. Brackets will allow for mounting of shade system with fascia panel either inside, outside, or to the ceiling.

¹ Durethan is a registered trademark of Bayer Corp.

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- 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.
- K. Shade Pocket and Pocket Enclosure shall be made of extruded aluminum for optional mounting in recessed ceiling pocket.

2.03 Controls:

- A. The switching device to activate the system shall be either a BTX switch for hardwired control or the BTX radio or IR remote control. Multiple systems shall be controlled either individually or by BTX group controllers or automatic controllers including sun sensors and programmable digital timers. Controls can be integrated with home automation, or building management systems.

2.04 Accessories:

- A. Spring angle coupler shall be a stainless steel helical coil allowing up to a 90-degree bend.
- B. Straight coupler shall allow multiple shade installation on a single motor. Straight Fascia Coupler shall be used for multiple fascia panel installations on a single motor.

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. The power supplied shall be 110v or 220v AC three conductor to the primary switch (hardwire switch, radio or IR receiver unit, or BTX automated controls). Wiring between primary switch and selected control units shall be in accordance with manufacturer's wiring schematics and specifications. All on site wiring shall be provided by the owner.

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.