

**BTX Window Automation
Product Specifications
Drapery Systems**

Tumo Solar

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Part 1 – General

1.01 Abstract:

- A. Scope of work is to provide direct-drive traversing tracks for draperies that may be curved to precise specifications for commercial and/or residential applications that are operated by a BTX motorized traverse system along with accessories, attachment hardware and equipment necessary to complete satisfactory installation.

1.02 Turnkey responsibility for motorized drapery systems:

- A. To ensure control of responsibility for satisfactory performance and installation of the motorized drapery 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. 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 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.

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1.05 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.

1.06 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 the factory.

Part 2 – Products

2.01 Manufacturer:

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

2.02 Components:

- A. The Tumo Solar series of direct drive motors shall operate on 5V DC and have the capability of pulling 45 lbs. over 18' of track. Power shall be supplied via solar panel that plugs into the Tumo motor and requires no electrician or special wiring. The power cord shall connect to motor by means of a 5.5mm DC plug. Motor shall have automatic limit sensors that do not require programming or setting. Motor shall have automatic clutch that allows drapes to be moved smoothly by hand. Motor shall lock onto track by means of "bayonet" type mount with tamper-resistant safety lock to secure motor to track. Motor shall be instantly detachable for easy replacement. The BTX Tumo™ motor shall feature integral electronics control for RF remote operation. The motor shall be provided with RJ jacks for low voltage connection and shall feature integral LVI electronics
- B. Drive Assembly and Return Assembly shall be manufactured from injection molded plastic.
- C. Headrail shall be manufactured from extruded aluminum.
- D. Drive Belt shall be a toothed timing belt and circulates internally in the headrail to ensure smooth travel even if track is curved. Curves shall be factory made according to template or specification. Overall weight capacity decreases by 15% per ninety-degree curve.

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- E. Remote Control shall operate system via RF signal and is capable of controlling up to 6 motors independently and as a group.
- F. DC Power Supply shall supply 5V DC @ up to 120mA to the internal integrated accumulator of the motor.
- G. Wall/Ceiling Brackets shall be made from formed steel and allow for mounting of system either to wall or ceiling.

2.03 Controls:

- A. The switching device to activate the system shall be either a BTX Tumo 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. 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. Traversing system components should not require routine maintenance under normal operating conditions.
- B. For fabric care refer to fabric manufacturer's care and use directions.