

12 00 00 Furnishings**12 20 00 Window Treatments:**

1. Manual chain operated, fully factory assembled sun control shading system with infinite positioning.
2. Window shade shall be designed for easy lifting, fingertip control with infinite positioning (shade is capable of stopping and holding at any position within window opening).
3. Left or right hand operative option available to suit design requirements. Clutch may be mounted on either end of the roller tube and must not require any adjustment after installation. The clutch shall be nylon construction and available in black or white. Operating loop shall be #10 plastic bead chain or #10 plated steel ball chain (rating: 90lbs min.) with upper and lower stops to prevent over winding or unrolling.
4. Roller tube shall be extruded aluminum, to be sized and reinforced internally as necessary to prevent excessive deflection in span of tube. Tube diameter to correspond with clutch size and provided in the correct diameter as per the manufacturer's recommendations.
5. Universal mounting hardware shall be manufacturer's standard heavy-duty bracket constructed of hardened 1/8" thick steel to support full weight of shade. Ensure removal does not require disassembly of shade unit.
6. Removable continuous aluminum fascia shall have concealed fasteners and end caps, providing a clean finished look. Fascia shall be painted with a high-quality baked enamel finish or finished with an anodized finish.
7. When installed on multi-mullion windows, any joint between two fabric pieces shall occur only at center line of an intermediate mullion.
8. Shades are to be fabricated with no vertical seams and with a maximum of 2 horizontal seams per shade (on very tall windows, only where necessary). Furnish fabric in adequate widths to avoid horizontal seams at spacings of less than 1900 mm (75"). Ensure seams are straight, even and offer minimum visual obstruction. Heat seaming is not acceptable in areas in which fabric is exposed.
9. Bottom hem should be enclosed in an external, extruded aluminum hem bar to match the fascia.

12 21 26 Blackout Blinds:

1. Manual shades with extruded aluminum side and bottom channel are to be used in applications where complete room-darkening conditions are required. System must have no visible screws and concealed fabric brushes for smooth, quiet operation.

Shading Fabrics:

1. Sheer weave fabrics shall be vinyl coated polyester yarn consisting of approximately 25% polyester, 75% vinyl or 36% fiberglass, 64% vinyl. Room-darkening fabrics shall be opaque with an off-white backing, 100% polyester fabric shades are preferred for most applications. Fabrics must be dimensionally stable, moisture and solar heat resistant, non-flammable with colour fastness. All fabrics must be GREENGUARD certified for low chemical emissions into indoor air during product usage.
2. Please consult with the Facilities Design Team to select fabrics for each project. Generally, a sheer weave fabric with a 3% openness is used in offices, student areas and public spaces. In classrooms or meeting rooms where A/V equipment is present, a dual shade system may be necessary (typically a 3% sheerweave paired with a room-darkening fabric). If room-darkening is not required, a 1% openness should be used for South or Western exposures in classrooms.