# PART 1 – GENERAL

* 1. SCOPE
1. SUPPLIER: Furnish and install Manual Roller Shades (Premium Quality)
2. RELATED WORK SPECIFIED ELSEWHERE:
	1. Section 06100: Rough Carpentry
	2. Section 08520: Aluminum Windows
	3. REFERENCES
3. FLAME-RESISTANT MATERIALS SHALL PASS OR EXCEED ONE OR MORE OF THE FOLLOWING TESTS:
* National Fire Protection Association (NFPA) 701 (small scale for horizontal applications)
* Department of Transportation Motor Vehicle Safety Standard 302 Flammability of Interior Materials
* California Administrative Code Title 19
* Federal Standard 191 Method 5903 (used by Port Authority of New York and New Jersey for drapery, curtain, and upholstery material)
* Boston Fire Department Teat BFD IX-1
* New York State Uniform Fire Prevention and Building Code
	1. SUBMITTALS
	2. PRODUCT DATA: Manufacturer’s descriptive literature shall be submitted indicating materials, finishes, construction and installation instructions and verifying that product meets requirements specified. Manufacturers recommendations for maintenance and cleaning shall be included.
	3. DRAWINGS AND DIAGRAMS: Wiring diagrams of any motorized components or units, working and assembly drawings shall be supplied as requested.
	4. SAMPLE: Responsible contracting officer or agent shall supply one sample shade of each type specified in this contract for approval. Supplied units shall be furnished complete with all required components, mounting and associated hardware, instructions and warranty.
	5. QUALITY ASSURANCE:
1. Supplier: Manufacturer, subsidiary or licensed agent shall be approved to supply the products specified, and to honor any claims against product presented in accordance with warranty.
2. INSTALLER: Installer or agent shall be qualified to install specified products by prior experience, demonstrated performance and acceptance of requirements of manufacturer, subsidiary, or licensed agent. Installer shall be responsible for an acceptable installation.
3. UNIFORMITY: Provide Manual Roller Shades of only one manufacturer for entire project.
	1. DELIVERY, STORAGE AND HANDLING:
4. Product shall be delivered to site in manufacturer’s original packaging.
5. Product shall be handled and stored to prevent damage to materials, finishes and operating mechanisms.
	1. JOB CONDITIONS:
6. Prior to shade installation, building shall be enclosed.
7. Interior temperature shall be maintained between 60° F. and 90° F. during and after installation; relative humidity shall not exceed 80%. Wet work shall be complete and dry.
	1. WARRANTY:
8. Lifetime Limited Warranty. Fabrics warranted for 5 years. Specific product warranties available from manufacturer or its authorized agent.

**PART 2 – PRODUCTS**

* 1. ACCEPTABLE MANUFACTURER
1. **Illinois Window Shade Company/ 6250 N. Broadway St./ Chicago, IL 60660/ Phone: 773-743-6025 Fax: 773-743-1749/ Website:** [**www.illinoisshade.com**](http://www.illinoisshade.com), or architect approved equivalent.
2. Product substitutions must be approved by architect minimum of 30 days prior to close of bid.
	1. MANUAL ROLLER SHADES
3. PRODUCT: **IWS “SmoothMove™ Manual Clutch Roller Shades”**
4. MATERIALS:
	1. FABRICS: Inherently anti-static, flame retardant, fade and stain resistant, light filtering, room darkening, & blackout fabrics providing 0% - 15% openness factors. Fabric weights to range between 6.00 oz/sq.yd. – 20.70 oz/sq.yd. containing fiberglass, PVC, polyester, acrylic, vinyl laminates, cotton, & vinyl coatings. Finish selected by architect from manufacturer’s available contract colors.
	2. CONTROL SYSTEM: Adjustment-free continuous qualified #10 stainless steel ball chain ((90-lb. test)) and pulley clutch operating system allows precise control and ensures a uniform look. Clutch will develop no more than ½ pound drag for ease of lifting. Glass reinforced polyester thermopolymer (PBT) plastic components conform to military specification MIL M-24519 and designed for smooth, trouble-free operation.
	3. ROLLER: Circular-shaped painted extruded aluminum tubes with thicker wall & ribs provide additional strength while locking into place the clutch & end plug. 3” outside diameter extruded tube to have a .090 wall thickness. 2” outside diameter extruded tube to have a .072” wall thickness (1 ½” & 1 1/8” tubes have .055” wall thickness) providing strength & durability.
	4. END PLUG: Heat stabilized fiber reinforced plastic outside sleeve and center shaft provide bearing surfaces on which the roller rides ensuring smooth, wear resistant operation.
	5. BOTTOM ROD: Extruded aluminum weight in a Sealed Pocket Hem Bar, or Flat Bottom Bar for fabrics that are not seamable. Bottom rod is for tracking adjustments and provides uniform look.
	6. MOUNTING HARDWARE: Manufacturer’s standard .07” nickel-plated, C1008/1010 cold rolled steel universal brackets including end plug bracket with lock down retainer device.
	7. ADDITIONAL AVAILABLE OPTIONS: Fascia, Top & Bottom Covers, Blockout Systems, Motorization, 3 Clutch Sizes, Fabric Wrapped Hembar, Dual Shades, Coupled Shades, Banded Shades, Extruded Pockets, Reverse Roll.
	8. FABRICATION
5. Shade measurements shall be accurate to within + 1/8” or as recommended in writing by manufacturer.

2.04 FABRICS

A. FABRIC selection from the following: (0% Openness) Avila Twilight, No-Lite Fiberglass (NLFG), Flocke, Translucent Flame Retardant (TFR), Sheerweave 7000, Sheerweave 7100, Sheerweave 7300 (1% Openness), GreenScreen Revive 1%, E Screen 7501,Vizela, Sheerweave 7350, Sheerweave 2701, Sheerweave 4800 (3% Openness), GreenScreen Revive 3%, T Screen, E Screen 7503, E Screen 7703 KoolBlack, M Screen 8503, T Screen, Sheerweave 2410, Sheerweave 2410 Performance +, Infinity2, Sheerweave 2703, Sheerweave 4400, Sheerweave 4600, Sheerweave 4650, (4% Openness), E Screen 7505, E Screen 7705 KoolBlack, Satine, M Screen 8505, M Screen Deco, SilverScreen, Sheerweave 2000, Sheerweave 2390, Sheerweave 2390 Performance +, Sheerweave 2705, Sheerweave 4000, Sheerweave 4500, Sheerweave 4550, Sheerweave 4700, Sheerweave 5000, (7% Openness), E Screen 7510, Vienne, Sheerweave 2100, Sheerweave 2360, Sheerweave 2710, Sheerweave 4100 (12% Openness) Natte (14% Openness) A Screen, Sheerweave 3000.

**PART 3 - EXECUTION**

* 1. INSPECTION:
1. SUBCONTRACTOR shall be responsible for inspection on site, approval of mounting surfaces, installation conditions and field measurement for this work.
2. OTHER INTERACTING TRADES shall receive drawings of shade systems, dimensions, assembly and installation methods from subcontractor upon request.
	1. INSTALLATION:
3. INSTALLATION shall comply with manufacturer’s specifications, standards and procedures as detailed on contract drawings.
4. ADEQUATE CLEARANCE shall be provided to permit unencumbered operation of shade and hardware.
5. CLEAN finish installation of dirt and finger marks. Leave work area clean and free of debris.
	1. DEMONSTRATION:
6. Demonstrate operation method and instruct owner’s personnel in the proper operation and maintenance of the blinds.
	1. SCHEDULE:
7. EXTERIOR WINDOWS:
8. INTERIOR RELIGHTS:

 **END OF SECTION 12492**