SECTION 12 21 00

WINDOW BLINDS

PART 1 – GENERAL

1.1 PURPOSE

A. This guideline is intended to provide useful information to the Professional Service Provider (PSP) to establish a basis of design. PSP is to apply the principles of this section such that the University of Texas at Arlington (UTA) may achieve a level of quality and consistency in the design and construction of their facilities. Deviations from these guidelines must be approved by UTA and may require justification through Life Cycle Cost (LCC) analysis and submitted to UTA for approval.

1.2 LESSONS LEARNED AND DESIGN CONSIDERATIONS

A. Colors to be Linen to match New Linen wall color or Espresso to match dark bronze mullions.

1.3 SCOPE

- A. Furnish and install 1" Metal Blinds in accordance with specifications, drawings, and contract documents.
- B. Related work specified elsewhere.

1.4 QUALITY ASSURANCE

- C. Installer's qualifications:
 - 1). The installer shall be approved by Timber Blinds.
 - 2). The installer shall be qualified to install the product specified, as demonstrated by prior experience.

1.5 SUBMITTALS

- A. Product information: Submit Timber Blinds product literature and installation instructions.
- B. Shop drawings: Indicate field-measured dimensions of opening which are to receive blinds, details on mounting surface and sill conditions, and details of corners and conditions of adjacent blinds.
- C. Color samples: Submit a sample of each type and color of material specified.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Packing and Shipping
 - 1). Materials shall be delivered to the Project in Timber Blinds original unopened packaging with labels intact.
- B. Storage:
 - 1). Materials shall be stored in a clean area which is free of corrosive fumes, dust, and away from construction activities.
 - 2). Materials shall be stacked horizontally using plastic or wood shims such that drainage and ventilation are provided for, and such that water cannot accumulate in, about or upon the containers.

1.7 PROJECT/SITE CONDITIONS (BEFORE PRODUCT INSTALLATION BEGINS)

- A. Roof must be tight, windows and frames installed and glazed, and interior doors hung.
- B. Wet work including concrete, masonry, plaster, stucco, terrazzo, sheetrock, spackling and taping (including sanding) shall be complete and dry.
- C. Ceilings, window pockets, electrical, and mechanical work above the product shall be complete.

1.8 WARRANTY

A. Limited Lifetime Warranty: Timber Blinds shall repair or replace for the life of the blind, at its option, without charge, any part found defective in workmanship or material as long as the blind remains in the same window for which it was purchased.

PART 2 – PRODUCTS

2.1 HORIZONTAL METAL BLINDS

A. Acceptable product: Timber Blind 1" Premium Professional Series.1). Substitutions: In accordance with Division 01.

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B. Materials:

- 1). Head rail shall be of .024" thick sheet metal, 1" high x 1½" wide with a U shaped channel. Head rail shall be a valance-free design and shall be coated with a baked on finish. All headrail detailing shall be high-density polyethylene. All hardware shall be enclosed in the head rail.
- 2). Tilter mechanism shall be of a worm and gear type enclosed in acetyl housing. Tilter shaft shall be clear polycarbonate and the gear shall be nylon. Tilter shall be a snap in component.
- 3). Tilt Wand shall be solid, clear, transparent polymer with a round cross section 5/16" in diameter. The tilt wand mechanism shall exit the bottom of the headrail via a U-shaped black or bright metal-plated steel link. The tilt wand end contains a split eye machining detail which facilitates attachment and removal of the wand to the headrail.
- 4). Cord Lock shall be snap in design and shall be securely attached to the head rail. It shall be a crash-proof type with sufficient sensitivity to lock slats at desired height upon release of cords. Cord separators shall prevent cords from twisting or tangling.
- 5). Drum and cradle shall be provided for each ladder.
 - a). Drums shall be patented one piece nylon design. Snap lock cover retains ladder tape. All points where ladder contacts drum have smooth edges to prevent damage.
 - b). Cradles shall provide bearing support for the tilt rod, thus preventing the weight of the blind from being transferred to the tilter. Cradles shall center drums over ladder openings.
- 6). Tilt rod shall be electro-zinc plated cold rolled steel measuring ¹/₄" across its points.
- 7). Installation Brackets shall be a one-piece, .032" zinc-plated spring steel designed to minimize light gaps. A rivet-hinged locking front cover shall be incorporated for safety.
- 8). Intermediate brackets shall be of the same design as installation brackets. They shall be installed with blinds over 60" wide. Maximum spacing for intermediate brackets is 48". Brackets shall be supplied as required.
- 9). Ladders (slat supports) shall be braided polyester yard, designed for maximum flexibility combined with minimum stretch and tensile strength of not less than 50 lbs. per cable. Horizontal components (rungs) shall consist of not less than two crossed cables inter- braided with vertical components.
- 10). Ladder shall support slats without visible distortion. Distance between slats shall not exceed 21.5mm. Distance between ladders will not exceed 22". Distance between end ladder and end of slat will not exceed 6".
- 11). Slats shall be of virgin aluminum alloy. Aluminum alloy shall be tempered to optimize tensile and yield strength for superior slat strength, resiliency and corrosion resistance. Slats shall be nominally 1" wide and the thickness of the slats shall be nominally .006". Slat thickness and ladder support distances shall prevent visible sag or bow after continued use indoors. Slats shall be:
 - a). Non-perforated.
- 12). Bottom rail shall be C-shaped, .028" thick electro-zinc coated steel, painted with vinyl primer and baked polyester enamel finish coat. Bottom rail shall be roll formed with grooves to receive dust cover. Molded end caps shall provide hold-down capability designed to prevent bottom bar sway on doors or in windy exposures.
- 13). Lift Cord shall be braided of high strength, 1.4mm dia. polyester fiber with a high tenacity polyester core, 34 picks per inch, 16 carrier smooth braids, and shall be flexible, have minimum stretch, maximum abrasion resistance characteristics, and a minimum breaking strength of 130lbs. Cord shall be of sufficient length equalized to properly control raising and lowering of blinds and spaced not over 46" between cords.
- 14). Lift Cord Tassel shall allow for field adjustments of lift cord length.
- 15). Color of blind shall be selected from Timber Blinds 1" Professional Series color deck.
- 16). Options shall include:
 - a). Cutouts
 - b). End Mount Brackets
 - c). Extension Brackets
 - d). Hold-Down Brackets
 - e). Multiple Blinds on One Headrail
- 2.2 VERTICAL BLINDS
 - A. Acceptable product: SWFcontract G-71 Super-Vue Vertical Blinds with 3¹/₂" Crown Vinyl Vanes.
 - 1). Substitutions: In accordance with Division 01.
 - B. Materials:
 - 1). Head rail shall be of .050" thick anodized aluminum alloy 6063-T5 with a satin finish, 1 3/8" high x 1

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15/16" wide with a U shaped channel.

- 2). Carriers shall be made of molded acetyl and traverse on self-lubricated wheels for smooth operation. Carriers shall be centrally located making the headrail reversible. Stems shall be made of clear, nonyellowing, UV-stabilized nylon and are impact-resistant. Carriers and stems shall be replaceable without demounting the headrail.
- 3). Rotation control shall consist of #10 nickel-plated steel bead chain and a dual rack and pinion gear system providing 180° direct rotation. The pinion rod shall be extruded aluminum 0.30" diameter. Standard E-Z Open[™] feature will automatically rotate louvers to the open position when the traverse cord is operated.
- 4). Traversing control shall be a pantograph system made of hard-tempered, 18 gauge (0.046") plated steel, ensuring precise and proportional louver spacing. Traverse cord is #3 braided polyester with a fiberglass core, 0.094" diameter and is equipped with a cord weight and cord clip. The cord clip is anchored to the wall or window jamb during installation in accordance with CPSC recommendations.
- 5). Louvers shall be 3¹/₂" widths in PVC or NFPA 701 Fire Resistant fabric vanes.

2.3 WOOD BLINDS

- A. Acceptable product: SWFcontract Traditions 2" Wood Blinds.
 - 1). Substitutions: In accordance with Division 01.
- B. Materials:
 - 1). Head rail shall be of .0.022" thick sheet metal, 1 5/8" high x 2¹/4" wide with a U shaped channel, with 1/8" light-blocking lip on the bottom center line. Head rail shall have a grained, smooth-sanded 100% North American Basswood valance and shall be coated with a baked on finish.
 - 2). Tilter mechanism shall be of a worm and gear type enclosed in acetyl housing. Tilter shaft shall be clear polycarbonate and the gear shall be nylon. Tilter shall be a snap in component.
 - 3). Tilt Wand shall be electro-zinc coated steel measuring $\frac{1}{4}$ square.
 - 4). Cord Lock shall be snap in design and shall be securely attached to the head rail. It shall be a crash-proof type with sufficient sensitivity to lock slats at desired height upon release of cords. Cord separators shall prevent cords from twisting or tangling.
 - 5). Drum and cradle shall be provided for each ladder.
 - a). Drums are made of high-strength thermoplastic, which securely anchors braided ladder or fabric tapes.
 - b). Cradles are made of low-friction polypropylene with metal lift cord rollers.
 - 6). Installation brackets shall be a one-piece, .032" zinc-plated spring steel designed to minimize light gaps. A rivet-hinged locking front cover shall be incorporated for safety.
 - 7). Intermediate brackets shall be of the same design as installation brackets. They shall be installed with blinds over 60" wide. Maximum spacing for intermediate brackets is 48". Brackets shall be supplied as required.
 - 8). Ladders (slat supports) shall be braided polyester yard, designed for maximum flexibility combined with minimum stretch and tensile strength of not less than 50 lbs. per cable. Horizontal components (rungs) shall consist of not less than two crossed cables inter- braided with vertical components.
 - 9). Ladder shall support slats without visible distortion. Distance between slats shall not exceed 44mm.
 - 10). Slats shall be of lineal grained and smooth sanded 100 percent North American basswood, kilned dried to 6 - 10 percent moisture content to reduce warping. Finish: PureGrain finish.
 - 11). Bottom rail shall be 7/8" high x 2" wide wood in trapezoid shape to improve closure and finished to coordinate with slats.

2.4 COMPOSITE WOOD BLINDS

- A. Acceptable product: SWFcontract Traditions 2" Composite Faux Wood Blinds.
 - 1). Substitutions: In accordance with Division 01.
- B. Materials:
 - 1). Head rail shall be of .0.022" thick sheet metal, 1 5/8" high x 2¼" wide with a U shaped channel, with 1/8" light-blocking lip on the bottom center line. Head rail shall have a grained, smooth-sanded 100% North American Basswood valance and shall be coated with a baked on finish.
 - 2). Tilter mechanism shall be of a worm and gear type enclosed in acetyl housing. Tilter shaft shall be clear polycarbonate and the gear shall be nylon. Tilter shall be a snap in component.
 - 3). Tilt Wand shall be electro-zinc coated steel measuring ¹/₄" square.
 - 4). Cord Lock shall be snap in design and shall be securely attached to the head rail. It shall be a crash-proof type with sufficient sensitivity to lock slats at desired height upon release of cords. Cord separators shall

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prevent cords from twisting or tangling.

- 5). Drum and cradle shall be provided for each ladder.
 - a). Drums are made of high-strength thermoplastic, which securely anchors braided ladder or fabric tapes.
 - b). Cradles are made of low-friction polypropylene with metal lift cord rollers.
- 6). Installation brackets shall be a one-piece, .032" zinc-plated spring steel designed to minimize light gaps. A rivet-hinged locking front cover shall be incorporated for safety.
- 7). Intermediate brackets shall be of the same design as installation brackets. They shall be installed with blinds over 60" wide. Maximum spacing for intermediate brackets is 48". Brackets shall be supplied as required.
- 8). Ladders (slat supports) shall be braided polyester yard, designed for maximum flexibility combined with minimum stretch and tensile strength of not less than 50 lbs. per cable. Horizontal components (rungs) shall consist of not less than two crossed cables inter- braided with vertical components.
- 9). Ladder shall support slats without visible distortion. Distance between slats shall not exceed 44mm.
- 10). Slats shall be of a blend of PVC polymers 2" wide x 1/8" thick with straight cut edges.
- 11). Bottom rail shall be 7/8" high x 2" wide wood in trapezoid shape to improve closure and coordinate with slats.

PART 3 – EXECUTION

3.1 INSPECTION

- A. Window treatment subcontractor shall be responsible for inspection of site, field measurements, and approval of mounting surfaces and installation conditions.
- B. Subcontractor shall verify that site is free of conditions that interfere with blind installation and operation, and shall begin installation only when any unsatisfactory conditions have been rectified.

3.2 INSTALLATION

- A. Installation shall comply with manufacturer specification, standards and procedures.
- B. Provide support brackets as per manufacturer installation instructions.
- C. See installation instructions packaged with blinds for more installation details.
- D. Provide adequate clearance to permit unencumbered operation of blind and hardware.
- E. Demonstrate blinds to be in uniform and smooth working order.

3.3 CLEANING

- A. Clean soiled blinds with mild soap solution only. Do not use cleaning methods involving heat, bleach, abrasives, or solvents. Do not use window cleaner or cloths with paper content.
- B. Ensure proper drying following cleaning by providing adequate ventilation.

PART 4 – APPENDIX

4.1 PRODUCT DATA / CUT SHEETS

- A. SWFcontract, Classics Supreme Aluminum Blinds, .008" gage 1" metal blinds
- B. SWFcontract, G-71 Super-Vue Vertical Blinds
- C. SWFcontract, 2" Wood Blinds
- D. SWFcontract, 2" Composite Blinds

END OF SECTION

DATA SHEET CLASSICS™ 1" ALUMINUM BLINDS

Product Features



- 1" x 1¹/₂" steel headrail
- Antistatic performance to repel dust
- Low HAP, low VOC paint process
- Disengaging clutch
- Crash-proof cordlock
- Enclosed bottomrail
- Box bracket
- GREENGUARD Gold certified
- Limited lifetime warranty

GREENGUARD COLOR CENTRED FOR LOW CHEMICAL EMISSIONS ULCOM/GG

Product Specifications

Headrail shall be 1" high x $1\frac{1}{2}$ " wide x .025" thick U-shaped steel. The steel finishing process includes phosphate treatment for corrosion resistance, a chrome-free sealer, a low HAP urethane primer, and a topcoat of low HAP polyester-baked enamel.

Tilter shall be made of injection-molded thermoplastics for smooth low-friction operation and shall incorporate a clutch mechanism to prevent damage due to overtilting.

Tilt rod shall be electro-zinc coated solid steel measuring 1/4" square.

Tilt wand shall be clear polycarbonate with a hexagonal cross section measuring approximately ¹/4" diameter and attached to the tilter shaft by means of a spring clip for easy removal.

Cordlock shall be a snap-in design made of durable high-impact nylon with a stainless steel wear guard incorporating a floating shaft-type locking pin. The design provides a crash-proof safety feature that will lock the blinds automatically upon release of the lift cord.

Drum and cradles shall be low-friction thermoplastic and provided for each ladder.

Installation brackets shall be made of phosphate-treated steel with a urethane primer and polyester-baked enamel finish to match headrail. The design shall incorporate a hinged front cover.

Braided ladder shall be made of 100% polyester yarn, incorporating two extra-strength rungs per ladder for slat support. Standard ladder spacing shall be 21.5mm.

Slats shall be 5000 series cold-rolled aluminum containing the maximum allowable recycled content to produce a high-strength and corrosion-resistant flexible product. Slats shall be nominally 1" wide x .006" thick and processed to provide a smooth, hard, less porous surface with antistatic performance to repel dust. Slats shall be treated with a topcoat of polyester-baked enamel.

Bottomrail shall be a completely enclosed tubular shape made of phosphate-treated steel for corrosion resistance and finished with a chrome-free sealer, low HAP urethane primer, and a topcoat of low HAP, polyester-baked enamel. Bottomrail shall measure .025" thick.

Options:

- .008" thick slat
- 20mm ladder spacing
- 22.5mm ladder spacing
- Perforated slat
- Tilt limiter
- Cord tilt
- Ring tilt
- Top-lock cordlock
- Ring pull

• Turn clips for extruded pocket

- Extension brackets
 - Hold down brackets
 - Cut-outs
 - Two-slat valance
 - Deluxe two-slat valance
 - Specialty shapes (arches, circles, and angles)

The SWFcontract product presented is identical to Bali[®] Classics[™] Aluminum Blinds.

DATA SHEET G-71 SUPER-VUE® VERTICAL BLINDS

Product Features



- 1¹⁵/₁₆" x 1³/₈" heavy-duty extruded aluminum headrail
- · Steel pantograph spacing and traversing
- E-Z Open[™] rotation
- Centered carrier stems
- Clear nonyellowing stems
- #10 nickel-plated steel rotation chain
- Headrail and components: Limited lifetime warranty
- Vertical blind vanes: Three-year warranty



Product Specifications

Headrail shall measure $1^{15/16"}$ wide x $1^{3/8"}$ high with an average wall thickness of .050" and made of anodized aluminum alloy 6063-T5 with a satin finish.

Carriers shall be made of molded acetyl and traverse on selflubricated wheels for smooth operation. Carriers shall be centrally located, making the headrail reversible. Stems shall be made of clear, nonyellowing, UV-stabilized nylon and are impact-resistant. Carriers and stems shall be replaceable without demounting the headrail.

Rotation control shall consist of #10 nickel-plated steel bead chain and a dual rack-and-pinion gear system, providing 180° direct rotation. The pinion rod shall be extruded aluminum 0.30" diameter. Standard E-Z Open[™] feature will automatically rotate vanes open when the traverse cord is operated.

Traversing control shall be a pantograph system made of hardtempered, 18 gauge (0.046") plated steel, ensuring precise and proportional vane spacing. Traverse cord is #3 braided polyester with a fiberglass core, 0.094" diameter and is equipped with a cord weight or tension device and cord clip. The cord clip is placed above the cord weight or tension device to prevent a hazardous cord loop. The cord clip should be properly anchored to the wall or window jamb in accordance with installation instructions and consistent with requirements of the American National Standard for Window Covering Safety ANSI-WCMA A100.1.

Installation brackets shall be made of zinc-plated, heat-treated steel and provided for overhead, wall or ceiling installation per the contract documents.

Vanes shall be selected from the Graber[®] line of PVC offerings in 2" or $3\frac{1}{2}$ " widths and/or fire-rated fabrics in $3\frac{1}{2}$ " widths. FR certifications are available upon request.

Options:

- One Touch[®] wand control (not available with E-Z Open)
- Valance
- Stack release
- Bottom chain
- Extension brackets
- · Custom-painted headrail
- Curved headrail
- Angle headrail
- Bay window application
- Specialty shapes available

The SWFcontract product presented is identical to Graber® G-71 Super-Vue® Vertical Blinds.

DATA SHEET **2" WOOD BLINDS**

Product Features



- Slats made exclusively of North American hardwood
- SureClose[™] Headrail system
- · Easy Grip Bottomrail
- Cord tilt
- Wood tassels
- · Limited lifetime warranty

Product Specifications

SureClose Headrail shall be $1^{5}/8^{"}$ high x $2^{1}/4^{"}$ wide x .022" thick U-shaped steel with 1/8" lightblocking lip on the bottom center line. The steel finishing process includes phosphate treatment for corrosion resistance, a chrome-free sealer, a low HAP urethane primer, and a topcoat with low HAP, polyester-baked enamel.

Valance shall be lineal grained, smooth-sanded 100% North American Basswood. Valance choices include 3" Classic, 31/2" Craftsman, $3^{1}/2^{"}$ Legacy, and $4^{1}/2^{"}$ Symphony.

Cord tilter shall be a snap-in component incorporating a worm and pulley of low-friction thermoplastic and a nylon gear. Tilt cords shall be secured to pulley and treated with wood tassels at tilt end.

Tilt rod shall be electro-zinc coated solid steel measuring ¹/₄" square.

Cordlock shall be of a snap-in design incorporating a floating, shaft-type locking pin in a die-cast housing and shall incorporate a crash-proof safety feature that will lock blind automatically upon release of cord.

Cradles shall be made of low-friction thermoplastic with metal lift cord rollers.

Drums shall be made of high-strength thermoplastic, which securely anchors braided ladder or cloth tapes.

Braided ladder shall be made of 100% polyester yarn, incorporating four extra-strength rungs per ladder for slat support. Standard ladder spacing shall be 44 mm.

Cord shall be made of 100% polyester yarn and shall be 1.8 mm thick for standard routes, 1.4 mm for NoHoles[™], and 1.2 mm for cordless lift.

Installation brackets shall be a universal style with hinged front cover and shall be made of phosphate-treated steel with urethane primer and polyester-baked enamel finish to match headrail.

Slats shall be made of North American hardwood, kiln-dried to a 6%–10% moisture content to reduce the possibility of warping. Slats shall be 2" wide $x \frac{1}{8}$ " thick.

Easy Grip Bottomrail shall be 5/8" high x 2" wide wood, shaped to improve closure and shall coordinate with slats.

Cordless lift option shall use 2" x 2¹/₄" steel headrail.

Options:

• 2³/8" slat

- NoHoles privacy and lightblocking slat
- 1" or 1¹/₂" cloth tapes
- · Cordless lift
- Ring lift

- · Motorized tilt
- Ring tilt (2" only)
- Wand tilt
- Extension brackets
- · Hold down brackets
- · Cut-outs
- · Decorative tassels

The SWFcontract product presented is identical to Graber® Traditions® 2" Wood Blinds.

2" COMPOSITE BLINDS



Product Features and Benefits

- PVC-free polystyrene slats
- SureClose[™] Headrail system
- Trapezoid-shaped bottomrail
- Cord tilt
- Braided ladder
- Limited lifetime warranty

Product Specifications

SureClose Headrail shall be $1^{5}/8^{"}$ high x $2^{1}/4^{"}$ wide x .022" thick U-shaped, extruded steel with $1/8^{"}$ lightblocking lip on the bottom center line. The steel finishing process includes phosphate treatment for corrosion resistance, a chrome-free sealer, a low HAP urethane primer, and a topcoat with low HAP, polyester-baked enamel.

Valance choices include 3" Classic and 3" Majestic.

Cord tilter shall be a snap-in component incorporating a worm and pulley of low-friction thermoplastic and a nylon or die-cast zinc gear, depending on size of blind. Tilt cords shall be secured to pulley and treated with wood tassels at tilt end.

Tilt rod shall be electro-zinc coated solid steel measuring 1/4" square.

Cordlock shall be metal of a snap-in design incorporating a floating, shaft-type locking pin and shall incorporate a crash-proof safety feature that will lock blind automatically upon release of cord.

Cradles shall be made of low-friction thermoplastic with metal lift cord rollers.

Drums shall be made of high-strength thermoplastic, which securely anchors braided ladder or cloth tapes.

Braided ladder shall be made of 100% polyester yarn, incorporating four extra-strength rungs per ladder for slat support. Standard ladder spacing shall be 44 mm.

Cord shall be made of 100% polyester yarn and shall be 1.8 mm thick for standard routes, 1.4 mm for NoHolesTM, and 1.2 mm for cordless lift.

Installation brackets shall be a universal style with hinged front cover phosphate-treated steel with urethane primer and polyester-baked enamel finish to match headrail.

Slats shall be PVC-free polystyrene measuring 2" wide x 1/8" thick with straight-cut edges.

Bottomrail shall be a blend of PVC polymers 7/8" high x 2" wide in a trapezoid shape to improve closure and shall coordinate with slats.

Cordless lift option shall use 2" x 2¹/₄" steel headrail.

Options:

- 21/2" slat
- NoHoles privacy and lightblocking slat
- 1" or 1¹/₂" cloth tapes
- Cordless lift
- Ring lift

- Motorized tilt
- Ring tilt (2" only)
- Wand tilt
- Extension brackets
- Hold down brackets
- Cut-outs

The SWFcontract product presented is identical to Graber® Traditions® 2" Composite Blinds.