



# Architectural Surfaces, Inc.

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# WOODCUBE™

## WOODCUBE I™ – SPECIFICATIONS

### ARCHITECTURAL SURFACES, INC. 952-448-5300

#### Section 13020 Special Wood Louver Ceiling System

##### Part 1: General

##### 1.1 Scope:

- A)** The work in this section shall be subject to the requirements of the General Conditions.
- B)** Work Included: Furnish all labor, materials, equipment and services required in conjunction with the installation of the wood louver ceiling system specified herein and identified on the drawing and schedules including:
  - 1) Wood louver ceilings system.
  - 2) Suspension system.
  - 3) All factory applied and/or field installed accessories, wood moldings, trim and matching veneer strips.
  - 4) Integrated air diffusion (optional).
  - 5) Factory prefinishing (optional).
- C)** Related work specified elsewhere:
  - 1) Painting or finishing (optional).
  - 2) Finishing of matching wood veneer on grid suspension system.
  - 3) Mechanical connections to integrated air components (optional).
  - 4) Balancing of air distribution system.
  - 5) Millwork.

##### 1.2 Quality Assurance:

- A)** Manufacturer: The manufacturer shall have completed at least five projects of the scope and quality required by this project.
  - 1) (Optional – not used with regressed system) The wood louvers shall be specifically designed for complete compatibility with the ceiling grid suspension system. The louver blades shall be flush with the bottom of the tee to provide an absolute monolithic appearance of the highest quality.
- B)** Contract Execution: The bidding subcontractors shall be approved by the manufacturer's local distributor/representative of the specified materials and shall be thoroughly experienced in this type of work.

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### **1.3 Submittals:**

- A)** Contract Execution: The work of this section shall not be contracted for until all submissions required below have been completed and approved.
- B)** Test Data: Submit tests establishing compliance with all performance characteristics of the specifications.
- C)** Shop Drawings: Submit shop drawings in detail of all work in scale to indicate size, location and attachment methods required for the installation of the required work.
- D)** Samples: Submit samples or portions of full size units showing jointing where such exists and methods of internal fastening as well as all other detailing required.

### **1.4 Warranty:**

- A)** Submit at the time of submission of shop drawing, the manufacturer's warranty that the materials furnished hereunder will be free of manufacturing defects for a period of one year. The manufacturer's warranty may be conditioned with a statement that damage resulting from wet job conditions, faulty construction, plumbing or ventilating systems is not covered by the warranty. The manufacturer's warranty is limited to replacement of defective material only, rather than installation of the same. Faulty installation shall be corrected by the installing contractor. The warranty required herein is the sole remedy against the manufacturer and there are no other implied warranties. In any event, the manufacturer shall not be liable for incidentals or consequential damages.

### **1.5 Substitute Products:**

- A)** Proposal shall be based only on the specified product.
- B)** Alternative proposals for substitute products will not be accepted unless approved in writing via addenda.
- C)** Request for approval to submit an alternate proposal must be made a minimum of twenty-one (21) calendar days prior to bid date. Request must include test data, samples and product certification per paragraph 1.3 Submittals. If approval is granted an addenda will be issued, so stating, a minimum of seven (7) calendar days prior to bid date.

## **Part 2: Products**

### **2.1 Suspension System:**

- A)** Materials: The grid suspension system shall be (9/16") (15/16") face width and shall be (black) (mirrored chrome) (brass) (copper) (veneered to match ceiling) as manufactured by Chicago Metallic Corporation, Armstrong or approved equal.

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## **2.1 Suspension System – Continued:**

- B)** All main runners and cross runners shall conform to the intermediate classification of ASTM C635.
- C)** Main runners shall be installed 48" o.c. and be directly suspended by not less than 12 ga. galvanized steel wire wrapped tightly at least three full turns. Suspension wires shall be straight and vertically installed not more than 48" o.c.
- D)** Main runners shall be interconnected by cross tees \_\_\_\_\_ inches long to form (2'x2') (4'x4') module.
- E)** Wall angle moldings shall be standard cold rolled electrogalvanized steel.

## **2.2 Wood Louver Ceiling System:**

- A)** Materials: Wood louvers shall be specifically designed for a (flush monolithic) (regressed) appearance with the suspended grid system without the use of clips. Louvers shall be (4'x4') (2'x2" in size with (1/4") (1/2") (3/4") thick x 2-1/4" high blades of select (red oak) \_\_\_\_\_ (other) species. the wood louver blades shall form nominal sized cubes of \_\_\_\_\_ inches by \_\_\_\_\_ inches square.
- B)** Matching veneer grid covering: (Optional) Matching veneer grid cover shall be the same species and finish as specified above and supplied with a special double faced adhesive system for field application to the grid suspension system.
- C)** Lighting lens: (Optional) The lighting overlay lens shall be as manufactured by \_\_\_\_\_, style no. \_\_\_\_\_ and shall be nominal (2'x2') (4'x4') in size for installation over the regressed wood louver system.
- D)** Finish: (Optional) Prefinished panels shall be custom stained with no. \_\_\_\_\_ as manufactured by \_\_\_\_\_. Surface finish shall be a (flat lacquer) (other). (Number of coats and application procedures to comply with A.W.I. Finish System No. \_\_\_\_\_.) Finish to be reviewed and accepted by the Architect/Designer prior to its application to the wood.
- E)** (Option) Finish to be Architectural Surfaces, Inc., and shall be Fire Retardant Finish No. \_\_\_\_\_, Class "A" (1), flame spread index of 0-25. (Stained as described above.)
- F)** Manufacture and Design: The wood louver ceiling system shall be Woodcube™ Style No. \_\_\_\_\_ as manufactured by Architectural Surfaces, Inc. (952) 448-5300.

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## **Part 3: Execution**

### **3.1 Conditions:**

Upon receiving and prior to the installation of interior finish materials, the installing contractor shall completely read all of the manufacturer's instructions for storage, job conditions and the installation recommendations, and see that they are strictly complied with. Work shall not begin until the space is fully enclosed and glazed. All wet work is to be completed and dried out to the satisfaction of the architect. Temperature shall be at least 65 degrees Fahrenheit during the installation and thereafter. The installation contractor shall be responsible for the examination of all of the conditions and recommendations as set forth and shall not proceed until satisfactory conditions have been met.

### **3.2 Installation:**

The grid system and wood louvers shall be installed in a pattern as indicated on the drawings.

Installation shall be in strict accordance with the manufacturer's recommendations, project specifications and the contract drawings. Installation shall be performed by trained crews under the direction of a trained foreman. Finished appearance in all cases shall be in exact conformance with the contract documents.

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# WOODCUBE II™ – SPECIFICATIONS

## ARCHITECTURAL SURFACES, INC. 952-448-5300

### Section 13020 Special Monolithic Wood Louver Ceiling System

#### Part 1: General

##### 1.1 Scope:

- A)** The work in this section shall be subject to the requirements of the General Conditions.
- B)** Work Included: Furnish all labor, materials, equipment and services required in conjunction with the installation of the wood louver ceiling system specified herein and identified on the drawing and schedules including:
- 1) Wood louvers.
  - 2) Integral wood suspension system.
  - 3) All factory applied and/or field installed accessories, wood moldings, and trim.
  - 4) Integrated air diffusion (optional).
  - 5) Factory prefinishing (optional).
- C)** Related work specified elsewhere:
- 1) Painting or finishing (optional).
  - 2) Finishing of matching wood veneer on grid suspension system.
  - 3) Mechanical connections to integrated air components (optional).
  - 4) Balancing of air distribution system.
  - 5) Millwork.

##### 1.2 Quality Assurance:

- A)** Manufacturer: The manufacturer shall have completed at least five projects of the scope and quality required by this project.
- 1) The wood louver system shall have black integral metal angle ties that form a positive lock into the suspension members to prevent warping and twisting or the louver panel from falling out due to expansion or contraction.
  - 2) The manufacturer shall have complete installation drawings and instructions to insure a quality installation.
- B)** Contract Execution: The bidding subcontractors shall be approved by the manufacturer's local distributor/representative of the specified materials and shall be thoroughly experienced in this type of work.

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### **1.3 Submittals:**

- A)** Contract Execution: The work of this section shall not be contracted for until all submissions required below have been completed and approved.
- B)** Test Data: Submit tests establishing compliance with all performance characteristics of the specifications.
- C)** Shop Drawings: Submit shop drawings in detail of all work in scale to indicate size, location and attachment methods required for the installation of the required work.
- D)** Samples: Submit samples or portions of full size units showing jointing where such exists and methods of internal fastening as well as all other detailing required.

### **1.4 Warranty:**

- A)** Submit at the time of submission of shop drawing, the manufacturer's warranty that the materials furnished hereunder will be free of manufacturing defects for a period of one year. The manufacturer's warranty may be conditioned with a statement that damage resulting from wet job conditions, faulty construction, plumbing or ventilating systems is not covered by the warranty. The manufacturer's warranty is limited to replacement of defective material only, rather than installation of the same. Faulty installation shall be corrected by the installing contractor. The warranty required herein is the sole remedy against the manufacturer and there are no other implied warranties. In any event, the manufacturer shall not be liable for incidentals or consequential damages.

### **1.5 Substitute Products:**

- A)** Proposal shall be based only on the specified product.
- B)** Alternative proposals for substitute products will not be accepted unless approved in writing via addenda.
- C)** Request for approval to submit an alternate proposal must be made a minimum of twenty-one (21) calendar days prior to bid date. Request must include test data, samples and product certification per paragraph 1.3 Submittals. If approval is granted an addenda will be issued, so stating a minimum of seven (7) calendar days prior to bid date.

## **Part 2: Products**

### **2.1 Wood Louver Ceiling System:**

- A)** Materials: The wood louver blades shall be specifically designed to form a (flush monolithic) pattern and shall form nominal size cubes of \_\_\_\_\_ inch x \_\_\_\_\_ inch squares. The louver blades shall be identical in size, shape and pattern to the main integral suspension blades.

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## 2.1 Wood Louver Ceiling System – Continued:

The wood louvers shall 24"x48" in size with 3/8" wide blades, 1-1/2" deep, (custom depth of \_\_\_\_\_ inches) and shall be precision fabricated from select \_\_\_\_\_ (species of wood). The louvers shall have black metal angle ties attached to the top blades, 12" o.c. along the 4' sides, that engage into the integral main suspension rail.

- B)** Integral Wood Suspension System: The integral suspension blades shall be the same size, shape and species as specified above and shall be specially grooved on the top to receive the louver metal angle ties.

The main suspension rails shall be 96" in length and shall have doweled ends for precision alignment. Main rails shall be installed 48" o.c with lag screw-eye type hangers on the top of the rail, not more than 48" o.c. The lag hanger shall be directly suspended by no. 12 ga galvanized steel wire, wrapped tightly at least three full turns. Suspension wire shall be straight and vertically installed not more than 48" o.c.

The cross suspension rails shall be in installed 24" o.c. and shall have metal angle ties installed on each end of the rail that engage into the main suspension rails for stability and alignment.

- C)** Lightning Lens: (Optional) The lighting overlay lens shall be as manufactured by \_\_\_\_\_, style no. \_\_\_\_\_ and shall be nominal (2'x2') (4'x4') in size for installation over the regressed wood louver system.
- D)** Finish: (Optional) Prefinished panels shall be custom stained with no \_\_\_\_\_ as manufactured by \_\_\_\_\_. Surface finish shall be (flat lacquer) (other). (Number of coats and application procedures to comply with A.W.I. Finish System No. \_\_\_\_\_.) Finish to be reviewed and accepted by the Architect/Designer prior to its application to the wood.
- E)** (Optional) Finish to be Architectural Surfaces, Inc., and shall be Fire Retardant Finish No. \_\_\_\_\_, Class "A" (1), flame spread index of 0-25. (Stained as described above.)
- F)** (Manufacture and Design: The wood louver ceiling system shall be Woodcube II™ Style No. \_\_\_\_\_, as manufactured by Architectural Surfaces, Inc. (952) 448-5300.

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## **Part 3: Execution**

### **3.1 Job Conditions:**

Upon receiving and prior to the installation of interior finish materials, the installing contractor shall completely read all of the manufacturer's instructions for storage, job conditions and the installation recommendations, and see that they are strictly complied with. Work shall not begin until the space is fully enclosed and glazed. All wet work is to be completed and dried out to the satisfaction of the architect. Temperature shall be as least 65 degrees Fahrenheit during the installation and thereafter. The installation contractor shall be responsible for the examination of all of the conditions and recommendations as set forth and shall not proceed until satisfactory conditions have been met.

### **3.2 Installation:**

The wood louvers shall be installed in a pattern as indicated on the drawings. Installation shall be in strict accordance with the manufacturer's recommendations, project specifications and the contract drawings. Installation shall be performed by trained crews under the direction of a trained foreman. Finished appearance in all cases shall be in exact conformance with the contract documents.

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## **JOB CONDITIONS:**

Louvers shall be installed in areas where the same humidity and temperature conditions exist as will be in the final occupancy of the space. Do not install any louvers in areas that are not fully enclosed or are exposed to dampness or moisture. **If louvers are to be stored for more than one week, they should be totally sealed, front, back and all edges, to protect against the effects of moisture.**

Seventy-two hours prior to installation open all cartons or crates and lay louvers in a flat horizontal position. Place lath spacers 12 inches on center below and between each row of louvers to allow air to circulate around them. The louvers must adjust to the temperature and humidity of the space they are to be installed to alleviate excessive expansion or contraction.

## **JOB FINISHING:**

Louvers that are to be job finished should be completely sealed, stained, and finish coated prior to installing, to insure against the effects of moisture and humidity. The **back and edges must also be sealed** to balance the louver.

Woodcure II louvers are sanded prior to leaving the factory, subsequent grain raise, handling or tool marks must be removed before final finishing. Use 5/0 – 180 grit sandpaper to remove.

Semi-transparent oil stains or danish quick drying stains are recommended. Water based or combination stain-sealers are not recommended. The finish coat must be a clear stain sealer, lacquer, or varnish. Carefully follow the manufacturer's directions for mixing and application of the stains or finishes. Make sure the finish does not violate the local fire codes.

## **IMPORTANT NOTES:**

1. If installing in a high moisture areas or on exterior wood louvers must be sealed with two coats of Woodlife or Seal Treat water repellent and preservative.
2. Louvers that are pressure or surface treated with Class 1 fire retardant chemicals may slightly discolor or leave a whitish cast on the wood. This may occur when exposed to high humidity conditions. The manufacturer assumes no liability if this condition should occur.

## **CEILING GRID SUSPENSION SYSTEM:**

Lay out the room to find the center lines in both directions so that the cut louver cells will be equal in width on both sides. Lay out the wood grid members so that the 8' main rails are at right angles to the 4' cross rails.

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### **CEILING GRID SUSPENSION SYSTEM – CONTINUED:**

The 8' wood main rails are also used as the edge molding. Install the 8' wood main rails 4' o.c. with #12 pre-straightened galvanized steel wire not more than 4' o.c. wrapped tightly at least three full turns. The 4' wood cross rails shall be installed 2' o.c. When the wood main or cross rails are cut at the edges of the room, screw a black metal angle tie into that member so it securely locks into the wood edge molding and the entire wood grid system is stable.

### **CEILING LOUVER INSTALLATION:**

Wood naturally varies in color and grain characteristics. It is recommended that louvers be presorted before installation to assure a uniform final appearance.

Install the wood louvers starting in the center of the room working outwardly to the walls. Adjust the 4' cross rails as you proceed to the proper module.

As the louvers are cut and fit at the outside walls, reinstall metal angle ties with screws to secure louvers firmly in place against the wood angle molding and stabilize the entire system.

### **IMPORTANT NOTE:**

The Woodcube II system is designed only to adequately support its own weight. All electrical or mechanical services must be independently suspended. No banners, streamers, or signs shall be hung off the Woodcube II system without independent support.

### **NOTICE:**

The above recommended installation instructions are reliable for most installations, but are not meant to imply any warranty or guarantee for which Architectural Surfaces, Inc. assumes responsibility. The installer must undertake testing and verification as to specific applications to determine suitability for them prior to installation.

The manufacturer's only obligation is to replace any material proven to be defective, rather than the installation or removal of the same, for a period of one year from the date of shipment. Faulty installation shall be corrected by the installing contractor. Beyond the purchase price of the materials supplied, the manufacturer assumes no liability for damages of any kind and the user accepts the product "as is" without warranties expressed or implied. The suitability of the product for an intended use shall be solely up to the user.

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