

# Architectural Surfaces, Inc.

123 Columbia Court North • Suite 201 • Chaska, MN 55318  
952-448-5300 • Fax: 952-448-2613 • Toll Free: 1 -800-448-3134

# 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 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:**

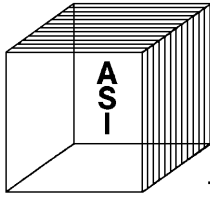
The Woodcube II system is designed only to adequately support its own weight. All electrical or mechanical services must be independently suspended. No banners, streamers, or signs shall be hung off the Woodcube II system without independent support.

### **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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## **WOODCUBE I™ – CEILING LOUVERS**

### **INSTALLATION RECOMMENDATIONS & INSTRUCTIONS**

***CAUTION: Do Not Install Until Instructions Have Been Read Completely.***

#### **WARNING:**

All wood products are cellular and are subject to expansion, contraction, or warping. Under normal construction conditions, wood can expand or contract up to 1/8th of an inch per foot. Louvers **should not** be subject to high or low humidity, storage should preferably be between 40 and 50 percent relative humidity. Storage, even for a short period of time, in areas where the humidity is over 60 or under 30 percent could cause permanent damage to the louvers. (See Job Conditions). The manufacturer assumes no liability for expansion, contraction, or warping of louvers that may have been exposed to extreme conditions. For the best installation results these instructions must be followed exactly.

#### **RECEIVING:**

Check cartons or crates for any obvious shipping damage to the louvers; if you feel there is concealed damage, open cartons and inspect. Have driver sign for any damaged louvers and the consignee shall file a freight claim with the carrier at once. The manufacturer assumes no responsibility for filing freight claims or for shortages.

Make sure that all of the material ordered for the job has been received and is the proper style or styles and in the proper quantities.

If any louver appears to have manufacturing defects, do not install. The manufacturer's only obligation is replacing materials proven to be defective and that are returned for credit, within the terms and conditions of the sale. Notify the manufacturer or distributor/representative at once.

#### **STORAGE:**

Louvers shall be stored in a flat horizontal position on wood blocking not more than 12" o.c.

Protect all louvers from exposure to moisture or to light with dark colored polyethylene or similar material. Do not store louvers in damp areas or in freshly plastered buildings. Terrazzo grinding must be completed and cement cured. Storage space must be dry and well ventilated.

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## **CEILING PANEL INSTALLATION:**

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

Louvers shall be installed from the center lines towards the outside edges of the room. When the louvers are cut against walls the inside of the edge molding can be seen between the cells. It is recommended that extra louver blade material be ordered to cover the inside of the edge molding for finished appearances. The extra blade material can be applied to the wall with adhesive. Cut the louvers tight against the wall blade material. If the Woodcube panels are the regressed type, remove one of the outside louver frames, cut louver to size and reattach the outside frame to the louver.

## **IMPORTANT NOTE: CAUTION**

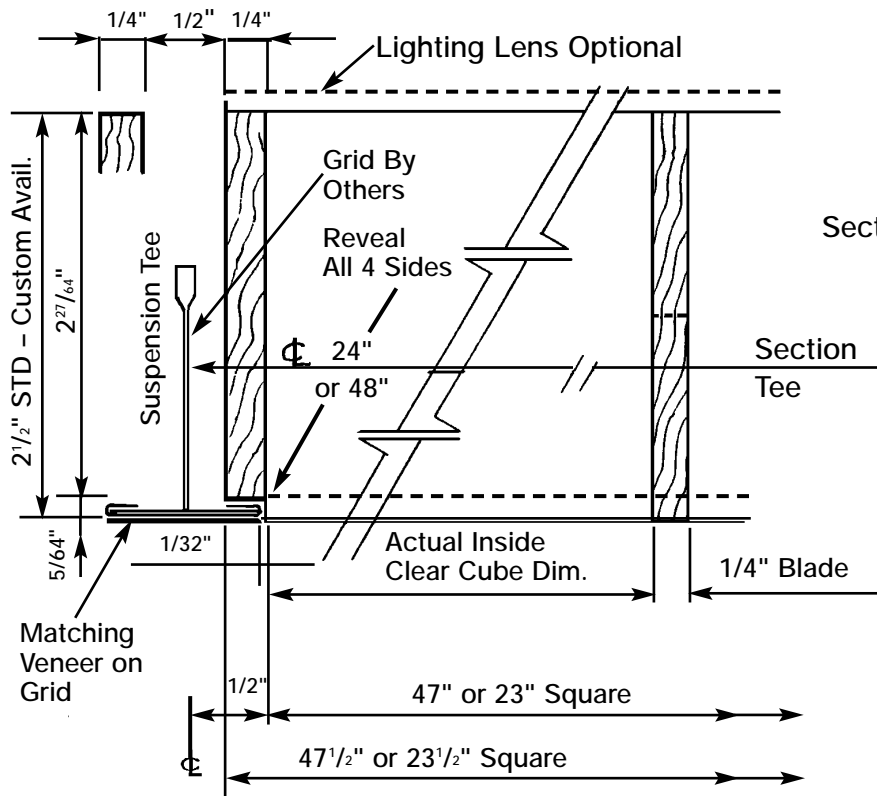
2'x2', 2'x4', and 4'x4' louvers all have different cell sizes (do to the different inside of grid to inside of grid measurements 23"x23", 23"x47", 47"x47") and **can not** be used or mixed in the same room. A single room must be installed with only one size of louver.

## **NOTICE:**

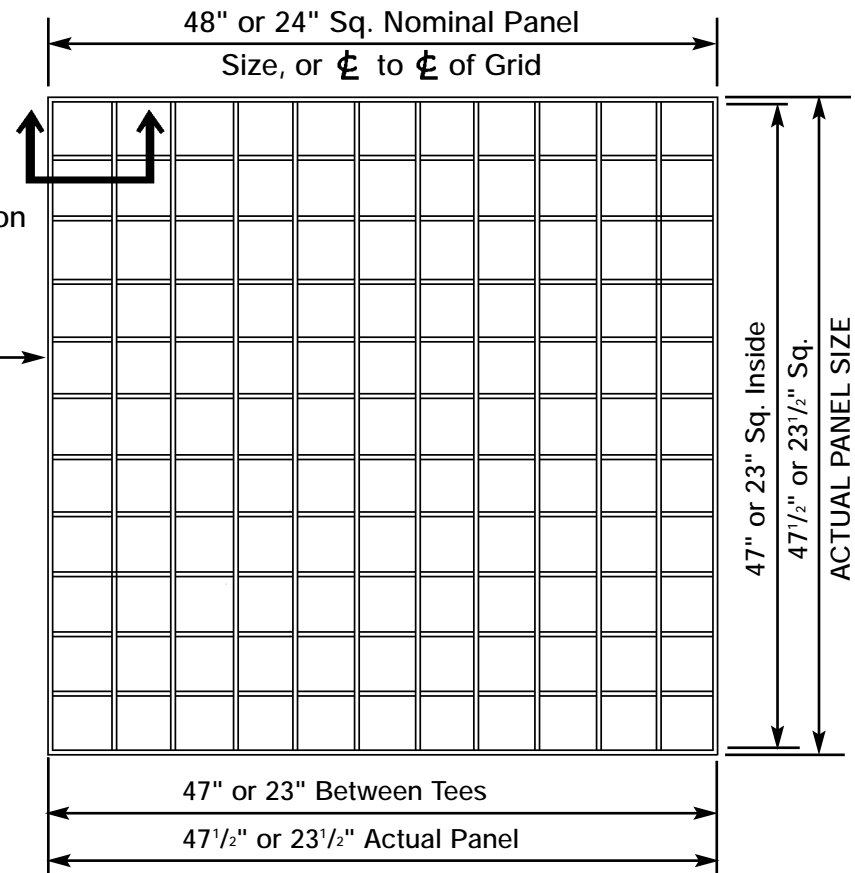
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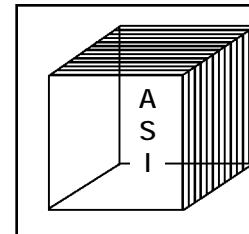
©ARCHITECTURAL SURFACES, INC.



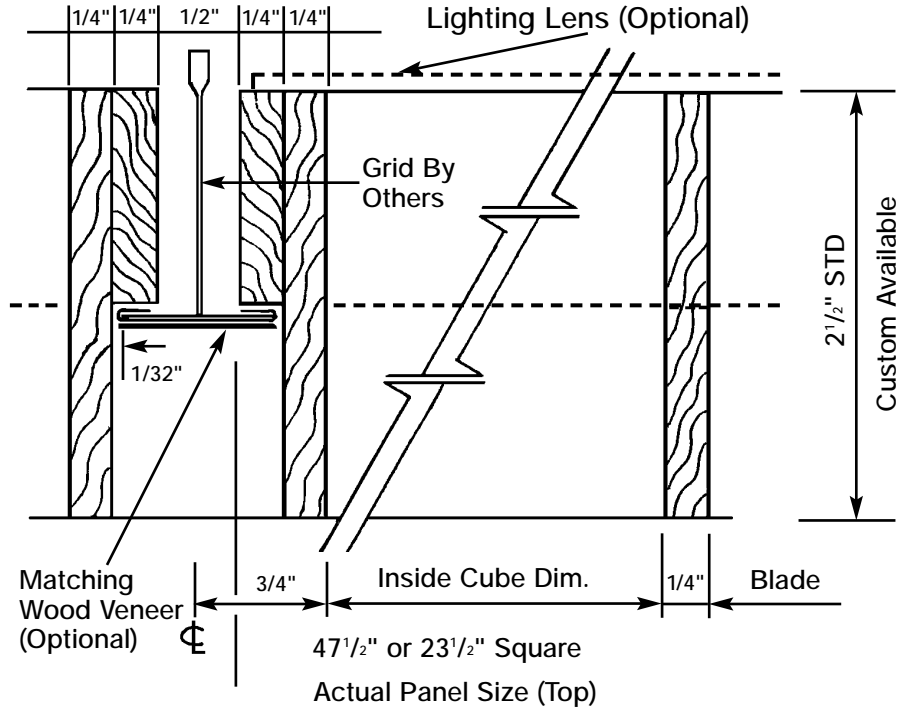
**WOODCUBE SECTION  
FLUSH MOUNT**  
FULL SCALE



**WOODCUBE PANEL PLAN**

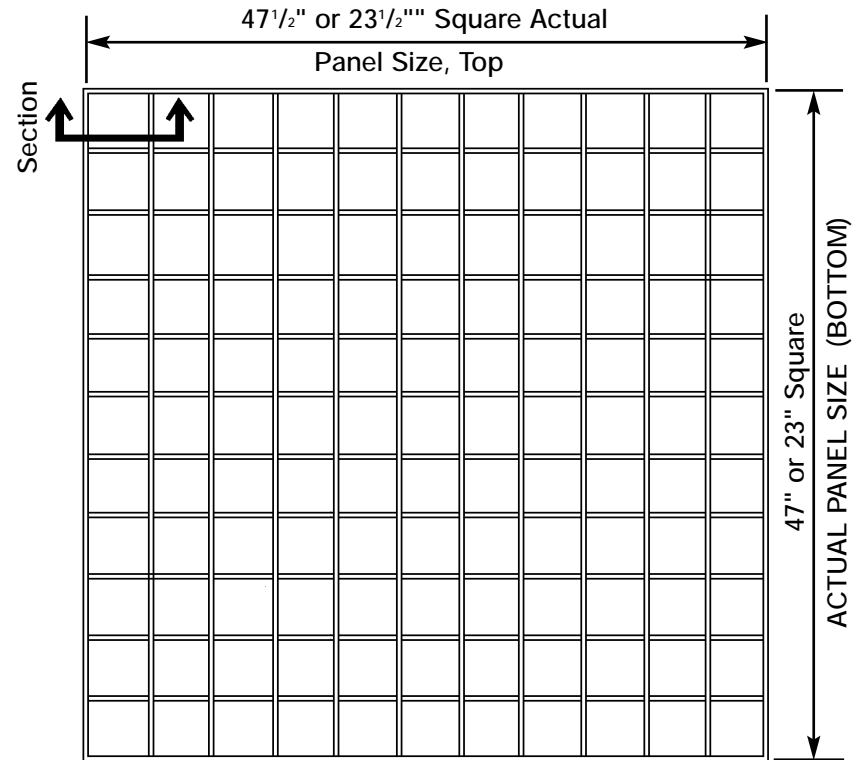


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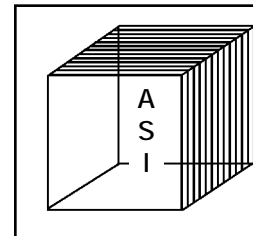


**WOODCUBE SECTION REVEAL EDGE**  
FULL SCALE

NOTE: Also Available For Use With  
9/16" Wide Regressed Tees

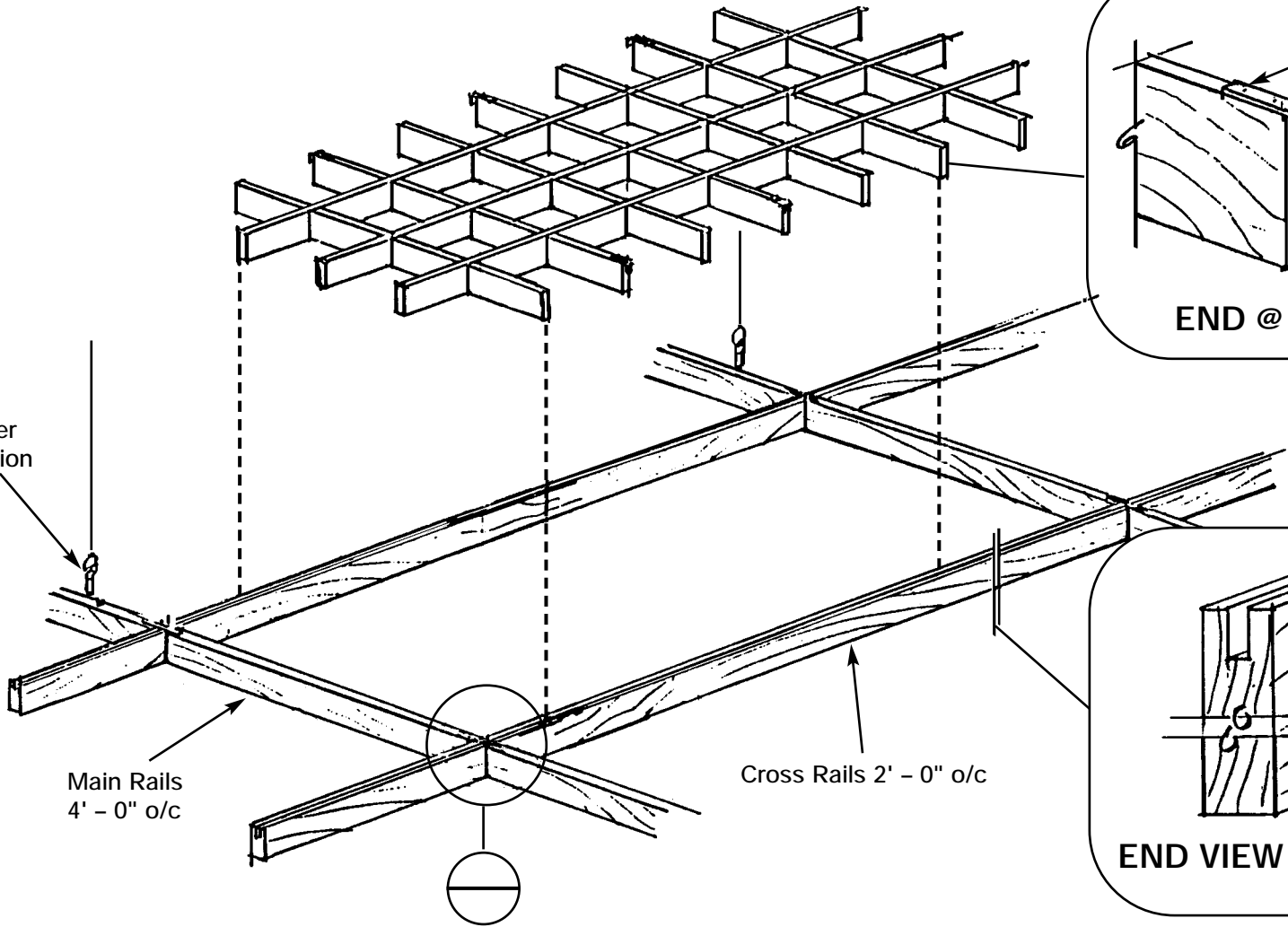


**WOODCUBE PANEL PLAN**  
SCALE= 1"=1'-0"



Architectural Surfaces Inc.  
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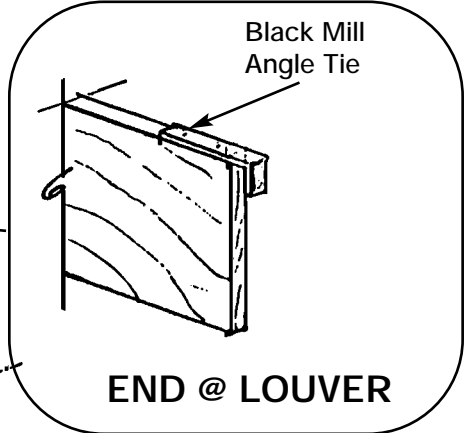
TYP.  
Hanger  
Location



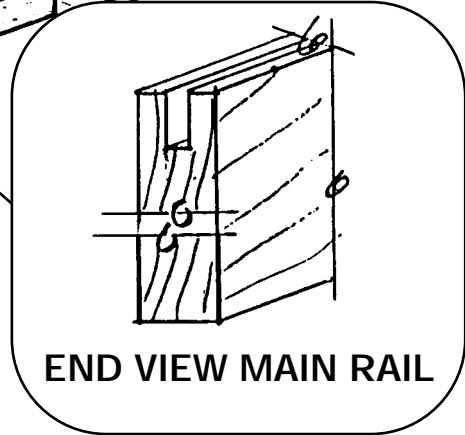
Main Rails  
4' - 0" o/c

Cross Rails 2' - 0" o/c

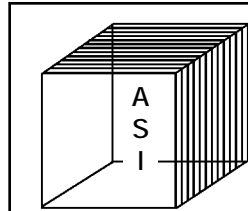
⊖ ISOMETRIC VIEW



END @ LOUVER

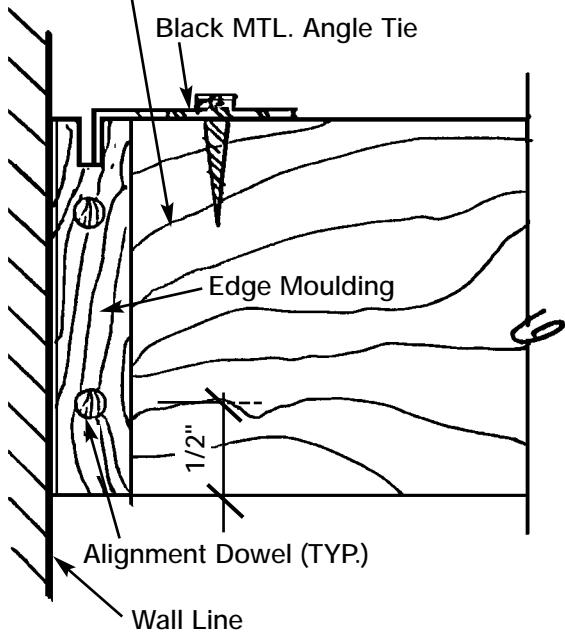


END VIEW MAIN RAIL



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Cut Cross Rails and Louvers  
In Field At Odd Modules and  
Reattach Metal Angle Ties



 **DETAIL**

No. 12 Wire 4'-0" o/c  
(Paint Black Optional)

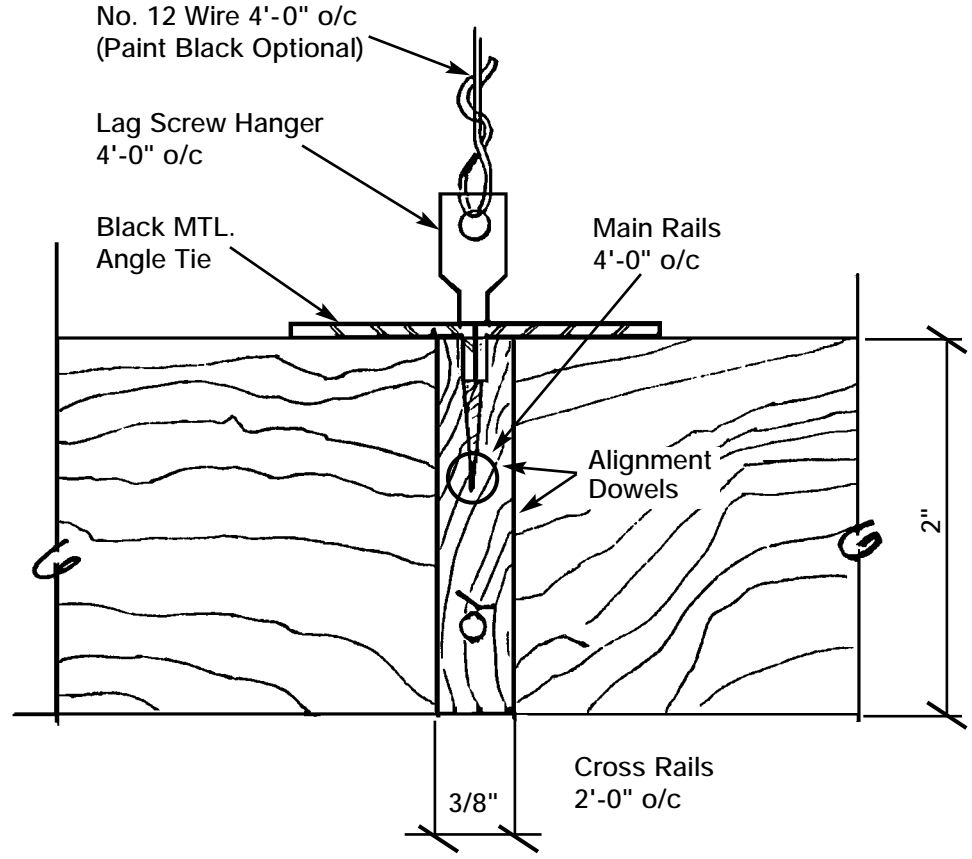
Lag Screw Hanger  
4'-0" o/c

Black MTL.  
Angle Tie

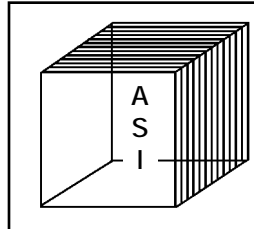
Main Rails  
4'-0" o/c

Alignment  
Dowels

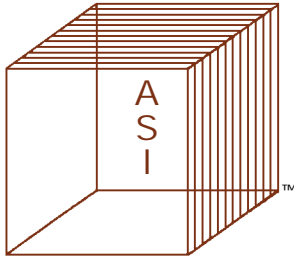
Cross Rails  
2'-0" o/c



 **DETAIL**



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# Architectural Surfaces, Inc.

DISTINCTIVE WOOD & SPECIALTY ACOUSTICAL CEILING & WALL SYSTEMS

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Visit Our Web Site at [www.architecturalsurfaces.net](http://www.architecturalsurfaces.net)

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**CEILINGS YOU CAN LOOK UP TO!**

## ***BURN BARRIER™ 6 CLEAR WOOD SEALER FOR BURN BARRIER 166 CLASS "A" FIRE RETARDANT VARNISH SYSTEM.***

### **Product Description:**

BURN BARRIER™ 6 is a crystal clear, hardwood sealer developed primarily for use with Fire Retardants Inc. #166 Retardant Varnish. *NOTE: BURN BARRIER™ 166 is part of a fire retardant varnish system and is not a fire retardant when used alone.*

### **Surface Preparation:**

Surfaces must be clean, dry and free from all loose or powdery materials, grease, wax or other foreign matter. All staining and filling must be done using nonbleeding type stains prior to the application of BURN BARRIER™ 6 Sealer.

### **Application:**

#### (New Work) Previously uncoated surfaces:

Apply a full bodied coat by brush, at a coverage rate of 300 to 450 square feet gallon. Coverage rate depends upon the porosity of the wood. Highly porous woods may require a second coat of BURN BARRIER™ 6 Sealer.

#### (Old Work) Previously coated surfaces:

Previously varnished surfaces must be sanded to remove all gloss, loose or poorly bonded varnish. Test patch a small area to determine the compatibility of BURN BARRIER™ 6 Sealer with existing coating, to insure that no lifting or wrinkling occurs. If lifting or wrinkling develops, it is necessary to completely remove the old finish before proceeding.

### **Coverage**

300 to 450 square feet per gallon, depending on porosity of the wood.

### **Thinners**

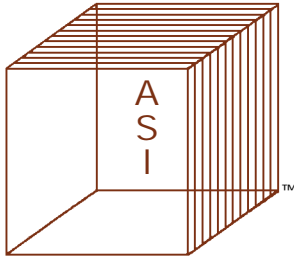
For thinning and cleaning equipment, use only BURN BARRIER™ 6 Reducer.

Information provided herein is based on tests believed to be reliable. Inasmuch as Fire Retardants Inc. has no control over the use or application to which others may put this material, we make no guarantee or warranty. Our products are sold on the condition that each user of the material make their own evaluation to determine the material's suitability for their own particular use.

**NOTE:** All porous surfaces should be properly sealed before applying fire retardant paint or varnish.

**CAUTION:** It is recommended that a test application be completed prior to end use.

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# Architectural Surfaces, Inc.

DISTINCTIVE WOOD & SPECIALTY ACOUSTICAL CEILING & WALL SYSTEMS

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CEILING YOU CAN LOOK UP TO!

## **BURN BARRIER™ 166 CLEAR CLASS "A" FIRE RETARDANT "INTUMESCENT" VARNISH**

### **Product Description:**

BURN BARRIER™ 166 is a clear satin finish fire retardant varnish having a Class "A" Underwriters' Laboratory flame spread rating. When exposed to flame or high heat, the coating puffs up to form a thick insulating cellular foam. This foam layer retards the penetration of heat, thereby reducing the flame spread (surface burning characteristics) and smoke development of combustible materials.

BURN BARRIER™ 166 is designed for use on interior wood surfaces where it is desirable to maintain the natural wood appearance, while obtaining a Class "A" flame spread rating. BURN BARRIER™ 166 is suitable for use on wall paneling, ceiling panels and other such surfaces. We do not recommend this product for use on floors, doors, shelving, or in areas where there will be exposure to excessive moisture or splashing of water, as the coating is somewhat softer than conventional varnishes. (On hard use surfaces we recommend BURN BARRIER™ 129 and BURN BARRIER™ 130 Class "B" Fire Retardant Varnish System.) BURN BARRIER™ 166 dries to a clear velvety satin finish. All surfaces that will be subjected to handling, washing or where a low, semi or hi-gloss finish is desired, should be overcoated with BURN BARRIER™ 167 UL rated Fire Retardant Varnish Overcoat. The use of BURN BARRIER™ 167 Overcoat greatly improved the moisture resistance, durability and cleansibility of BURN BARRIER™ 166.

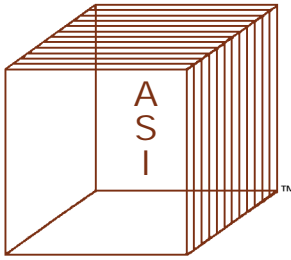
### **Surface Preparation:**

(New Work Previously uncoated surfaces All surfaces. must be dry, clean, free of all wax, grease, dirt, sanding dust, etc. If staining is desired, the use of nonbleeding type stains are recommended. All surfaces should be thoroughly sealed with BURN BARRIER™ 6 Clear Wood Sealer. Allow the surface to thoroughly dry before proceeding with the application of BURN BARRIER™ 166. It is recommended that a representative sample of the system be prepared prior to starting the project.

(Old Work Previously coated surfaces All surfaces. which have been previously coated with a conventional coating (this includes prefinished wood paneling), must be washed down with mineral spirits or other suitable solution, to remove all wax, grease, etc. Lightly sand or steel wool all glossy surfaces, test patch small areas, if old coating is not affected, proceed with the application of BURN BARRIER™ 166. If old coating is affected, it will be necessary to completely remove the coating before applying BURN BARRIER™ 166.

**NOTE:** On prefinished wood paneling, it may be necessary to seal the grooved areas, as most panel manufacturers only stain these areas and the grooves are highly porous.

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**Application:**

BURN BARRIER™ 166 can be applied by brush, conventional or airless spray. On wood paneling and other large surface areas, spray application is suggested as it will yield a more uniform finish. When spray applied the use of heavy duty spray equipment is recommended. Should thinning be required for spray application, use only BURN BARRIER™ 166 Reducer. After surface preparation has been carried out, apply a uniform coat of BURN BARRIER™ 166 without dilution, at a coverage rate of 300 sf/US gallon (7.4 m IL). Allow the surface to dry a minimum of 16 hours, or until hard. Then apply another coat as above. NOTE TWO COATS ARE REQUIRED. If the surface is to be over coated with BURN BARRIER™ 167 Overcoat, allow at least 48 hours drying time before applying BURN BARRIER™ 167.

**Thinners:**

For thinning and cleaning equipment, use only BURN BARRIER™ 166 Reducer.

**CAUTION:** The liquid coating contains volatile (combustible) solvents. Due care must be exercised during and after application until coating is dry.

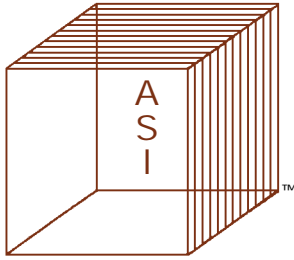
**Fire Tests:**

Flame Spread Rating, Class “A”. When tested in accordance with ASTM E84 (NFPA255) the coating obtained the following fire hazard classification. A complete report from the UNDERWRITERS’ LABORATORIES is available upon request.

<u>Coating System Details</u>	<u>When Applied to Douglas Fir</u>			
	<u>*Flame FSC</u>	<u>Spread (GWL)</u>	<u>Smoke Developed</u>	<u>Fuel Contr.</u>
Type 6 (sealer) applied in one coat a 400 sf/US/gal. (9.8 m <sup>2</sup> /L) Type 166 (base coat) applied in two coats at 300 sq/US gal. per coat (7.4m <sup>2</sup> /L) (No topcoat)	25	(15)	50	15
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Type 6 (sealer) applied in one coat a 400 sq/US gal. (9.8 m <sup>2</sup> /L) Type 167 (top coat) applied in one coat at 1800 sq.US gal. (44.2 m <sup>2</sup> /L)	25	(15)	30-50	10
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\*Flame Spread Ratings      FSC = Canadian Rating  
 (GWL) = U. S. Rating

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## **BURN BARRIER™ 167 CLEAR OVERCOAT FOR CLEAR CLASS "A" FIRE RETARDANT VARNISH FOR BURN BARRIER 166**

### **Product Description:**

BURN BARRIER™ 167 Overcoat has been tested and rated by the Underwriter's Laboratories as an overcoat for BURN BARRIER™ 166 Class "A" Fire Retardant "Intumescent" Varnish. BURN BARRIER™ 167 is available in three distinctive sheens, i.e. low, semi or hi-gloss. The use of BURN BARRIER™ 167 as a topcoat over BURN BARRIER™ 166 greatly improves the moisture resistance, durability, and cleansibility of BURN BARRIER™ 166. We recommend that BURN BARRIER™ 167 be used over BURN BARRIER™ 166 on all surfaces that will be subjected to washing, handling or where a low, semi or hi-gloss finish is desired. *NOTE: FRI 167 is part of a fire retardant varnish system and is not a fire retardant when used alone.*

### **Surface Preparation:**

After the application of BURN BARRIER™ 166 Class "A" Fire Retardant "Intumescent" Varnish has been completed, allow the surface to dry a minimum of 48 hours. Remove all dust, dirt, etc., from the surface, before applying BURN BARRIER™ 167 Overcoat.

### **Application:**

BURN BARRIER™ 167 Overcoat can be applied by brush, roller or spray. Stir material well before using, then apply a uniform coat at a coverage rate up to 600 sq. ft./gal. In hard use areas or where excessive wear is expected, a second coat is suggested. Allow at least 24 hours drying time between coats.

### **Thinners:**

For thinning use only BURN BARRIER™ 167 reducer. MINERAL SPIRITS or BURN BARRIER™ 167 Reducer may be used for cleaning.

### **WARNING**

Adequate ventilation must be provided during and after application, until the coating has dried. Avoid breathing vapors or spray mist.

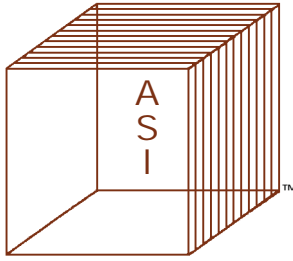
### **CAUTION**

The liquid coating contains volatile (combustible) solvents. Due care must be exercised during and after application until coating is dry.

### **Fire Tests:**

Flame Spread Rating: Class "A", when applied as a topcoat over BURN BARRIER™ 166 and tested in accordance with ASTM E84 (NFPA255) the coating system obtained the following fire hazard classification. A complete report from the Underwriters' Laboratories is available upon request.

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## FIRE HAZARD CLASSIFICATION

### Coating System Details

(When Applied to Douglas Fir)

	*Flame FSC	Spread (GWL)	Smoke Developed	Fuel Contributed
Type 6 (sealer) applied in one coat at 400 sq. ft./gallon				
Type 166 (base coat) applied in two coats at 300 sq. ft./gallon per coat				
Type 167 (top coat) applied in one coat at 1800 sq. ft./gallon	25	(15)	30-50	10

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\*Flame Spread Ratings      FSC = Canadian Ratings  
 (GWL) = U.S. Ratings

### Packaging

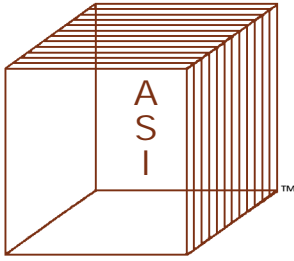
Standard packaging, 1 gallon, 5 gallon and 55 gallon containers.

Information provided herein is based on tests believed to be reliable. Inasmuch as Fire Retardants Inc. has no control over the use or application to which others may put this material, we make no guarantee or warranty. Our products are sold on the condition that each user of the material make their own evaluation to determine the material's suitability for their own particular use.

**NOTE:** All porous surfaces should be properly sealed before applying fire retardant paint or varnish.

**CAUTION:** It is recommended that a test application be completed prior to end use.

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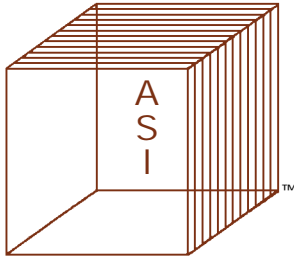
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## Finishes

**All of our wood systems are available factory pre-finished. Commercial projects typically require solid wood products to be finished with an intumescent Class A fire retardant varnish to meet local fire codes. Standard and catalyzed lacquer finishes are also available that are typically used on veneer faced products that have Class A Fire particle board core. We typically match customers stain samples for color approval.**



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## **Maintenance/Cleaning**

**Our wood products will require little maintenance. Surfaces may require standard dusting periodically. A feather duster can be used on the Woodcube™ and Woodgrille™ systems. A non-abrasive soft cloth with a light application of “Liquid Gold” applied to the cloth should be used to clean or dust flat panels or linear systems.**

