

SECTION 07 42 93 - SOFFIT PANELS

SAGIREV

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GUIDE SPECIFICATIONS:

THIS GUIDE SPECIFICATION IS WRITTEN ACCORDING TO THE CONSTRUCTION SPECIFICATIONS INSTITUTE (CSI) FORMATS, INCLUDING MASTERFORMAT®, SECTIONFORMAT™, AND PAGEFORMAT™.

CAREFULLY REVIEW AND EDIT THIS SECTION TO MEET THE REQUIREMENTS OF THE PROJECT, LOCAL BUILDING CODE, AND AUTHORITIES HAVING JURISDICTION. COORDINATE THIS SECTION WITH OTHER SPECIFICATION SECTIONS AND DRAWINGS.

DELETE ALL "SPECIFIER NOTES" WHEN EDITING THIS SECTION.

# GENERAL

## CONDITIONS AND REQUIREMENTS

### The General Conditions, Supplementary Conditions, and Division 01 – General Requirements apply.

## SECTION INCLUDES

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SPECIFIER NOTES: DELETE OPTIONS NOT REQUIRED FOR THIS PROJECT.

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## SAGIREV Panel System for use as [boards for exterior soffits], [boards for interior walls], or [boards for interior ceilings].

## RELATED SECTIONS

### Section 06 10 00 – Rough Carpentry.

### Section 07 21 13 – Board Insulation.

### Section 07 62 00 – Sheet Metal Flashing and Trim.

### Section 07 92 00 – Joint Sealants.

### Section 09 21 16 – Gypsum Board Assemblies.

### Section 09 50 00 – Ceilings.

### Section 21 00 00 – Fire Suppression.

### Section 26 00 00 – Electrical.

## REFERENCES

### American Society for Testing and Materials (ASTM):

### ASTM C158: Standard Test Methods for Strength of Glass by Flexure (Determination of Modulus of Rupture).

### ASTM C653: Standard Guide for Determination of the Thermal Resistance of Low-Density Blanket-Type Mineral Fiber Insulation.

### ASTM D374: Standard Test Methods for Thickness of Solid Electrical Insulation.

### ASTM D696: Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30ºC and 30ºC with a Vitreous Silica Dilatometer.

### ASTM D2244: Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.

### ASTM D2457: Standard Test Method for Specular Gloss of Plastic Films and Solid Plastics.

### ASTM D4477: Standard Specification for Rigid (Unplasticized) Poly (Vinyl Chloride (PVC) Soffit.

### ASTM E1753: Standard Practice for Use of Qualitative Chemical Spot Test Kits for Detection of Lead in Dry Paint Films.

### ASTM G155: Standard Practice for Operating Xenon Arc Lamp Apparatus for Exposure of Materials.

### Deutsches Institut für Normung (DIN):

### DIN EN 53495: Testing of Plastics; Determination of Water Absorption.

### Florida Building Code (FBC): Approved as FBC FL41603.

### 1203.2: Ventilation.

### 1609.1: Determination of Wind Loads.

### 1709.10: Soffit.

### R301.9: Wall Construction.

### R704.1: Wall Coverings.

## SUBMITTALS

### Product Data:

#### Submit the manufacturer's printed product literature, specifications, and datasheet.

### Shop Drawings: Submit fabrication and installation drawings indicating project layout and elevations; fastening and anchoring methods; detail and location of joints, sealants, and gaskets including joints necessary to accommodate thermal movement; trim; flashing; and accessories. Shop Drawings shall indicate the surrounding construction as provided for the Project.

### Manufacturer’s Samples:

### Samples for Initial Selection: Submit color samples for plastic boards and accessories visible in the final installed work.

### Samples for Verification: Submit samples, full profile width by approximately 200 mm (8 inches) of materials proposed for use on the Project for each profile and finish of board required.

### Maintenance Materials:

### Supply one manufacturer’s touch-up pen for each finish on the Project.

### Submit one of each accessory and trim shape in the manufacturer’s standard maximum lengths.

## QUALITY ASSURANCE

### Qualifications:

### Manufacturer:

### Panel manufacturer shall have a minimum of 25 years of experience in panel manufacturing.

### Panel manufacturer shall be based in North America or Europe.

### Installer: The Installer shall have a minimum of 3 years of experience in work of a similar size and scope to this project.

### Field measurements should be taken prior to the completion of shop fabrication wherever possible.

### Coordinate the fabrication schedule with construction progress as directed by the contractor to avoid delay of work. Field fabrication may be allowed to ensure proper fit but shall be kept to a minimum.

### The panel fabricator or installer shall assume responsibility for all components of the exterior panel system including but not limited to the attachment to sub-construction, panel-to-panel joinery, panel-to-dissimilar material joinery, and joint seal associated with the panel system.

### Panel manufacturer shall have established a Certification Program acceptable to the local Code Authorities.

## DELIVERY, STORAGE, AND HANDLING

### Protect finish and edges in accordance with the manufacturer’s recommendations.

### Store panels in accordance with the manufacturer’s recommendations.

## WARRANTY

### Manufacturer’s Warranty: Provide the manufacturer’s standard limited warranty in effect at the date of purchase.

# PRODUCTS

## MANUFACTURERS

### Specified Manufacturer: Sagiper North America Inc. Edmonton, Alberta, Canada. Toll Free: 1-866-724-4737 (1-866-SAGIPER). Web: [www.sagipernorthamerica.com](http://www.sagipernorthamerica.com). Email: info@sagipernorthamerica.com.

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SPECIFIER NOTES: DELETE ONE OF THE FOLLOWING TWO PARAGRAPHS.

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### Substitutions: Not Permitted.

### Requests for approved substitutions will be considered in accordance with provisions specified in Section 01 62 00 – Product Options.

## SAGIREV SOFFIT PANEL DESCRIPTION

### SAGIREV panels are ideal for Soffits, interior ceilings, and interior walls. SAGIREV is designed for interior and exterior use and is available in a variety of realistic wood tones, colors, and metallic finishes. SAGIREV is highly durable, easy to install, and maintenance-free.

## SAGIREV SOFFIT PANEL MATERIALS

### SAGIREV Product Performance

#### Soffit panel materials shall be approved under the Florida Building Code.

#### Sagirev approved as FBC FL41603.

#### Physical Properties:

#### Dimension and Tolerance: Conform to ASTM D4477 and ASTM D374.

#### Linear Expansion Coefficient: Conform to ASTM D696

#### Gloss: Conform to ASTM D2457.

#### Color Uniformity: Conform to ASTM D2244.

#### Deflection: Conform to ASTM D4477.

#### Lead Content: Conform to ASTM E1753 testing and must have no lead present.

#### Wall Construction: Conform to FBC R301.9.

#### Wall Coverings: Conform to FBC R704.1.

#### Ventilation: Conforms to FBC 1203.2.

#### Weather Resistance: Conforms to ASTM G155 with no visible effects from 4500 hours of accelerated weathering.

#### Flexural Modulus of Rupture: Conforms to ASTM C158 with an average 51 percent flexural difference after 4500 hours of accelerated weathering.

#### Wind Load: Conforming to ASTM E330, FBC 1609.1 and FBC 1709.10.

#### Maximum Allowable Design Pressure for 150-millimeter (6-inch) profile with a maximum span of 406 millimeters (16 inches):

#### Negative, away from soffit: -120 pound-force per square foot (-5746 Pascals).

#### Positive, toward soffit: 100 pound-force per square foot (4788 Pascals).

#### Maximum Allowable Design Pressure for 150-millimeter (6-inch) profile with a maximum span of 610 millimeters (24 inches):

#### Negative, away from soffit: -67.5 pound-force per square foot (-3232 Pascals).

#### Positive, toward soffit: 80 pound-force per square foot (3830 Pascals).

#### Sagiper Films Performance and Attributes:

#### Film Application: Shall Conform to ASTM G155:

#### Multi-layered film with an overall thickness of 170 to 180 micrometers. The top layer consists of a polyvinylidene fluoride film, the second layer is transparent polymethylmethacrylate, and the base layer is a solid color polymethylmethacrylate with Solar Shield Technology.

### SAGIREV Physical Attributes

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SPECIFIER NOTES: OPTIONS ARE INDICATED WITH SQUARE BRACKETS. DELETE PRODUCT OPTIONS NOT REQUIRED FOR THIS PROJECT

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#### Sagirev Material: Extruded rigid board with transparent polyvinylidene fluoride film (PVDF) layer over a transparent polymethylmethacrylate (PMMA) layer over a decorate PMMA film with [wood] or [metallic] appearance factory applied on extruded polyvinyl chloride (PVC) board substrate.

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SPECIFIER NOTES: PROFILE INTERLOCKINGS ARE **NOT** INTERCHANGABLE.

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#### Sagirev Profiles: [100 millimeters (4 inches) V-groove], [150 millimeters (6 inches) V-groove], or [200 millimeters (8 inches) flat].

#### Sagirev Accessory Profiles: [J-Mold], [2-piece Clip Crown Molding], [Outside Corner], [H-Mold], [2-piece ClipBaseboard], [Vent Strip], [2-piece Aluminum J-Mold], or [2-piece Aluminum H-Mold].

#### Panel Lengths: [3660 millimeters (12 feet)], [5790 millimeters (19 feet)] or [custom lengths available up to 10668 millimeters (35 feet)].

#### Benefits:

#### Appearance: Authentic wood look and feel.

#### Durability: High durability. Minimal expansion or contraction. Impervious to water and molds. Impenetrable to insects. Resistant to impacts and scratches.

#### Maintenance: Maintenance-free.

#### Weather-Resistant: Resistant to humidity and temperature variations.

#### Fire-Resistant: Fire rated for North America.

#### Ease: Lightweight and easy to install.

#### Selection: Available in a wide range of woodgrain and solid finishes.

#### Applications:

#### Soffits.

#### Interior walls.

#### Interior ceiling panels.

#### Finishes:

#### Wood Appearance: [Ref #1 Blonde Oak], [Ref #2 Port Redwood], [Ref # 3 Chocolate Blackwood], [Ref #4 Espresso Blackwood], [Ref #5 White Oak], [Ref #6 Hazel Oak], [Ref #7 Brazilian Redwood], [Ref #8 Caramel Cedar], [Ref #9 Caramel Zebrawood], [Ref #10 Cherry Zebrawood], [Ref #11 Pine Zebrawood], [Ref #12 Titanium Coalwood], [Ref #13 Light Maple], or [Ref #14 Walnut Cedar].

#### Solid and Wood Metallic Appearance: [Ref #50 Absolute Silver], [Ref #69 Metallic Copper ], [Ref #76], [Ref #77], [Ref #78 Metallic Black], [Ref #79 Knotty Maple], [Ref #80 Mocha Redwood], [Ref #81 Chestnut Blackwood], [Ref #82 Desert Oak], [Ref #83 Mountain Oak], [Ref #84 Monument Oak], [Ref #60 Absolute White], [Ref #88 Rustic Cherry], [Ref #89 Soft Cherry], [Ref #90 Oslo Oak], [Ref #91 Stockholm Oak], [Ref #92 Copenhagen Oak], or [Ref #93 Gothenburg Oak].

## ACCESSORIES

### Sagirev Accessory Profiles: [J-Mold], [2-piece Clip Crown Molding], [Outside Corner], [H-Mold], [2-piece ClipBaseboard], [Vent Strip], [2-piece Aluminum J-Mold], or [2-piece Aluminum H-Mold].

### Sealants and gaskets within the panel system shall be as per the manufacturer’s standards and meet performance requirements.

### Use fasteners as recommended by the panel manufacturer. Do not expose fasteners except where unavoidable and then match the finish of the adjoining metal.

### Suspension System: Metal suspension system for interior ceilings shall be a direct hung metal suspension system conforming to ASTM C653 for intermediate duty concealed tee bar.

# EXECUTION

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## EXAMINATION

### Examine Project conditions and completed Work and verify that Surfaces to receive panels are smooth, even, clean, dry, and free from defects detrimental to work.

### Verify soffit framing is braced or sheathed to resist racking loads in accordance with authorities having jurisdiction.

### Verify [soffit framing], [interior wall substrate] or [interior ceiling substrate] has adequate fastener withdrawal resistance before beginning installation of panels.

### Notify the Architect in writing of conditions detrimental to the proper and timely completion of work.

### Do not proceed with erection until unsatisfactory conditions have been corrected.

### Immediately correct all deficiencies and conditions which would cause improper execution of Work specified in this Section and subsequent Work.

### Surfaces to receive panels shall be structurally sound as determined by a registered Architect or Engineer.

### Proceeding with Work specified in this Section shall be interpreted to mean that all conditions were determined to be acceptable prior to start of Work.

## PREPARATION

## Prior to installation, randomly mix boards bundles to maximize [wood grain] appearance and minimize pattern repeats.

## Select Boards of the longest possible lengths.

## INSTALLATION

### Install panels in accordance with the manufacturer’s instructions and recommendations and in accordance with Authorities having jurisdiction.

### Securely attach panels using the methods and materials recommended by the panel manufacturer.

### Scribe and cut as required to fit abutting walls and adjacent surfaces and to accommodate other materials where penetrating through boards. Secure boards and accessories in place, rigid, plumb, and square and as follows:

### Install work with joints concealed behind corner trims and other manufacturer’s trim accessories.

### Locate fasteners in the center of elongated slots without binding boards to allow for thermal movement. Allow for board expansion/contraction gaps as recommended by the manufacturer, with consideration given to the temperature at the time of installation.

### When using a wood grain finish, select each board to avoid the appearance of a repeating wood grain pattern.

### Install boards with end joints concealed by H-shaped trim or perimeter trims.

### Where aluminum trims are cut on-site, apply sealant to edges in accordance with the sealant manufacturer’s instructions.

### Interface with Adjacent Work or Other Work: Install door and window trim pieces in maximum lengths.

### Install in accordance with the manufacturer’s High Wind Velocity Vent Installation instructions and the authorities having jurisdiction.

## SITE QUALITY CONTROL

## Non-Conforming Work:

## Adhesive installation is not acceptable.

## Fasteners exposed to view will only be acceptable with prior approval of Consultant and panel manufacturer.

## ADJUSTMENT AND CLEANING

### Remove and replace panels damaged beyond repair as a direct result of the panel installation.

### Repair panels with minor damage.

### Remove dirt or foreign contaminants on panels in accordance with the manufacturer’s instructions.

END OF SECTION