



Vinyl Soffit Specifications

PART 1 – GENERAL

1.01 Scope of Work

- A. Furnish all necessary labor, material and equipment for complete installation of Kaycan Vinyl Soffit and related work as shown on drawings or specified herein.

1.02 References

- A. American Society for Testing and Materials (ASTM)
 - D3679 Standard specification for rigid PVC siding.
 - D256 Test Methods for impact resistance of plastics and electrical insulating materials.
 - D618 Practice for conditioning plastics.
 - D635 Test method for rate of burning and/or extent and time of burning of self supporting plastics in a horizontal position. (UBC 52-4)
 - D638 Test Method for tensile properties of plastics
 - D648 Test Method for deflection temperature of plastics under flexural load
 - D696 Test method for coefficient of linear thermal expansion of plastics.
 - D1929 Test method for ignition properties of plastics. (UBC 52-3)
 - D2843 Test method for density of smoke from the burning or decomposition of plastics. (UBC 52-2)
 - D3679 Standard specification for rigid PVC siding.
 - D4226 Test method for impact resistance of rigid PVC siding.
 - D5206 Test method for wind load resistance of rigid PVC siding.
 - E84 Test method for surface burning characteristics of building materials
- B. ICBO ES Acceptance criteria
- C. ANSI/AAMA Standard No. 1402

1.03 Submittals

- A. Submit samples of siding design, size and color for approval.
- B. Product data: Manufacturer's standard printed product data and installation instruction for specified products.
- C. Selection samples: Submit color chips of manufacturer's full range of colors for Architects selection.
- D. Verification samples: Submit three samples, each 12 inch in length, of each specified vinyl product in the specified color.
- E. Quality assurance submittals: Submit evidence of Code compliance specified in the quality assurance section of this specification.

1.04 Quality Assurance

- A. Manufacturer to certify that vinyl soffit as supplied meets or exceeds the conditions specified in section 2.02.
- B. Regulatory compliance:
 - 1 National Evaluation Services Report #NER-503
 - a) National Building Code BOCA Evaluation
 - b) Standard Building Code SBCCI Compliance
 - c) Uniform Building Code ICBO Evaluation
 - 2. HUD-FHA Minimum Property Standards
 - 3. ANSI/AAMA Standard No 1402
 - 4. Canadian General Standards Board 41GP24MA
 - 5. National Building Code of Canada-9.28.13.1
 - 6. Texas Department of Insurance EC9
 - 7. CCMC 11814-L.
 - 8. UBC 14-2
 - 9. Dade County PA 202-94 and PA 203-94 approval protocols
 - 10. ASTM D3679 General Standard.
 - 11. International Building Code 2000 and International Residential Code 2000.

PART 1 – GENERAL (continued)

1.05 Delivery, Storage and Handling

- A. Soffit is packed in cardboard cartons identified with stickers bearing the manufacturer's name, product name, product code, number of pieces, size, and date of manufacture.
- B. Prior to application, vinyl soffit and accessories are to be stored in an area that is clean, dry and out of direct sunlight
- C. Handle material in a manner to prevent damage. Do not allow siding material to crease.

1.06 Warranty

- A. Upon completion provide a written Lifetime, Transferable, Limited Warranty and for Non-Residential a Fifty Year Warranty.

PART 2 – PRODUCTS

2.01 Manufacturer

- A. Materials to be supplied by Kaycan Ltd., www.kaycan.com
- B. Substitutions not permitted.

2.02 Materials

- A. Vinyl soffit shall conform to all of the requirements established in ASTM Specification D3679-91, developed in cooperation with the industry and published by the American Society for Testing and Materials. Manufacturer shall maintain rigorous production quality control standards to assure that Kaycan Vinyl Siding will perform as expected for its intended use.

- B. **Typical Compound Properties:** Vinyl soffit is produced from Kaycan's exclusive Duratron formula: a Poly Vinyl Chloride (PVC) compounds meeting the requirements of ASTM D3679 for compound class number 2 and 3 materials with the following manufacturing and product specifications.

Test Criteria: Typical Properties

Tensile Strength: 7528 psi ASTM D638*

Modulus of Elasticity: 390,125 psi ASTM D638*

Izod Impact @70 Deg. F:

4.66 lb./in. notch, ASTM D256*, D1784*

Izod Impact @32 Deg. F:

1.76 lb./in. notch, ASTM D256*, D1784*

Deflection Temperature: 1620 F ASTM D648*

*Denotes Average

- C. **Fire Resistance Properties:**

Average Time of Burning: <5 sec ASTM D635

Average Extent of Burning: <5 mm ASTM D635

Flame Spread: 15 ASTM E-84

Smoke Density: 72.2% ASTM D2843

Ignition Properties: Self ignition did not occur.

At 842 Deg. F sample began to smolder and continued until consumed. ASTM D1929-77

- D. **Typical Physical Properties:**

Test Criteria: Typical Properties

Warp: <0.125 in, ASTM D3679

Heat Shrinkage: <1.9%, ASTM D3679

Impact Resistance:

2.36 in./mil, ASTM D4226, Procedure A, H.25

Weatherability: No surface or structural defects such as peeling, cracking, chipping, when tested as per ASTM D3679.

Coefficient of Linear Expansion: 2.83 x 10⁻⁵ in/in Deg F 5.10 x 10⁻⁵ cm/cm Deg C, ASTM D696

Gloss: plus or minus 5 units, ASTM D3679

Surface Distortion: No distortion at 105 Deg F, ASTM D3679, Section 5.12



Vinyl Soffit Specifications

PART 2 – PRODUCTS (continued)

E. Soffit Dimensions and Description (all of Canada):

Solid 10”: Double 5 profile soffit panel, 10 in. wide exposure configured as two 5 in. panels, 12ft length.

Vented 10”: Double 5 profile soffit panel, 10 in. wide exposure configured as two 5 in. panels, 12ft long aerated (lanced) panels.

Center Vented 12”: Triple 4 profile soffit panel, 12 in. wide exposure configured as three 4 in. panels with the central panel aerated (lanced), 12ft length.

Center O-Vented 12”: Triple 4 profile soffit panel, 12 in. wide exposure configured as three 4 in. panels with the central panel aerated (“O” holes), 12ft length

Full O-Vent 12”: Triple 4 profile soffit panel, 12 in. wide exposure configured as three 4 in. panels with the all panels aerated (“O” holes), 12ft length

Solid 16”: Quadruple 4 profile soffit panel, 16 in. wide exposure configured as four 4 in. panels, 12ft length.

Vented 16”: Quadruple 4 profile soffit panel, 16 in. wide exposure configured as four 4 in. panels with the all panels aerated (lanced), 12ft length.

Soffit Dimensions and Description (Western Canada only):

O-Vent 8”: Double 4 profile, soffit panel, 8 in. wide exposure configured as two 4 in. panels, 12ft long aerated (“O” holes) panels.

O-Vent 16”: Quadruple 4 profile soffit panel, 16 in. wide exposure configured as four 4 in. panels with the all panels aerated (“O” holes), 12ft length.

F. Soffit Panel Description:

Thickness: (0.042 in. ±0.002 in.)

Embossing/Woodgrain: Siding panel to match the sample provided under section 1.03.

Color: Soffit color shall be as specified by architect.

Nail Slots: Elongated nail slots 1" long are spaced approximately 1/2" apart in the nailing hem to allow siding to expand and contract properly.

2.01 Accessories:

- A. Accessories shall be consistent with the shape, size and properties as shown in the drawing and as required for complete installation. Color shall be matched or color coordinated to the siding according the architect’s specifications.

Accessories shall be produced from the same compound materials and with comparable properties as the soffit.

2.02 Fasteners:

- A. Galvanized nails or other corrosion-resistant fasteners, as recommended by manufacturer for specific application shall be used to install the siding.

PART 3 – EXECUTION

3.01 Examination

- A. Confirm that all critical dimensions are as specified in the drawings.
- B. Commencement of soffit installation implies acceptance of the substrate as suitable to accept soffit.

3.02 Preparation

- A. Any substrate flaws or defects must be repaired, and free from obstructions before the vinyl soffit is applied.

3.03 Installation

- A. The soffit fasteners are corrosion resistant nails with a minimum 11/32 in. diameter head and a 0.135 diameter shank.
- B. Nails shall be long enough to penetrate the nailing base by at least 1 in.
- C. Install in accordance with the latest edition of the "Rigid Vinyl Soffit Application Manual" published by the Vinyl Siding Institute.
- D. The vinyl soffit and accessories shall be installed in accordance with the best practice. Nails shall be centered in the soffit nail slots with a minimum 1/16 in. clearance between the back of the nail head and the face of the siding. Nails shall be driven perpendicular to the substrate.
- E. At all openings and stops, a minimum gap 1/4 in., shall be provided for expansion and contraction.

3.04 Field Quality Control

- A. After installation of soffit check entire surface for obvious flaws or defects. Replace and repair any problem areas.

3.05 Cleaning

- A. After the vinyl soffit has been applied, clean as necessary to remove all fingerprints and soiled areas.
- B. Clean and remove all scrap, packaging and unused materials resulting from the installation of vinyl products.

All Kaycan Vinyl Soffit and accessories are backed by a Lifetime Limited Warranty.