LATITUDE

Flexibility and Function

780.451.5482
www.lenmak.com
Toll Free 888.451.5482

Latitude Panel

The Latitude™ product line from Lenmak Exterior Innovations is made to order and produced on demand to meet your needs - and your budget. Available in a variety of widths, depths, and lengths, it can bend around corners and soffits, and comes in dozens of prefinished colours. Better still - it pairs the cost-effectiveness of single-skin cladding with the beauty of architectural panel systems.

Advantages

Design

- Several depths & widths - mix & match for greater impact
- Custom lengths up to 21' with no waste on site
- Easily integrated with surrounding exterior products using coordinated trim and optional modular reveal plates

Colour

- 30 different standard pre-finished colours
- Available in standard & metallic colours for use as accents or full exteriors

Time

- Lean manufacturing and a dedicated Special Projects team enable custom orders to be produced quickly
- Short lead times and manufacturing flexibility reduce carrying costs and site delays
- Repairs are made easy by skinning over panels - no costly removal and re-installation required

Price

- Automated inventory management system & pre-programmed folding machines produce perfect panels
- Single-skin aluminum with industry-leading finish warranties offer a virtually maintenance-free exterior and long service life, reducing cost of ownership

Sustainability

- Panels include pre- and post-consumer recycled materials (possible LEED credits) and remain 100% recyclable at the end of their life cycle
- No harmful toxins and zero VOC emissions ensure interior air quality and reduce carbon footprint
- Customized design produced on demand minimizes waste and conserves energy

LENMAK
Exterior Innovations Inc.

The Latitude product line is available in dozens of sizes and custom lengths up to 21'.

- Custom-manufactured 0.050" (1.25mm) painted aluminum with 70% Kynar finish in a wide range of colours
- Laminate-free materials pose no risk of delaminating
- Contain 24.7% pre-consumer and 55.8% post-consumer recycled content for a total of 80.5% LEED-required recycled content

Vertical Latitude

- Cost-effective alternative to composite panel systems
- Male-Female interlocking sides and customizable reveal widths allow panels to expand and contract freely even when an uneven wall must be shimmed
- Hollow panels and recommended spacers maintain rainscreen assembly and ventilation while customizable trim details direct weather away from the building envelope
- Soffit-fascia bent panel allows continuation of reveals from soffit to wall areas and beyond
- Interacts elegantly with surrounding materials for a beautiful, low-maintenance exterior

Horizontal Latitude

- Available splices or reveal plates allow the appearance of continuous strips without sacrificing aesthetic performance
- Custom colour-coordinated trim details allow perfect integration with proud, flush, or recessed windows & doors
- Work bottom-up or top-down to minimize costs of rental equipment
- Optional corner-wrap and splice detail creates aesthetic illusion of continuity around corners - even non-90°
- Cut on site using regular sheet-metal tools to fit irregularities with no delays due to size mis-measure

Panel Depth	Covered Width	Minimum Length	Maximum Length*	Reveal Size	Ideal Application
1"	18" 10" 6"	24" (2')	252" (21')	0.25" 0.5" 0.75" 1"	Most Cost-effective; greatest variety in available widths
1.5"	17" 9"	24" (2')	252" (21')	0.25" 0.5" 0.75" 1"	Mix with 1" deep panels to create texture on a flat wall
2"	16" 8"	24" (2')	252" (21')	0.25" 0.5" 0.75" 1"	Use extra depth to accent certain colours or small sections between materials

*Note: Length limitations apply based on panel orientation and specific project scope. Consult Lenmak's Sales Team for project-specific limitations.

STRATACLAD®

The freedom of design, transformed.

LATITUDE

Flexibility and Function


Cape Blue (SRI 44%)


Slate Blue (SRI 35%)


Pacific Blue (SRI 31%)


Royal Blue (SRI 25%)


Aged Copper (SRI 48%)


Seaport (SRI 31%)


Teal Green (SRI 27%)


Classic Green (SRI 26%)


Hartford Green (SRI 25%)


Sage (SRI 30%)

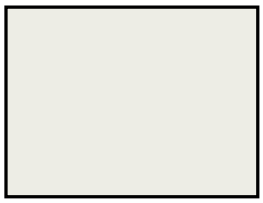

Terra Cotta (SRI 45%)

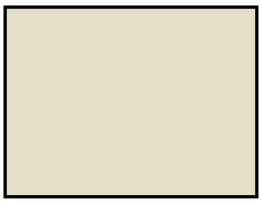

Red Clay (SRI 39%)


Banner Red (SRI 25%)


Colonial Red (SRI 38%)


Cordovan (SRI 31%)


Snowdrift White (SRI 92%)


Travertine (SRI 86%)


Stone White (SRI 68%)


Almond (SRI 78%)


Sierra Tan (SRI 27%)


Roman Bronze (SRI 31%)


Mansard Brown (SRI 28%)


Dark Bronze (SRI 29%)


Slate Grey (SRI 37%)


Musket Grey (SRI 33%)


Charcoal Grey (SRI 27%)


Matte Black (SRI 23%)


Silver (SRI 55%) *


Weathered Zinc *


Copper Penny (SRI 37%) *

All colours are represented as accurately as possible, however minute variances should be expected from paper colour card to actual inventory. Sample chips are available for the purpose of matching, selecting, or approving colours prior to fabrication.

Some colours are directional in nature. To avoid differences in light reflectivity or colour perception, steps should be taken to avoid rotation of grain orientation within a project.

*Metallic finishes. These colours may exhibit a more pronounced grain and greater likelihood of batch-to-batch variations in colour.

Part 1 General

1.1 SUMMARY

.1 ****This Section includes requirements for supply and installation of exterior factory fabricated and prefinished metal wall siding [and soffit panel assemblies] with related flashings and accessory components [and support framing].

1.2 RELATED REQUIREMENTS

.1 **** [Section 05 41 00 - Structural Metal Stud Framing: Steel stud wall framing]

.2 **** [Section 06 10 00 – Rough Carpentry: Wood framed exterior walls]

.3 **** [Section 07 21 16 - Blanket Insulation: Semi-rigid insulation installed between metal panels/siding and exterior sheathing]

.4 **** [Section 07 26 00 - Vapour Retarders: Perimeter vapour seal between [curtain wall] system and adjacent assemblies]

.5 **** [Section 07 27 00 - Air Barriers]: Perimeter air seal between [curtain wall] system and adjacent assemblies

.6 Section 07 92 00 - Joint Sealants

1.3 REFERENCE STANDARDS

.1 **** [American Architectural Manufacturers Association (AAMA):]

.1 **** [AAMA 611-14 - Voluntary Specification for Anodized Architectural Aluminum]

.2 **** [AAMA 2605-13 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels]

.2 American Society for Testing and Materials (ASTM):

.1 **** [ASTM B209/B209M-14 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate]

1.4 ADMINISTRATIVE REQUIREMENTS

.1 ****Coordination: Coordinate work of other trades having a direct bearing on work of this Section in accordance with Section [01 31 00], and as follows:

.1 ****Coordinate installation of [air barrier] [and] [vapour retarder].

.2 ****Coordinate installation of [windows] [doors] [louvres] and other components penetrating metal siding assemblies.

.2 ****Pre-Installation Meeting: Before starting work of this Section, arrange a meeting in accordance with Section [01 31 19], with Contractor, siding Subcontractor, Subcontractors responsible for adjacent work, and Subcontractors responsible for work that penetrates siding assemblies.

.1 Review construction schedule, material availability, personnel, equipment, and other relevant issues to avoid unnecessary delays.

.2 Review methods and procedures related to panel installation, including manufacturer's instructions.

1.5 SUBMITTALS

.1 Submit information in accordance with Section 01 33 00 - Submission Procedures.

.2 Action Submittals: Before starting work of this Section, submit the following:

.1 Shop Drawings: Indicate arrangement of siding system, include dimensions, location of joints, profiles of panels, support types and locations, sealants, fasteners, flashings, closures and all metal components related to panel installation.

.2 Samples:

.1 ****[Samples for Initial Selection: Submit [color chart] [physical samples on actual substrate] showing manufacturer’s full range of standard colors for Consultant’s selection.

.2 Samples for Verification: When requested by the Consultant, submit sample in manufacturer’s standard size for each panel illustrating colour, finish and texture.

.3 Informational Submittals:

.1 Installation Data: Before beginning work of this Section, submit manufacturer's installation instructions, and any special handling criteria.

.2 Test Reports: When requested by Consultant, submit certified test reports showing compliance with specified performance characteristics and physical properties.

.4 ****Sustainable Design Submittals: Submit project sustainable design requirements with Section [01 35 18] [01 35 63], and as follows:

.1 ****During the course of the work, submit manufacturer’s documentation indicating [percentages weight of post-consumer and pre-consumer recycled content, total weight of products and costs for each product with recycled content] [and local/regional materials].

.2 ****During the course of the work, submit manufacturer’s documentation indicating Solar Reflectance Index (SRI), initial values and aged values.

1.6 CLOSEOUT SUBMITTALS

.1 ****Operations and Maintenance Data: Submit maintenance data for cleaning and maintenance of panel finishes for incorporation into Operation and Maintenance manuals specified in Section [01 78 10] [01 78 23].

.2 Warranty Documentation: Submit manufacturer's finish warranty information.

1.7 QUALITY ASSURANCE

.1 ****Manufacturer Qualifications:

.1 Company specializing in manufacturing the Products specified in this Section with minimum [three (3)] years' experience.

.2 Providing siding assemblies and accessories from a single manufacturer.

.2 ****Installer Qualifications: Company specializing in performing the work of this Section with minimum [three (3)] years documented experience [and approved by the manufacturer].

.3 ****Mock-Ups: Provide mock-up in accordance with Section [01 43 00] [01 45 00], [[___] m [___] ft] long by [[___] m [___] ft.] wide mock-up of siding [and soffit system], attachments to building [frame], associated vapour retarder and air barrier materials, weep drainage system, sealants and seals, and related insulation.

.1 ****Locate [where jointly agreed between Consultant and Contractor] [where directed by Consultant].

.2 Approved mock-up may remain as part of the Work.

1.8 DELIVERY, STORAGE, AND HANDLING

.1 Transport, handle, store, and protect products in accordance with Section 01 61 00, and as follows:

.1 Protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.

.2 Store prefinished material off ground protected from weather, to prevent twisting, bending, or abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.

.3 Prevent contact with materials which may cause discolouration or staining.

1.9 WARRANTY

.1 ****Provide a manufacturer's warranty with coverage for finish failure, including peeling, cracking, checking, blistering, chipping and excessive colour fading.

.1 **** [Twenty five (25) year for PVDF finishes]

Part 2 Products

2.1 MANUFACTURERS

.1 Basis-of-Design Materials: Products named in this Section were used as the basis-of-design for the Project.

.1 **** [Additional manufacturers offering similar Products may be incorporated into the work of this Section when they meet the performance requirements established by the named Products, and when substitution requests are submitted in accordance with [01 25 00] [01 62 00].]

.2 **** [Substitutions: Not permitted]

.2 Basis-of-Design Materials: Lenmak Exterior Innovations Inc., Latitude™ series siding

2.2 DESCRIPTION

.1 ****Wall System: Preformed and prefinished single skin metal siding panels with [horizontal] [vertical] profile; fastened to [steel] [wood] framing system with concealed fastening, rear ventilated [and sub-girt system].

.2 **** [Soffit System: Preformed and prefinished single skin profiled metal panels; fastened to [steel] [wood] framing system with concealed fastening system.]

2.3 PERFORMANCE CRITERIA

.1 ****Components: Design and size components to withstand dead and live loads caused by positive and negative wind pressure acting normal to plane of wall [as calculated in accordance with the applicable building code at the Place of the Work] [to a design pressure of [___] kPa [___] lb/sq ft].

.2 ****Maximum Allowable Deflection of Aluminum Panel: L/60 of span.

.3 ****Thermal Movement: Design assemblies for expansion and contraction within system components caused by a cycling ambient temperature range of [-40 to +35] degrees Celsius seasonally without overstressing components causing buckling, failure of connections, or other permanent detrimental effects.

.4 Provide expansion joints to accommodate movement within siding panels, and between siding panels and structure to prevent permanent distortion or damage to siding.

.5 Seismic Loads: Design and size components to withstand seismic loads and sway displacement as calculated in accordance with applicable building code at the Place of the Work.

.6 ****System Drainage and Ventilation: Provide assemblies with positive drainage to exterior when moisture enters or condensation occurs within siding system. Exterior siding assemblies covering an air space [pressure equalized with the exterior].

.7 ****Vapour Retarder: Provide continuity to the vapour retarder at building envelope, in conjunction with vapour retarders specified in Section [07 26 00].

.8 ****Air Seal: Provide continuity to the building air barrier systems at building envelope, in conjunction with air seal materials specified in Section [07 27 00].

2.4 ALUMINUM SHEET MATERIALS

.1 Aluminum: To 3003, 5052, or 5005-H32 to ASTM B209, 1.27 mm (0.050 inch) thick, **** [24.7% pre-consumer and 55.8% post-consumer recycled content]

2.5 COMPONENTS

.1 Siding Panels: Factory coated aluminum, interlocking edges with concealed fasteners.

.1 Siding Panel Profile Orientation: **** [Horizontal] [Vertical] [As indicated on Drawings]

.2 Siding Panel Depth: **** [25 mm (1")] [38 mm (1.5")] [50 mm (2")]

.3 Siding Panel Reveal Dimension: **** [None] [6 mm (0.25")] [13 mm (0.50")] [19 mm (0.75")] [25 mm (1.0")]

.4 ****Siding Exposed Panel Face Dimension:

.1 For 1" deep panels: [152 mm (6")] [254 mm (10")] [457 mm (18")]

.2 For 1.5" deep panels: [229 mm (9")] [432 mm (17")]

.3 For 2" deep panels: [203 mm (8")] [406 mm (16")]

.2 ****Soffit Panels: [Matching material and finish of siding panels] [Factory coated aluminum], interlocking edges with concealed fasteners]

.1 Soffit Panel Profile: **** [Orientation as indicated on Drawings]

.2 Soffit Panel Depth: 25 mm (1")

.3 Soffit Panel Reveal Dimension: **** [None] [6 mm (0.25")] [13 mm (0.50")] [19 mm (0.75")] [25 mm (1.0")]

.4 Soffit Exposed Panel Face Dimension: **** [152 mm (6")] [254 mm (10")] [457 mm (18")]

.3 Drip Flashing: Manufacturer's standard profile; thickness and finish matching wall panel.

.4 ****Corner Trim: [Manufacturer's standard profile] [Custom profile as indicated on Drawings], thickness and finish matching wall panel.

.5 Reveal Trim: Manufacturer's standard profile; thickness and finish matching wall panel.

.6 Starter Strip: Manufacturer's standard profile; thickness and finish matching wall panel.

.7 ****Metal Framing: Galvanized steel [18 gauge framing, hat channels, adjustable Z-girts; [gauge as required by engineered design,] [sizes and profiles as indicated on Drawings] [As indicated in Section 05 41 00]

****OR****

.8 **** [Wood Framing: [As indicated in Section 06 10 00] [Framing, furring, strapping; softwood lumber SPF species, [pressure-preservative treated,] sizes and profiles indicated.

2.6 FABRICATION

.1 Form metal profiles true to shape, accurate in size, square, and without distortions.

.2 Factory fabricate components ready for site installation, in longest practical lengths.

2.7 FINISHES

.1 Aluminum Finishes:

.1 ****Factory Painted PVDF Classic Collection Coating: AAMA 2605, two-coat, 70 percent by weight polyvinylidene fluoride (Kynar 500 or Hylar 5000), nominal 1.0 mil dry film thickness:

.1 ****Colour: [As selected by Consultant from manufacturer's standard colour range]

****OR****

.2 ****Factory Painted PVDF Metallic Coating: AAMA 2605, three-coat, 70 percent by weight polyvinylidene fluoride (Kynar 500 or Hylar 5000):

.1 ****Colour: [As selected by Consultant from manufacturer's standard colour range]

2.8 ACCESSORIES

.1 Fasteners: **** [Galvanized] [Long-term corrosion resistant coated steel] [Stainless steel], as recommended by manufacturer

.2 Escutcheons: Weatherproof type for pipe, conduit, and similar materials penetrating exterior walls

.3 Sealant and Backing Materials: **** [Polyurethane type] [Silicone type] [As specified in Section 07 92 00].

2.9 SOURCE QUALITY CONTROL

.1 Non-Conforming Work: Pre-finished post-formed metal panel assemblies may exhibit certain behaviors common to all fabricators. Panel surfaces may display a slight convex effect (pillowing) due to panel stresses during manufacture, fabrication, or installation. Oil canning is a moderate deformation of sheet metal surfaces, typically caused by uneven stresses at fastening points. Metal forming during panel fabrication may result fine cracks in finishes (crazing) at outer edges or bends. Take reasonable steps to prevent and mitigate these effects. Excessive effects are a deficiency; mild "pillowing", "oil canning" or "crazing" are not deficiencies.

Part 3 Execution

3.1 EXAMINATION

.1 Verify existing conditions before starting work in accordance with Section **** [01 70 00] [01 71 00] [01 73 00], and as follows:

.1 Verify dimensions, tolerances, and method of attachment with other work.

.2 Verify wall openings and adjoining air barrier and vapour retarder materials are ready to receive work of this section.

.3 ****Verify that site measurements are as [indicated on Drawings] [indicated on Shop Drawings] [instructed by the manufacturer].

.4 Report unsatisfactory conditions to Consultant in writing; do not start Work until unsatisfactory conditions are corrected.

3.2 INSTALLATION

.1 ****Install supporting [furring] [framing] [on to cast-in-place concrete substrate] [on to concrete masonry unit substrate] [through exterior gypsum sheathing into structural steel stud framing].

.2 Install starter flashing, drip and other flashing, corners, edgings, and window and door flashings, and as indicated on Drawings.

.3 ****Install wall siding [and soffit material] to manufacturer's recommended installation procedures, providing proper laps true to line, and tight fitting to ensure a weather-tight face.

.4 Install finishing flashing, cap flashing, trims and closures.

.5 Attach components in manner not restricting thermal movement.

.6 Align assembly plumb and level, free of twist. Maintain assembly dimensional tolerances, **** [aligning with adjacent work].

.7 Metal Corrosion Protection: Provide permanent separation material where dissimilar metals contact each other, at cementitious substrates, and corrosive substrates.

.8 Sealants: Install sealants at junctions with adjoining components described in other specification Sections, and where shown on Drawings, in accordance with Section 07 92 00. Do not install sealants in locations that will interfere with drainage of pressure-equalized assembly.

.9 Remove site cuttings from surfaces without damaging finishes.

.10 Repair and touch up very minor surface damage with colour-matching high quality paint recommended by manufacturer.

.11 Replace damaged materials that cannot be satisfactorily repaired.

.12 ****Tolerances: Install assemblies in accordance with Section [01 73 00], and as follows:

.1 Maximum Offset from Alignment between Adjacent Members Butting or In-Line: **** [1.6 mm (1/16 inch)]

.2 Maximum Variation from Plane: **** [6 mm (1/4 inch)]

3.3 CLEANING

.1 Perform general cleaning requirements for installed work in accordance with Section **** [01 74 00] [01 74 23], and as follows:

.1 Clear weep holes and drainage pathways of obstructions, dirt, and sealants.

.2 If siding panels show evidence of soiling, clean and wash visible surfaces with mild soap and water. Rinse with clean water.

END OF SECTION

Product Name
Latitude Wall Panels
Specification Section
MasterFormat 07 46 10
Manufacturer's Name
Lenmak Exterior Innovations Inc.

PRODUCT DESCRIPTION

PRODUCT FEATURES

- DESCRIPTION
  - Factory fabricated metal wall or soffit panels with related flashings and accessory components.
  - Online technical information available at: http://www.lenmak.com
- BASIC USES / RELATED USES
  - Exterior wall and/or soffit finish installed with profiles running horizontally or vertically.
- PRODUCT ATTRIBUTES AND CHARACTERISTICS
  - Factory fabricated to standard profiles or custom designed to order and produced on demand.
  - Competitive lead times, due to automation and lean manufacturing processes. Rapid turn-around times.
  - Interlocking panel design permits fully concealed fastening.
  - Available in several pre-finished colours with no limits on production quantity.
  - Available in standard and metallic colours for use as accents or full extensions.
  - Designed to be best in aesthetics, performance and cost efficiency.
- SUSTAINABILITY CRITERIA
  - Panels are made from a combination of pre- and post-consumer recycled materials, and are 100% recyclable.
    - Aluminum Recycled Content: 24.7% pre-consumer and 55.8% post-consumer
    - Some panel colours have high Solar Reflectance Index (SRI) values, which can reduce the heat island effect
- APPLICABLE STANDARDS, RELATED REFERENCES
  - AAMA 611-14 Voluntary Specification for Anodized Architectural Aluminum
  - AAMA 2605-13 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels
  - ASTM B209/B209M-10 - Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate
- PERFORMANCE CRITERIA
  - System Design: Design and size components to withstand dead and live loads caused by positive and negative wind pressure acting normal to plane of wall as calculated in accordance with applicable code.

PRODUCT DESCRIPTION

- Thermal Movement: Provide for expansion and contraction within system components.
- Design expansion joints to accommodate movement in cladding and between cladding and structure to prevent permanent distortion or damage to cladding.
- Seismic Loads: Design and size components to withstand seismic loads and sway displacement as calculated in accordance with applicable code.
- Drainage: Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.

- PACKAGING, HANDLING, PROTECTION, AND DELIVERY INSTRUCTIONS
  - Packaged onto skids or crates.

- SPECIAL WARRANTY
  - Warranties for paint finishes are available, and vary depending on the finish type. Consult Lenmak Exterior Innovations Inc. for further information.

- LIMITATIONS
  - Pre-finished post-formed metal panel assemblies may exhibit certain behaviors common to all fabricators. Panel surfaces may display a slight convex effect (pillowing) due to panel stresses during manufacture, fabrication, or installation. Oil canning is a moderate deformation of sheet metal surfaces, typically caused by uneven stresses at fastening points. Metal forming during panel fabrication may result fine cracks in finishes (crazing) at outer edges or bends. Excessive effects are a deficiency; mild "pillowing", "oil canning" or "crazing" are not deficiencies.
  - Anodized aluminum is available by special request, but is not recommended for commercial projects. A finish warranty isn't available for anodized aluminum.

- AVAILABILITY
  - Directly from Lenmak Exterior Innovations Inc.

- COST
  - Consult Lenmak Exterior Innovations Inc for specific product costs or relative costs.

PRODUCT PROPERTIES

- MATERIALS
  - Panels: Aluminum, to 3003, 3105, 5052, or 5005-H32 to ASTM B209, 1.27 mm (0.050") thick
  - Trim and Related Components: Same material and finish as panels

PRODUCT DESCRIPTION

- PANEL SIZES
  - Panel Coverage Dimension (includes reveal):
    - Based on 1 inch panel depth: 152mm (6 inch), 305mm (12 inch), or 457mm (18 inch)
    - Available widths vary by panel depth selected.
    - Custom widths are available; consult Lenmak Exterior Innovations Inc. for details.
  - Panel Reveal Dimension: 6 mm (0.25"), 13 mm (0.50"), 19 mm (0.75"), 25 mm (1.0"), or without reveal
  - Panel Depth: Ranges from 25 mm to 75 mm (1" – 3"). Custom depths are available; consult Lenmak Exterior Innovations Inc.
  - Minimum Panel Length: 457 mm (18 inches)
  - Maximum Panel Length: 6400 mm (21 feet)
- ACCESSORIES
  - Fasteners: As recommended by manufacturer in the following materials:
    - Long-term corrosion resistant coated aluminum
    - Stainless steel
  - Sealant and Backing Materials: Polyurethane or silicone type
- SHOP FABRICATION AND ASSEMBLY
  - Form metal profiles true to shape, accurate in size, square, and free from distortions.
  - Factory fabricated components ready for site installation.
  - Fabricate in longest practical lengths.
  - All preformed components are site assembled.
- FINISH
  - Aluminum Finishes:
    - Factory Painted Coating: PVDF Kynar 500 or Hylar 5000, 70% by weight resin, nominal 1.0 mil dry film thickness:
      - Available Colours: See manufacturer's standard colour guide
      - Minimum order may apply to non-stock finishes

PRODUCT PLACEMENT

- INSTALLATION
  - Install supporting furring or framing secured to structural framing members, cast-in-place concrete structure, or structural concrete unit masonry.

PRODUCT DESCRIPTION

- Install panels in accordance with manufacturer's written instructions, and as indicated on shop drawings.
- Separate dissimilar metals with permanent isolating material
- Install assembly plumb and level, free of twist. Maintain assembly dimensional tolerances, aligning with adjacent work.
- Provide prefinished trim components to suit site conditions.

- WASTE RECYCLING
  - Any metal waste generated during installation is fully recyclable.

Corporate Identification

Lenmak Exterior Innovations Inc.
10404 - 176 Street NW
Edmonton, AB Canada
T5S 1L3
Tel: 780.451.5482 or 888.451.5482
Fax: 780.451.0865 or 888.451.0865
www.lenmak.com
orderdesk@lenmak.com

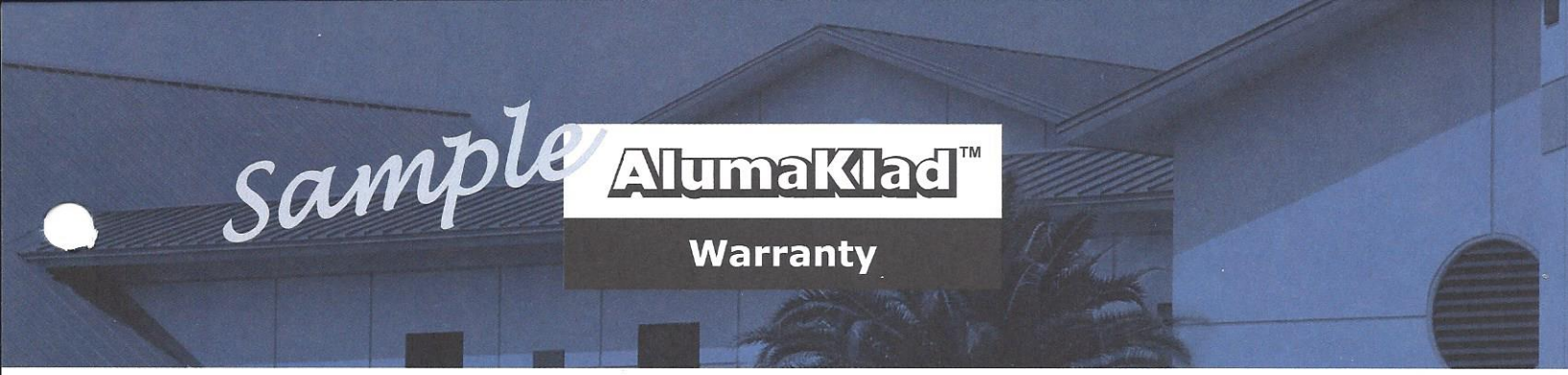
Classification and Filing

MasterFormat 2014:
- 07 46 10 - Metal Siding
- 07 42 93 – Soffit Panels

OmniClass:
- 23-13 37 15 11 – Metal Exterior Siding

UniFormat:
- B2010.10 - Exterior Wall Veneer

END



Subject to the conditions set forth in this document, Ryerson warrants that its coil-coated AlumaKlad will not do any of the following in normal atmospheric conditions (which term excludes corrosive or aggressive atmospheres such as those contaminated with chemical fumes or salt spray):

A. Peel, check, chip or crack (except for such crazing or slight cracking as may occur on tightly roll-formed edges or brake bends at the time of forming pre-painted sheet and which is accepted as standard) for a period of thirty (30) years from the date of installation.

B.

1. Chalk in excess of a numerical rating of eight (8), when measured in accordance with the standard procedures specified in ASTM D659-80; or

2. Fade or change in color in excess of five (5) E units (NBS) calculated in accordance with ASTM D2244-85, paragraph 6.3. Color change shall be measured on an exposed painted surface that has been cleaned of surface soils and chalk, and the corresponding values measured on the original or unexposed painted surface. It is understood that fading or color changes may not be uniform if the surfaces are not equally exposed to the sun and elements.

3. Embossed paint is fully warranted provided the embossing process does not fracture the coating or metal or adversely affect paint adhesion or film integrity. Any corrosion or loss of adhesion as a result of the embossing process is not covered under this warranty.

On all roofing installations, the warranties made in this Section B shall extend for the shorter of the following periods:

a) Thirty years (360 months) from the installation of AlumaKlad as the exterior surface of a building; or

b) Thirty years and six months (366 months) from the time AlumaKlad product is painted.

The customer named below, whose signature appears on this warranty, shall be named as Purchaser.

Purchaser:

_____
Signature

_____
Print Name

_____
Job Name

_____
Purchase Order Number

_____
Invoice Number

_____
Date

Ryerson:

_____
Signature

_____
Print Name

_____
Title

_____
Date

RYERSON™
THE STRENGTH IN METAL

2621 West 15th Place
Chicago, IL 60608

This warranty is subject to the following conditions:

1. All Fluoroceram® colors supplied by BASF to Ryerson are covered by this warranty, unless Ryerson specifically and in writing notifies the Purchaser otherwise.

2. In addition to, and without limiting the other conditions of this warranty, the following specific condition must be met: the coated surface must be a roof, on which no standing water accumulates, of an architectural, commercial, pre-engineered building.

3. This warranty covers only building panels and accessories which are exposed to normal weather conditions and which are used exclusively within the United States, Canada and the Caribbean, and will be extended to other geographic areas only upon written advance consent by Ryerson.

4. If AlumaKlad is on a surface located less than 1,000 feet from the seashore (salt water), maintenance will be performed by the building owners, including annual "sweet water" (fresh tap water) rinse in accordance with AAMA 610.1-1979 (copy available upon request).

5. AlumaKlad must not be cleaned with abrasive or chemical cleaners.

6. The warranty will not extend to, or cover: (a) damage to the AlumaKlad occasioned by improper storage prior to installation (NCAA guidelines described in the How-to series titled "How to Fabricate Prepaint") or improper packaging, handling, shipping, processing and/or installation; or (b) damage to the product which suffers from improper forming, fabrication or cut-edge exposure.

7. The warranty will not be applicable to damage or failure which is attributable to acts of God, falling objects, external forces, explosions, fire, riots, civil commotions, acts of war, or other such similar or dissimilar occurences beyond Ryerson's control.

8. Claims under this warranty must be made by Purchaser to Ryerson in writing thirty (30) days after discovery of the condition giving rise to the claim, and Ryerson must be given a reasonable opportunity to inspect the coated metal claimed to be defective.

9. In the event of a claim under this warranty, the Purchaser shall demonstrate to the reasonable satisfaction of Ryerson that the failure of the product was due to a breach of the warranty stated herein. Purchaser has the responsibility to supply a video and/or photographs of the claimed defective product for Ryerson's inspection and to arrange for inspection of the site where the product in question is located. Should the claim be found not to be covered under this warranty, Purchaser shall reimburse all of Ryerson's third-party expenses incurred in connection with the investigation of the claim.

10. Purchaser's sole and exclusive remedy, and Ryerson's liability under this warranty, will be limited, at its option, to refinishing or replacing the AlumaKlad claimed to be defective, including re-installation costs. In no event shall Ryerson be liable for any incidental or consequential damages. Any refinishing of the AlumaKlad shall be performed by using standard finishing practices and materials (and not necessarily AlumaKlad) selected by Ryerson, which reserves the right to approve or negotiate the contract for such refinishing. The warranty on any refinished or replaced AlumaKlad supplied hereunder shall be for the remainder of the warranty period applicable to the AlumaKlad originally coated.

11. Ryerson reserves the right to terminate this warranty at any time upon thirty (30) days advance written notice, except with respect to any product which has already been shipped to the Purchaser.

12. EXCEPT AS SET FORTH HEREIN, RYERSON MAKES NO OTHER WARRANTIES WITH RESPECT TO THE PRODUCT, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

13. All the foregoing conditions constitute material terms of this warranty, and violation by Purchaser, its agents or representatives of any one or more conditions shall release Ryerson from its obligations hereunder.

14. All notices given under or pursuant to this Agreement shall be in writing and either personally delivered or sent by registered or certified mail, postage prepaid, return receipt requested, to the party to whom such notice is to be given, as follows:

    a) Building Products
    Ryerson
    P.O. Box 360
    Minneapolis, MN 55440

    b)

    All such notices, when deposited in the U.S. Mail as set forth above, shall be considered served when so deposited.

15. No terms or conditions other than those stated herein, and no agreement or understanding, oral or written, in any way purporting to modify this warranty shall be binding on Ryerson unless made in writing and signed by its authorized representative.

16. The warranty shall not become effective unless and until signed by both Purchaser and Ryerson, with signed copies exchanged between the above parties.

LENMAK
Exterior Innovations Inc.

Ph: 780.451.5482 Toll Free Ph: 888.451.5482 Fax: 780.451.0865 info@lenmak.com www.lenmak.com

Recommended Cleaning & Maintenance – PVDF (Fluoropolymer) Coatings

Remove protective material from prefinished metal surfaces as soon as possible - before or just after installation. Keep components out of direct sunlight, high heat and/or extreme cold until laminate film is removed.

Cleaning/Removal of Water-Soluble Deposits (eg. Soil, soot, pollen, other particles)

Periodic cleaning with clean water will help to prolong the lifespan of all Lenmak products. Take care to remove dirt from corners and avoid pooling of water and pollutants at joints or edges. The frequency with which gentle cleansing is required will vary depending on the building's location, facing direction of the wall surface, local soil type, weather, pollution, humidity, salinity, and other conditions.

Where dirt and contaminants resist removal with water alone, wash down surfaces with a solution of mild (non-industrial) detergent in warm water, applied with soft, clean wiping cloths. As above, take care to remove dirt from corners and avoid pooling at joints and edges. Do not use steel wool, wire brushes, mechanical pressure-washers, or any other application method which may abrade the finish. Some cleaning chemicals may damage the surface. Test the application method and cleaning agent on an inconspicuous area before proceeding.

Cleaning/Removal of Non-Water-Soluble Deposits (eg. Tar, oil, paint, graffiti, sealants)

Where the above method is ineffective, cleaning with a solvent may be the only effective method. Always test solvents in an inconspicuous area before applying to the rest of the building/wall section. Many solvents are hazardous and should be handled with care; consult manufacturer instructions for safe handling practices and procedures in case of emergency.

Types of solvents may include:

- Alcohols - Ethanol (Denatured Alcohol), Isopropyl (Rubbing Alcohol), Methanol
  - Typically have no permanent effect on fluoropolymer surfaces
- Petroleum Solvents – Naptha Spirits, Mineral Spirits, Turpentine, Kerosene
  - Typically have no permanent effect on fluoropolymer surfaces
- Aromatic Solvents – Xylol (Xylene), Tuluol (Toluene), Perchlorethylene (Perclene), Trichloroethylene (Triclene)
  - Use with caution. Limit contact to a maximum of five minutes and test carefully before using.
- Ketones, Esters – MEK (Methyl Ethyl Ketone), MIBK (Methyl Isobutyl Ketone), Ethyl Acetate (Nail Polish Remover), Lacquer Thinner
  - Use with caution. Limit contact to surface and test carefully before using. It is possible that some solvents of this type may remove fluoropolymer coating; Lenmak is not responsible for damage caused by use of solvents.
- Acetone/Paint Remover – **DO NOT USE**

Misuse of any solvents or cleaning agents may result in voiding of finish warranty.