**PART 1 GENERAL**

* 1. SECTION INCLUDES
1. Requirements for the installation of preformed metal siding, soffit, and fascia.
	1. RELATED SECTIONS
2. Section 01 11 00: Summary of Work
3. Section 01 33 00: Submittal Procedures
4. Section 01 35 00: LEED Requirements
5. Section 01 61 00: Common Product Requirements
6. Section 01 78 00: Closeout Submittals
7. Section 01 74 11: Cleaning
8. Section 05 41 00: Structural Metal Stud Framing
9. Section 06 10 00: Rough Carpentry
10. Section 07 26 00: Air Barriers
11. Section 07 62 00: Sheet Metal Flashing and Trim
12. Section 07 92 00: Joint Sealing
13. Section 09 22 16: Non-Structural Metal Framing
	1. REFERENCES
14. American Society of Testing and Materials International
15. ASTM B117-16, Standard Method of Salt Spray (Fog) Testing.
16. ASTM 2244-15a, Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.
17. ASTM D522/D522M-13, Standard Test Methods for Mandrel Bend Test of Attached Organic Coating.
18. ASTM D968-15, Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasion.
19. ASTM D1005-9592013), Standard Test Method for Measurement of Dry-Film Thickness of Organic Coatings Using Micrometer.
20. ASTM D1308-02(2013) Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Finishes.
21. ASTM D7091-13, Standard Test Method for Non-destructive Measurement of Dry Film Thickness of Nonmagnetic Coatings Applied to Ferrous Metals and Nonmagnetic, Nonconductive Coatings Applied to Non-Ferrous Metals.
22. ASTM D523, Standard Test Method for Specular Gloss.
23. ASTM D2247-15, Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.
24. ASTM D2369-10(2015) e1, Test Method for Volatile Content of Coatings.
25. ASTM D2794-93(2010), Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
26. ASTM D2832-92(2016), Standard Guide for Determining Volatile and Non-volatile Content of Paint and Related Coatings.
27. ASTM D3359-09e2, Standard Test Methods for Measuring Adhesion by Tape Test.
28. ASTM D3363-05(2011) e2, Standard Test Method for Hardness by Pencil Test.
29. ASTM D4214-07(2015), Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films.
30. ASTM D5116-10, Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products.
31. Canadian General Standards Board (CGSB).
32. CAN/CGSB-51.32-M77, Sheathing, Membrane, Breather Type.
33. CAN/CGSB-93.4, Galvanized and Aluminum-Zinc Alloy Coated Steel Siding Soffits and Fascia, Prefinished, Residential.
34. CGSB 93.5, Installation of Metal Residential Siding, Soffits and Fascia.
35. CGSB 19-GP-5m
36. Canada Green Building Council (CaGBC):

1.LEED Canada 2009 Rating System: LEED Canada for New Construction and Major Renovations. LEED Canada for Core and Shell Development. [Website: [www.cagbc.org]](http://www.cagbc.org/)

1. Canadian Standards Association (CSA International).

1. CSA B111-1974(R2003), Wire Nails, Spikes and Staples.

1. Environmental Choice Program (ECP).

1. CCD-045-[95], Sealants and Caulking Compounds.

1. SCAQMD South Coast Air Quality Management District, California State (SCAQMD):

1. SCAQMD Rule #1168, June 2006

1. Canadian Construction Materials Center (CCMC) Number.
2. LUX Architectural Products official CCMC Number: CCMC 14137-L

1.5 SUBMITTALS

1. Product Data: Submit manufacturers printed literature, specifications, and data sheet in accordance with Section 01 33 00.
2. Submit two copies of WHMIS MSDS - Material Safety Data. Indicate VOCs for caulking materials during application and curing.
3. Shop Drawings:
4. Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
5. indicate dimensions, profiles, attachment methods, schedule of wall elevations, trim and closure pieces, [soffits, fascia, metal furring, and related work].
6. Samples:

1. Submit samples in accordance with Section 01 33 00 - Submittal Procedures.

2. Submit duplicate 300 mm samples of siding material of color and profile specified.

1. Manufacturer’s Instructions:

1. Submit manufacturer’s installation instructions.

1. Certifications:

1. Provide laboratory reports or certifications showing compliance with specified tests and standards.

* 1. CLOSEOUT DOCUMENTS
	2. Operation and Maintenance Data: Submit manufacturer’s printed operation and maintenance literature in accordance with Section 01 78 00 – Closeout Submittals. Submit [2] copies for inclusion in the project O&M manual, [4] weeks prior to substantial performance of the work.
	3. Warranty Documentation: Submit manufacturer’s warranty documentation in accordance with Section 01 78 00 – Closeout Submittals. Submit [2] copies for inclusion in the project O&M manual, [4] weeks prior to substantial performance of the work.
1. Record Documentation: Submit recorded documentation in accordance with 01 78 00 – Closeout Submittals. Submit [2] copies for inclusion in the project record documents, [4] weeks prior to substantial performance of the work.
2. Sustainable Design Closeout Documentation: Submit sustainable design documentation in accordance with 01 78 00 – Closeout Submittals. Submit [2] copies, [4] weeks prior to substantial performance of the work.
	1. QUALITY ASSURANCE
3. Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
4. Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
5. Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer’s installation instructions and manufacturer’s warranty requirements.
6. Convene pre-installation meeting two (2) week prior to beginning [work of this Section] [on-site installation], with [install contractor’s representative] [Owner Representative] [Consultant] in accordance with [Section [01 32 16.06 - Construction Progress.
7. Schedule - Critical Path Method (CPM)]] [Section [01 32 16.07 - Construction Progress Schedule - Bar (GANTT) Chart]] to:

Verify project requirements.

* 1. Review installation and substrate conditions.
	2. Co-ordination with other building sub-trades.
	3. Review [manufacturer’s] installation instructions and warranty requirements.
1. Manufacturer: All products and components from same manufacturer/supplier.
2. Sustainable Standards Certification: Sustainability Standards Certification:
	1. Recycled Content: [provide listing of recycled content products used, including details of required percentages or recycled content materials and products, showing their costs and percentages of [post-consumer] [post-industrial] content, and total cost of materials for project].
	2. Regional Materials: provide evidence that project incorporates required percentage [10] [20] % of regional materials/products, showing their cost, distance from project to furthest site of extraction or manufacture, and total cost of materials for project.
3. Mock-ups: construct in accordance with Section 01 45 00 - Quality Control & to requirements supplemented as follows:
	1. Provide mock-up for evaluation of surface finishes and workmanship.
	2. Provide initial production units for job-site assembly with other materials for review and approval.
	3. Co-ordinate type and location of mock-ups with project requirements.
	4. Accepted units will be used as the standard for acceptance of production units.
	5. Remove and replace units, which are not accepted.
	6. Do not proceed with remaining work until workmanship, color, and finish are reviewed and approved by Architect.
	7. Refinish mock-up area as new.
	8. Approved mock-up may [not] remain as part of finished work.
	9. Remove mock-up and dispose of materials when no longer required and when directed by Architect.

## **1.8 EXTENDED WARRANTY**

### .1 Provide a written guarantee, signed and issued in the name of the owner, covering the metal cladding/cladding material for 40 (fourty) years from the date of Substantial Completion.

### .2 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.

**PART 2 PRODUCTS**

2.1 CLADDING MANUFACTURER

1. LUX Architectural Products, Inc.; 14525 112 Avenue N.W., Edmonton, Alberta T5M2V5; (800) 540-0589; [www.luxarpro.com](http://www.luxarpro.com)
2. STEEL CLADDING AND COMPONENTS

 .1 LUX Neo-Lumber (Size to be specified) 24ga (0.0255”) steel AZ150

 .2 Finish Paint : 3-Coat PVDF 70 percent resin

 .3 Color : Color chosen by owners representative

 .4 Thickness: 0.0255” total material thickness

 .5 Lengths: 96 inch (2438mm) or 120 inch (3048mm) or 144 inch (3657mm)

**PART 3 EXECUTION**

3.1 MANUFACTURER’S INSTRUCTIONS

1. Compliance: comply with manufacturers written data, including product technical bulletins, product installation instructions, and data sheets.
2. Install Cladding and components in accordance with manufacturer’s installation manuals and videos.
	1. EXAMINATION
3. Confirm acceptability of wall sheathing of soundness, measurement, and flatness.
4. Verify that building framing members are ready to receive siding system.