

Partie 1 General

1.1 RELATED SECTIONS

- .1 [DIVISION 1]
- .2 [Section 07 90 00 - Joint sealers.]

1.2 REFERENCES

- .1 American Society of Mechanical Engineers (ASME)
 - .1 ASME B18.6.3-2013, Machine Screws, Tapping Screws, and Metallic Drive Screws (Inch Series).
- .2 American Society for Testing and Materials (ASTM)
 - .1 ASTM 653/A A653M - 15e1 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
 - .2 ASTM D 2369-10, Standard Test Method for Volatile Content of Coatings.
 - .3 ASTM D 2832-92(R2016), Standard Guide for Determining Volatile and Nonvolatile Content of Paint and Related Coatings.
 - .4 ASTM D 5116-10, Standard Guide For Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products.
 - .5 ASTM D 4214-07 (2015), Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films
 - .6 ASTM D 2244-16, Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-51.32-M77, Sheathing, Membrane, Breather Type..
 - .2 CAN/CGSB-93.3-M91, Prefinished Galvanized and Aluminum-Zinc Alloy Steel Sheet for Residential Use.
 - .3 CAN/CGSB-93.4-92, Galvanized Steel and Aluminum-Zinc Alloy Coated Steel Siding Soffits and Fascia, Prefinished, Residential.
 - .4 CGSB 93.5-92, Installation of Metal Residential Siding, Soffits and Fascia.
- .4 Canadian Standards Association (CSA)
 - .1 CAN/CSA-A247-96, Insulating Fibreboard.
 - .2 CSA B111-1974, Wire Nails, Spikes and Staples.
- .5 Underwriters Laboratories (UL)
 - .1 UL 2761, Sealants and Caulking Compounds
- .6 Underwriters Laboratories (Canada) ULC
 - .1 CAN/ULC-S706-09, STANDARD FOR WOOD FIBRE INSULATING BOARDS FOR BUILDINGS
 - .2 CAN/ULC-S741-08 STANDARD FOR AIR BARRIER MATERIALS - SPECIFICATION

1.3 SAMPLES AND PROJECT DOCUMENTATION

- .1 Data sheets

- .1 Submit steel siding manufacturer's data sheets and pertinent technical documentation. Data sheets must contain product specifications, size, performance, limits and finishes.
- .2 Submit samples in accordance with [Division 01] [section 01330 - Submittal Procedures].
- .3 [Submit [duplicate] [] x [] mm samples of siding material, from Série Granite [and, or] Série Métallisée, of the following colour:]
 - .1 [Argent Métallique- QC 130842]
 - .2 [Noir Jet - QC 60039]
 - .3 [Gris Graphite - QC 60035]
 - .4 [Brun Sépia - QC 60041]
- .4 [Submit duplicate [] x [] mm samples of siding material, from Série Bois hue, of the following colour:]
 - .1 [Espresso - QC 182525]
 - .2 [Gris urbain - QC 182535]
 - .3 [Sequoia - QC 182530]
 - .4 [Cèdre des bois- QC 182783]
 - .5 [Noir Fumé - QC 182786]
 - .6 [Désert - QC 182780]
 - .7 [Noyer exotique - QC 182795]

1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Divert used metal cut-offs from landfill by disposal [into the on-site metals recycling bin] [removed for disposal at the nearest metal recycling facility].
- .2 Divert reusable materials for reuse at nearest used building materials facility.
- .3 Divert unused caulking, sealants, and adhesive materials from landfill through disposal at hazardous material depot.
- .4 Separate and recycle waste materials in accordance with Section [01355 - Waste Management and Disposal], and with Waste Reduction Workplan.
- .5 Place materials defined as hazardous or toxic waste in designated containers.
- .6 Ensure emptied containers are sealed and stored safely for disposal away from children.

1.5 TRANSPORT, HANDLING AND STORAGE

- .1 Transport store and handle the products per [Section 01 61 00 - Basic product requirements] [and] [Manufacturer's written instructions].
- .2 Delivery and reception: All materials and accessories to be delivered on site, in their original packaging, bearing the manufacturer's identification.
- .3 Upon receiving a shipment, proceed with an inspection to assess any potential damage related to transportation and to assess order fulfillment. Do not install any product that could have been damaged, or for which the paint or finish could have been altered during transport or handling.
 - .1 Installed materials and accessories are considered free of transport and handling related defect;
 - .2 Store [sidings] adequately to prevent [Scuff marks, graze and scratches]

- .3 Replace all damaged materials and accessories with new ones.
- .4 Store siding and accessories in a dry, well ventilated place, inside, to manufacturer's recommendation.
- .5 If however siding and accessories are left outside, follow the manufacturer's recommendations, do not store in broad daylight and/or in freezing temperatures (protective plastic wrap might be difficult to remove and/or might leave glue residue).
 - .1 In order to mitigate any weather related damages, store under a protective tarp
- .6 Before any installation, keep materials and accessories above freezing temperatures for at least [24] [48] hours. Do not try to remove the protective wrap [in freezing temperatures] [under 0°C].
- .7 Handle siding packages strictly following written instructions. To prevent planar deformation, always lift the boxes short side up, not widthway.
- .8 Wear protective equipment, including gloves, safety goggles, hard hat and safety boots, in order to prevent injuries, as with the handling of any sheet metal products.

1.6 SITE CONDITIONS

- .1 Only carry out the work described in this section when the environmental conditions are within the manufacturer's recommended set regarding temperature, relative humidity and ventilation.
- .2 Do not install in areas subject to salt sprays or exposed to artificially or naturally occurring harsh chemicals.
- .3 Do not instal within 1 000 meters from salt water.

1.7 WARRANTY

- .1 Order all necessary materials at once and obtain from the manufacturer that it comes form the same lot.
 - .1 Consider material loss percentage according to job complexity.
- .2 In order for the manufacturer to honor his warranty all materials and accessories to be installed as per National Building Code (NBC) most recent version and written manufacturer's instructions.
 - .1 All installation work to be carried strictly following NBC and applicable local bylaws.
- .3 In accordance with the relevant clauses, conditions and exceptions of the manufacturer's warranty:
 - .1 Metalunic Design warranties that the "série Granite Deep Mat" and the "Série Bois" (collectively designated as the "Products" within the warranty) pre-painted, steel cladding paint film will not show, on a routine inspection, any sign of flaking, peeling, flecking and loss of adhesion, for a period of forty (40) years from the delivery date, in a normal environmental set (excluding all corrosive or aggressive environment such as any chemically contaminated area or marine environment), for installation projects in Canada and continental US, including Alaska.
 - .2 Obtain a copy of the manufacturer's warranty and provide it to the Client.

Partie 2 Products

2.1 METAL CLADDING

- .1 Siding "Le Distinction":
 - .1 MetalUnic Design
164, rue Royal,
Les Coteaux (Qc)
J7X 1A6
Phone : (450)267-2330
Fax : (450)267-2582
- .2 Strip siding Le Distinction to CGSB 93.4.: Class [Plain [Série Métallisée, Série Granite]] [patterned [Série bois nuance]], [horizontal] [and, or] [vertical], [and, or] [diagonal],
 - .1 Finish coating : Class F2S, with back finish:
 - .1 [Perspectra paint (Série Bois nuance)] [polyester paint (série Granite)].
 - .2 Colour : [Selected by [Architecte] [Client]].
 - .3 Base Metal thickness : [0.46mm 26Ga] [Série Métallisée: 0.64mm, 24Ga].
 - .4 Galvanisation: To ASTM A653, G90
 - .5 Standard Profile: 11mm deep preformed interlocking joints, fastener holes prepunched.
 - .1 Fastener holes: 3/4" (19mm)
 - .2 Fastener holes spacing: 2-1/4" (57mm)
 - .6 Physical properties:
 - .1 Yield point (min) $F_y = 33,000.00$ P.S.I (228Mpa)
 - .2 Maximal stress $F_b = 60,000.00$ P.S.I (144Mpa)
 - .3 Young Modulus = 29,500,000.00 P.S.I (203Mpa)
- .3 Soffit, perforated or smooth, Le Distinction: to CGSB 93.4.: Class [Plain [Série Métallisée, Série Granite]] [patterned [Série bois nuance]], [parallel to wall] [and, or] [perpendicular to wall]:
 - .1 Finish coating : Class F2S, with back finish:
 - .1 [Perspectra paint (Série Bois nuance)] [polyester paint (série Granite)].
 - .2 Colour : [Selected by [Architecte] [Client]].
 - .3 Base Metal thickness : [0.46mm 26Ga] [Série Métallisée: 0.64mm, 24Ga].
 - .4 Galvanisation: To ASTM A653, G90
 - .5 Standard Profile: 11mm deep preformed interlocking joints, fastener holes prepunched..
 - .1 Fastener holes: 3/4" (19mm)
 - .2 Fastener holes spacing: 2-1/4" (57mm)
 - .6 Physical properties:
 - .1 Yield point (min) $F_y = 33,000.00$ P.S.I (228Mpa)
 - .2 Maximal stress $F_b = 60,000.00$ P.S.I (144Mpa)
 - .3 Young Modulus = 29,500,000.00 P.S.I (203Mpa)
 - .7 Standard vented profile: [2.75 sq inches per linear feet (58.17 cm² per linear meter) opening] [preformed with elongated slits and small perforations] fastener holes prepunched.

- .1 Fastener holes: 3/4" (19mm)
- .2 Fastener holes spacing: 2-1/4" (57mm)
- .8 Physical properties:
 - .1 Yield point (min) $F_y = 33,000.00$ P.S.I (228Mpa)
 - .2 Maximal stress $F_b = 60,000.00$ P.S.I (144Mpa)
 - .3 Young Modulus = 29,500,000.00 P.S.I (203Mpa)
- .4 Fascia facings and exposed trim: Sheet metal Le Distinction to CGSB 93.4: Class [Smooth [Série Métallisée, Série Granite]] [patterned [Série bois nuance]]
 - .1 Finish coating: Class F1S.
 - .2 Colour : [[as adjacent Le Distinction siding finish] [selected by [Architect] [and, or] [Client]].
 - .3 Base Metal thickness : [0.46mm 26Ga] [Série Métallisée: 0.64mm, 24Ga].
 - .4 Galvanisation: To ASTM A653, G90
 - .5 Profile : Flatstock roll
 - .1 Série Bois Nuance: 16" x 50'-0" (0,406m x 15.25m)
 - .2 Other colours: 24" x 75'-0" (0,61m x 22,86m)

2.2 ACCESSOIRES

- .1 Exposed trim: inside corners, outside corners, cap strip, drip cap, undersill trim, starter strip and window/door trim of same [material], [colour] [and] [gloss] as cladding, with fastener holes pre-punched.
 - .1 Always leave 1/8" gap for vertical assemblies and 1/4" for horizontal assemblies involving trims.
- .2 Standard prefinished trims (finish and colour as adjacent cladding):
 - .1 "J" Trim
 - .2 Drip Cap
 - .3 Partition trim
 - .4 Conversion trim
 - .5 Starting strip
 - .6 Exterior corner
 - .7 Inside corner
- .3 Manufacturer's special trim, designed as requested, per project specifications:
 - .1
- .4 Non-exposed accessories: material is required for .
- .5 Furring strips: [1x4] [galv. furring channel, 1.59mm (16Ga)] [galv. Z-furring channel, mm] deep, 1.59mm (16Ga)].
- .6 Touch-up paint as provided by manufacturer for selected finish and colour.

2.3 FASTENERS

- .1 Screws to ANSI B18.6.4. Purpose made, by manufacturer.
 - .1 [K-Lath screws, #8 x 1-1/8", [406 mm (16")] apart on wood furring strips.
 - .2 [Self-tap screws #8 x 1/2", [406 mm (16")] apart on galv. furring channels.

2.4 CAULKING

- .1 Sealants : [].

2.5 SHEATHING MEMBRANES

- .1 Exterior wall sheathing membrane: to CAN2-51.32, [single ply] [laminated] [spunbound olefin] type [coated] [impregnated] [as indicated].
 - .1 Acceptable Material: [].

Partie 3 Execution**3.1 INSTALLATION**

- .1 Install Le Distinction cladding in accordance with CGSB 93.5, and manufacturer's written instructions
- .2 Le Distinction siding to be installed:
 - .1 Horizontally
 - .2 Vertically
 - .3 Diagonally
 - .4 As per plans
- .3 Prior to any installation work, proceed with an inspection to ensure surface is straight, plumb, rigid and ready to receive siding work. Preliminary inspection is paramount to a successful, warp-free installation.
- .4 Install exterior wall sheathing [air barrier] [weather barrier] membrane as per manufacturer's written instructions, lapping edges at least 50mm for glued membranes and 150mm for mechanically fastened membranes.
- .5 Maintain air circulation behind cladding to prevent risks of condensation:
 - .1 Install cladding on furring, 16" (406mm) apart, properly aligned, perpendicular to cladding.
 - .2 Fitting joints to be centered on furring.
 - .3 Vertical cladding installation to be installed on discontinuous horizontal furring strips, with at least 2" (50mm) between furring sections.
- .6 Install continuous starter strips, inside [and outside] corners, edgings, soffit, drip, cap, sill and window/door opening flashings as indicated.
- .7 Install outside corners, fillers and closure strips with carefully formed and profiled work.
- .8 Install soffit and fascia cladding as indicated.
- .9 Attach components in manner not restricting thermal movement. Comply with manufacturer's instructions.
 - .1 Install screws, centered in fasteners holes, at right angle to cladding, using moderate torque. Do not angle the screws.
 - .2 All cladding joints to be perfectly aligned and abutted.
 - .3 In order to ensure sufficient material expansion, always leave 1/8" between each subsequent piece. When laying a new piece, always start by installing a screw in the first fastener hole.
- .10 The use of a specialized DISTINCTION GUILLOTINE is recommended by the manufacturer to execute any needed cuts. As per manufacturer's instructions, only use undamaged off-cuts, for which the overlap notch is preserved, to start new rows.
 - .1 Do not use off-cuts smaller than 16" (405mm).
- .11 Always apply touch-up paint on all cuts, visible or not. Dab touch-up paints on surface scratches.
- .12 Remove protective wrap and conduct a visual inspection after each strip installation. Proceed with a detailed visual inspection every 3rd or 4th row in order to detect defects. Immediately correct substandard work or any condition that could void the manufacturer's warranty.

- .1 Do not attempt to remove the protective wrap under 0°C.
- .13 Caulk junctions with adjoining work with sealant. Do work in accordance with Section [07900 - Joint Sealers].

3.2 SÉRIE NUANCÉE (6 HUES) INSTALLATION

- .1 The Bois Nuance paint systems mimics wood. Each box contains 2 pieces for each of the six hues and all pieces are numbered from 1 to 6 on the fastening strip.
- .2 Use a [random] [semi-random] pattern when installing the 6 numbered / different hue pieces.
- .3 Always perform a pattern inspection. Every 3rd or 4th row, step back to observe and correct any visual discrepancies in the pattern or correct pattern repetitions.
- .4 In order to get a wood siding effect, always break installation pattern, both horizontally and vertically and create joints centered on the furrings.

3.3 OPENINGS

- .1 Install mouldings around openings as per manufacturer's instructions.
- .2 When notching pieces, to fit on the top or at the bottom of openings, keep an additional 1/2" (13mm) to fold a 45 degree bracing crease.

END