

PART 1 - GENERAL

- 1.1 REFERENCES
- .1 Canada Green Building Council (CaGBC)
 - .1 LEED Canada 2009 for Design and Construction, LEED Canada 2009 for Design and Construction Leadership in Energy and Environmental Design Green Building Rating System Reference Guide.
 - .2 Sheet Metal and Air Conditioning Contractors' National Association (SMACNA)
 - .3 Society of Automotive Engineers (SAE)
- 1.2 ACTION AND INFORMATIONAL SUBMITTALS
- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for louvers, intakes and vents and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Indicate following:
 - .1 Pressure drop.
 - .2 Face area.
 - .3 Free area.
 - .4 Dimensions
 - .3 Certificates: submit certificates signed by manufacturer certifying that materials comply with specified performance characteristics and physical properties.
 - .4 Test Reports: submit certified data from independent laboratory substantiating acoustic and aerodynamic performance to ASTM E 90.
 - .5 Sustainable Design Submittals:
 - .1 LEED Canada submittals: in accordance with Section 01 35 21 - LEED Requirements.
 - .2 Construction Waste Management:
 - .1 Submit project Waste Management Plan highlighting recycling and salvage requirements.
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- 1.2 ACTION AND INFORMATIONAL SUBMITTALS
(Cont'd)
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- .5 Sustainable Design Submittals:(Cont'd)
- .2 Construction Waste Management:(Cont'd)
 - .2 Submit calculations on end-of-project recycling rates, salvage rates, and landfill rates demonstrating that 75% of construction wastes were recycled or salvaged.
 - .3 Recycled Content:
 - .1 Submit 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 and post-industrial content, and total cost of materials for project.
 - .4 Regional Materials: submit evidence that project incorporates required percentage 30% of regional materials and products, showing their cost, distance from project to furthest site of extraction or manufacture, and total cost of materials for project.
- 1.3 DELIVERY, STORAGE AND HANDLING
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- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
 - .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
 - .3 Storage and Handling Requirements:
 - .1 Store materials indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect louvers, intakes and vents from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.
 - .4 Develop Construction Waste Management Plan related to Work of this Section and in accordance with Section 01 35 21 - LEED Requirements.
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1.3 DELIVERY, STORAGE AND HANDLING
(Cont'd)

.5 Packaging Waste Management: remove for reuse or return of pallets, crates, padding, banding, and packaging materials as specified in Construction Waste Management Plan in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal and Section 01 35 21 - LEED Requirements.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

.1 Performance Requirements:
.1 Catalogued or published ratings for manufactured items: obtained from tests carried out by manufacturer or those ordered by manufacturer from independent testing agency signifying adherence to codes and standards.

2.2 GRAVITY ROOF OUTSIDE AIR INTAKES AND RELIEF VENTS

.1 Factory manufactured galvanized steel hinged at curb line.
.1 Complete with integral birdscreen of 2.7 mm diameter ss wire.
.2 Vertical backdraft dampers on 4 faces.
.3 Maximum throat velocity: 3.3 m/s intake.
.4 Maximum loss through unit: 15 Pa exhaust static pressure.
.5 Maximum velocity through damper area: 1.5 m/s.
.6 Shape: as per drawings.

.2 Birdscreens:
.1 Complete with integral birdscreen of 2.7 mm diameter ss wire. Use 12 mm mesh on exhaust 19 mm mesh on intake.

2.3 FIXED LOUVRES - ALUMINUM

.1 Construction: welded with exposed joints ground flush and smooth.

.2 Material: extruded and anodized aluminum alloy 6063-T5.

.3 Blade: drainable stormproof pattern with centre watershed in blade, reinforcing bosses and maximum blade length of 1500 mm.

- 2.3 FIXED LOUVRES - ALUMINUM
(Cont'd)
- .4 Frame, head, sill and jamb: 150 mm deep one piece extruded aluminum, minimum 3 mm thick with approved caulking slot, integral to unit.
 - .5 Mullions: at 1500 mm maximum centres.
 - .6 Fastenings: stainless steel SAE-194-8F with SAE-194-SFB nuts and resilient neoprene washers between aluminum and head of bolt, or between nut, ss washer and aluminum body.
 - .7 Screen: 12 mm exhaust 19 mm intake mesh, 2 mm diameter wire aluminum birdscreen on inside face of louvres in formed U-frame.
 - .8 Finish: factory applied premium polymer finish for all louvres. Colour: to Departmental Representative's approval at shop drawing review. Submit colour chips and samples with shop drawings for colour selector. Finish shall be rated for 25 years with minimum warranty of 5 years.

PART 3 - EXECUTION

- 3.1 EXAMINATION
- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for louvres, intakes and vents installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.
- 3.2 INSTALLATION
- .1 In accordance with manufacturer's and SMACNA recommendations.
 - .2 Reinforce and brace as indicated.
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