

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.
- 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 diffusers, registers and grilles and include product characteristics, performance criteria, physical size, finish and limitations.
.2 Indicate following:
.1 Capacity.
.2 Throw and terminal velocity.
.3 Noise criteria.
.4 Pressure drop.
.5 Neck velocity.
- .3 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.
.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.
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| 1.2 ACTION AND
INFORMATIONAL
SUBMITTALS
(Cont'd) | .3 Sustainable Design Submittals: (Cont'd)
.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 MAINTENANCE
MATERIAL SUBMITTALS | .1 Extra Materials:
.1 Provide maintenance materials in accordance with Section 01 78 00 - Closeout Submittals.
.2 Include:
.1 Keys for volume control adjustment.
.2 Keys for air flow pattern adjustment. |
| 1.4 DELIVERY,
STORAGE AND
HANDLING | .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 diffuser, registers and grilles 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.
.5 Packaging Waste Management: remove for reuse or return of pallets, crates, padding, banding, and packaging materials as specified |
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1.4 DELIVERY, STORAGE AND HANDLING (Cont'd)	.5 Packaging Waste Management: (Cont'd) 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.
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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.
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2.2 GENERAL	.1 To meet capacity, pressure drop, terminal velocity, throw, noise level, neck velocity as indicated.
	.2 Frames: .1 Full perimeter gaskets. .2 Plaster frames where set into plaster or gypsum board and as specified. .3 Concealed fasteners.
	.3 Concealed manual volume control damper operators.
	.4 Colour: standard or as directed by Departmental Representative.

2.3 MANUFACTURED UNITS	.1 Grilles, registers and diffusers of same generic type, products of one manufacturer.
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2.4 SUPPLY GRILLES AND REGISTERS	.1 General: with opposed blade dampers.
	.2 See schedule drawing for types, sizes and details.

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| <u>2.5 RETURN AND
EXHAUST GRILLES AND
REGISTERS</u> | .1 | General: with opposed blade dampers. |
| | .2 | See schedule drawing for types, sizes and details. |

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| <u>2.6 DIFFUSERS</u> | .1 | General: volume control dampers with flow straightening devices and blank-off quadrants and gaskets. |
| | .2 | See schedule drawing for types, sizes and details. |

PART 3 - EXECUTION

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| <u>3.1 EXAMINATION</u> | .1 | Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for diffuser, register and grille 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. |

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| <u>3.2 INSTALLATION</u> | .1 | Install in accordance with manufacturers instructions. |
| | .2 | Install with flat head cadmium plated screws in countersunk holes where fastenings are visible. |

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| <u>3.3 CLEANING</u> | .1 | Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning. |
| | .1 | Leave Work area clean at end of each day. |
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- 3.3 CLEANING
(Cont'd)
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
 - .3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal and Section 01 35 21 - LEED Requirements.
 - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.