

PART 1 - GENERAL

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| <u>1.1 REFERENCES</u> | .1 | Sheet Metal and Air Conditioning National Association (SMACNA)
.1 SMACNA HVAC Duct Construction Standards, Metal and Flexible-Latest Edition. |
| | .2 | Health Canada/Workplace Hazardous Materials Information System (WHMIS)
.1 Material Safety Data Sheets (MSDS). |
| <u>1.2 ACTION AND INFORMATIONAL SUBMITTALS</u> | .1 | Product Data:
.1 Submit manufacturer's printed product literature, specifications and datasheet in accordance with Section 01 33 00 - Submittal Procedures. Include product characteristics, performance criteria, and limitations. |
| <u>1.3 QUALITY ASSURANCE</u> | .1 | Health and Safety Requirements:
.1 Do construction occupational health and safety in accordance with Section 01 35 29.06 - Health and Safety Requirements. |
| <u>1.4 DELIVERY, STORAGE, AND HANDLING</u> | .1 | Packing, shipping, handling and unloading:
.1 Deliver, store and handle in accordance with Section 01 61 00 - Common Product Requirements. |
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PART 2 - PRODUCTS

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| <u>2.1 GENERAL</u> | .1 | Manufacture to SMACNA standards. |
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| <u>2.2 SINGLE BLADE
DAMPERS</u> | .1 | Fabricate from same material as duct, but one sheet metal thickness heavier. V-groove stiffened. |
| | .2 | Size and configuration to recommendations of SMACNA. |
| | .3 | Locking quadrant with shaft extension to accommodate insulation thickness. |
| | .4 | Inside and outside bronze end bearings. |
| | .5 | Channel frame of same material as adjacent duct, complete with angle stop. |
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| <u>2.3 MULTI-BLADED
DAMPERS</u> | .1 | Factory manufactured of material compatible with duct. |
| | .2 | Opposed blade: configuration, metal thickness and construction to recommendations of SMACNA. |
| | .3 | Maximum blade height: 100 mm. |
| | .4 | Bearings: pin in bronze bushings. |
| | .5 | Linkage: shaft extension with locking quadrant. |
| | .6 | Channel frame of same material as adjacent duct, complete with angle stop. |
| | .7 | Maximum leakage : 5% at 300 Pa. |
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PART 3 - EXECUTION

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| <u>3.1 MANUFACTURER'S INSTRUCTIONS</u> | .1 | Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheet. |
| <u>3.2 INSTALLATION</u> | .1 | Install where indicated. |
| | .2 | Install in accordance with recommendations of SMACNA and in accordance with manufacturer's instructions. |
| | .3 | Locate balancing dampers in each branch duct, for supply, return and exhaust systems. |
| | .4 | Runouts to registers and diffusers: install single blade damper located as close as possible to main ducts. |
| | .5 | Dampers: vibration free. |
| | .6 | Ensure damper operators are observable and accessible. |
| | .7 | Corrections and adjustments conducted by Engineer. |
| <u>3.3 FIELD QUALITY CONTROL</u> | .1 | Tests:
.1 Tests to cover period of not less than 3 days and demonstrate that system is functioning as specified. |
| <u>3.4 CLEANING</u> | .1 | Proceed in accordance with Section 01 74 11 - Cleaning. |
| | .2 | Upon completion and verification of performance of installation, remove surplus |
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3.4 CLEANING	.2	(Cont'd)
<u>(Cont'd)</u>		materials, excess materials, rubbish, tools and equipment.