

AIR DUCT ACCESSORIES

1. GENERAL

1.1 Summary

.1 Section Includes:

- .1 Materials and installation for duct accessories including flexible connections, access doors, vanes and collars.

1.2 References

- .1 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
 - .1 Material Safety Data Sheets (MSDS).
- .2 Sheet Metal and Air Conditioning Contractors' National Association (SMACNA).
 - .1 SMACNA - HVAC Duct Construction Standards - Metal and Flexible.

1.3 Submittals

- .1 Submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's printed product literature, specifications and data sheet. Indicate the following:
 - .1 Flexible connections.
 - .2 Duct access doors.
 - .3 Instructions: submit manufacturer's installation instructions.
 - .4 Closeout submittals: submit maintenance and engineering data for incorporation into manual specified in Section 01 33 00 - Submittal Procedures.

2. PRODUCTS

2.1 General

- .1 Manufacture in accordance with SMACNA - HVAC Duct Construction Standards.

2.2 Flexible Connections

- .1 Frame: galvanized sheet metal frame 45 mm thick with 76mm thick fabric clenched by means of double locked seams.
- .2 Material:

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- .1 Fire resistant, self extinguishing, neoprene coated glass fabric, temperature rated at minus 40 degrees C to plus 90 degrees C, density of 1.3 kg/m².

2.3 Access Doors In Ducts

- .1 Non-Insulated Ducts: sandwich construction of same material as duct, one sheet metal thickness heavier, minimum 0.6 mm thick complete with sheet metal angle frame.
- .2 Insulated Ducts: sandwich construction of same material as duct, one sheet metal thickness heavier, minimum 0.6 mm thick complete with sheet metal angle frame and 25 mm thick rigid glass fibre insulation.
- .3 Gaskets: neoprene.
- .4 Hardware:
 - .1 Up to 300 x 300 mm: two sash locks.
 - .2 301 to 450 mm: four sash locks.
 - .3 451 to 1000 mm: piano hinge and minimum two sash locks.

2.4 Turning Vanes

- .1 Factory or shop fabricated single thickness with trailing edge, to recommendations of SMACNA and as indicated.

2.5 Spin-In Collars

- .1 Conical galvanized sheet metal spin-in collars with lockable butterfly damper.
- .2 Sheet metal thickness to co-responding round duct standards.

3. EXECUTION

3.1 Manufacturer's Instructions

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and data sheet.

3.2 Installation

- .1 Flexible Connections:
 - .1 Install in following locations:
 - .1 Inlets and outlets to supply air units and fans.
 - .2 Inlets and outlets of exhaust and return air fans.
 - .3 As indicated.

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- .2 Minimum distance between metal parts when system in operation: 50 mm.
- .3 Install in accordance with recommendations of SMACNA.
- .4 When fan is running:
 - .1 Ducting on sides of flexible connection to be in alignment.
 - .2 Ensure slack material in flexible connection.
- .2 Access Doors and Viewing Panels:
 - .1 Size:
 - .1 300 x 300 mm for viewing.
 - .2 As indicated.
 - .2 Locations:
 - .1 Fire and smoke dampers.

3.3 Cleaning

- .1 Perform cleaning operations in accordance with manufacturer's recommendations.
- .2 Upon completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

END OF SECTION