DEC INTERNATIONAL TECHNICAL SPECIFICATIONS





Smartdec® a unique Green flexible duct, which contains no PVC!

An Emission free flexible duct for residential, new build & renovation applications consist out of a durable multiple layer Polypropylene fabric wall construction, with an interlocked spring-helix for a smoother inside. Inside duct wall is laminated with an environmental friendly DECPROTECT™ Anti-bacterial & Anti-fungus Inner liner to create an airtight inner surface with excellent properties regarding:

- ✓ **DECPROTECTTM** microbial resistance according to ISO 846 A
- ✓ HVAC uses EN13180
- ✓ Leakage D/ATC 2 up to +1000Pa
- ✓ The polypropylene duct wall offers good resistance to non-oxidizing acids/bases/ fatty agents/most organic solvents
- ✓ Highly impermeable to water;

APPLICATIONS:

- Residential ventilation;
- · Standard ductwork EN 13180;
- Air treatment installations;
- · Distribution, plenum boxes;
- · Retrofit ventilation channels;

Unique selling points:

- ✓ No PVC
- √ No Emissions
- ✓ Smartdec® Inner liner anti-microbe
- ✓ Energy saving by less pressure loss
- ✓ Environmental friendly
- ✓ Durable
- ✓ Easy to install
- √ No emissions
- ✓ 100% recyclable

Specification

Article code: SMAD[Ø]
Color: Green
Diameter range: 82-315mm
Temperature range: -20°C to 60°C
Operating pressure: up to 1000Pa

Fire resistance EN-13501: D-s1,d0 based on Smoothdec® test result

Operating air velocity: max. 4m/s Min bending radius: $R=0.54 \times Ø$

Airtightness class: ATC 2 Class D till 1000Pa ISO 22196 antimicrobial: 99,9% effectiveness ISO 16869 fungistatic: 99,9% effectiveness

ISO 184 Method A (11/2020) class 0

Hygienic packaging: Each length is packed individual Mounting: See mounting instruction

Standard length in meter: 10Mtr

Reach/RoHs Compliant
Directive 2011/65/EU RoHS

Phthalates according to 1907/2006/EC REACH

TÜVRheinland®

Test result: Pass - The test items meets the requirements of the test specification



LIABILITY:

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PLEASE NOTICE:

The consultant is responsible for the actual installation and mounting of the product. The mentioned values with respect to temperatures are not appropriate to be used to determine the physical properties. These properties are also dependent on humidity and the temperature of the air inside and outside of the H.V.A.C. system.

TRADEMARKS:

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Dutch Environment Corporation BV in the Netherlands and/or other countries.

RESTRICTIONS: The ducts are not suitable for

Ine ducts are not suitable for discharging combustion products from open fireplaces and oil-fired boilers. Neither are the ALUDEC ducts suitable for transporting air with a high concentration of acid and base.

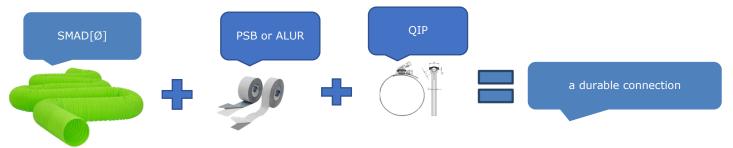
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The Smartdec® fulfills all the requirements and are classified as specified within EN 13180: Ventilation for buildings - Ductwork - Dimensions and mechanical requirements for flexible ducts.

Mountings instructions:



In summary all you need to build the inlet for a flexible ductwork system:

- Smartdec® diameter according installation space, air volume and aimed pressure loss;
- Smartdec® length; when a longer length is used than 2 meter;
- Fixated the fully stretched duct each 2 meters by brackets [SBRØ],
- To fixate the connect ends to the HVAC components [PSB] + [QIPØ]
- Please take care the **Smartdec**® duct is always fully stretched.

In addition to your needs;

- Air valves for example [RONDOØ] exhaust/supply;
- Other DEC ventilation components; see DEC's Delivery program www.decinternational.com



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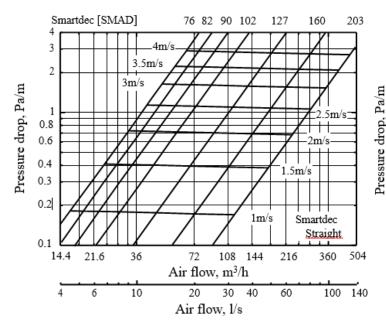
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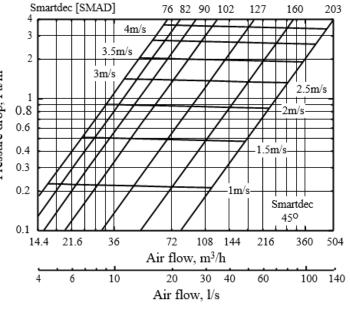




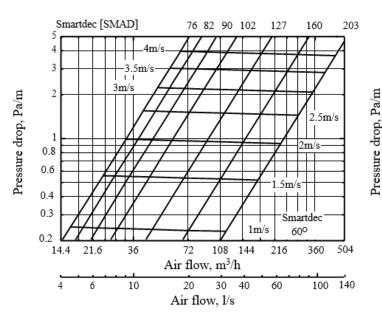
Pressure drop Straight length



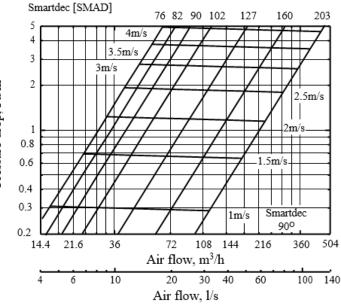
Pressure drop at 45°



Pressure drop at 60°



Pressure drop at 90°



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