COMBIDEC®

COMBIDEC[®] ducts are solid, very flexible, ectremly strong laminate ducts for different ranges of application. The duct consists of several layers of aluminum, polyester and copolymer. The ducts can be attached easily to round and oval connection parts. The fire resistance of the **COMBIDEC**[®] ducts has been tested in several countries, according to the current international standards. For specific information about the different ducts we refer to the product information sheet.



The base of the **COMBIDEC**® series is an aluminum laminate duct with an outer jacket of copolymer.

The used laminate has been developed by **DEC BV** trading under the name: **DEC International**® and has been composed of a "sandwich construction". The different layers of copolymer and aluminum are overlapping each other completely. This provides a very strong construction. The outer jacket is wear resistant and steam-tight.

The advantages of a **COMBIDEC®** duct towards PVC ducting:

- Higher temperature resistance.
- Less smoke development in the case of fire.

The advantages of a **COMBIDEC®** duct towards aluminium laminated ducting:

- Higher tear resistance.
- Better mechanical protection against external influences.
- Better resistance under local pressure.
- Higher resistance against puncture.

The Standard COMBIDEC® color is Grey metallic.

Colors on request:

- Black.
- White.

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

Restrictions in the range of application

The **COMBIDEC**[®] ducts are not suitable for discharging combustion products from open fireplaces and oil-fired boilers. Neither are the **COMBIDEC**[®] ducts suitable for transporting air with a high concentration of acid and base.

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.

To select the appropriate **COMBIDEC®** product, consult the table on the next page.

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COMBIDEC®

| | COMBIDEC® 2000 | COMBIDEC® 2100 | COMBIDEC® 2300 |
|---------------------------------|-------------------|-------------------|-------------------|
| Mechanical properties | | | |
| Temperature range (°C) | -30 - +140 | -30 - +140 | -30 - +140 |
| Maximum operating pressure (Pa) | +3000 | +3000 | +3000 |
| Maximum velocity of air (m/s) | 30 | 30 | 30 |
| Diameter range (mm) | 102 - 508 | 102 - 508 | 52 - 710 |
| Fire classes according to | | | |
| The Netherlands (NEN 6065/6066) | 1 and 3 | 1 and 3 | 1 and 3 |
| Germany (DIN 4102) | B2 | B2 | B2 |
| France (CSTB) | х | x | M2 |
| Switzerland (BKZ) | х | 5.2 | black 5.2 |
| United Kingdom (BS 476) | 6,7 and 20 | 7 and 20 | 6, 7 and 20 |
| Austria (B3800) | x | B2 | B2 |
| Italy (CSI) | Class 2 | х | Х |
| Technical data | | | |
| Article code | DC20[G/W/B]{Ø} | DC21[G/W/B]{Ø} | DC23[G/W/B]{Ø} |
| Material structure | 6 layers | 6 layers | 5 layers |
| Wire spacing | | | |
| Ø 52 mm | - | - | 12 |
| Ø 65 and 76 mm | - | - | 18 |
| <u>></u> Ø 76 mm | 36 | 25 | 25 |
| Minimum bending radius | 0.54 x Ø | 0.58 x Ø | 0.58 x Ø |
| Standard length (meters) | 10 | 10 | 10 |

X=not tested

Colors:

G = Standard Grey

W = White

B = Black

The **Combidec®2000** is also available as rectangular duct in several sizes and colors. The standard color is white and the standard length is 6mtr.

| Product code: | Sizes: | Length: |
|---------------|--------------|---------|
| DC20W110x54/6 | 110mm x 54mm | 6Mtr |
| DC20W140x54/6 | 140mm x 54mm | 6Mtr |
| DC20W180x54/6 | 180mm x 54mm | 6Mtr |
| DC20W195x54/6 | 195mm x 54mm | 6Mtr |
| DC20W222x58/6 | 222mm x 58mm | 6Mtr |
| DC20W115x55/6 | 115mm x 55mm | 6Mtr |
| DC20W150x70/6 | 150mm x 70mm | 6Mtr |

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