



www.growland.net / www.growland-hydroponics.com
<https://www.growland.fr> / <https://www.growland.co.uk>
<https://www.growland.es> / <https://www.growland.at>
<https://www.growland.nl> / <https://www.growland.it>
<https://www.growland.se> / <https://www.growland.pl>

COMBI DEC® ducts are solid, very flexible, extremely 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 **COMBI DEC®** 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 **COMBI DEC®** 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 **COMBI DEC®** duct towards PVC ducting:

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

The advantages of a **COMBI DEC®** 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 **COMBI DEC®** color is **Grey metallic**.

Colors on request:

- Black.
- White.

The **COMBI DEC®** 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 **COMBI DEC®** ducts are not suitable for discharging combustion products from open fireplaces and oil-fired boilers. Neither are the **COMBI DEC®** 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 **COMBI DEC®** product, consult the table on the next page.

The information contained in this brochure was current on the publication date. The Company reserves the right to make changes in details at any time without prior notice. In order to avoid misunderstandings, any interested party is advised to contact the Company checking for any changes in materials and/or information after this brochure was published.

Version 2005 www.decinternational.com

	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)	x	x	M2
Switzerland (BKZ)	x	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	x	x
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
≥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

The information contained in this brochure was current on the publication date. The Company reserves the right to make changes in details at any time without prior notice. In order to avoid misunderstandings, any interested party is advised to contact the Company checking for any changes in materials and/or information after this brochure was published.

Version 2005 www.decinternational.com