

VENTAFLEX® air duct Classic oval

**Particularly for great air volumes
at low installation height**

The VENTAFLEX® air duct Classic oval is generally applicable where insulation, tightness, weight and hygiene play a role. Thanks to high durability of the GRP-material a reliable operation in the long term is a special advantage of the system – for the interior-, exterior- and hygiene sector.

Certifications

- according to EN 12237
tightness class C (complies with
EN 16798-3 of class ATC 3)
- for the hygiene sector according
to VDI 6022

Strong material

The basis of VENTAFLEX® air ducts is PUR rigid foam. The GRP-surfaces are made of fiberglass, polyester resin and additionally with an UV resistant gelcoat cover on the outside. This special material composite gives the ducts an extremely high stability.

Highly insulating

The VENTAFLEX® system has a thermal conductivity of only 0,022 W/mK. This corresponds to thermal conductivity group WLG 022. Consequently a condensation- and dew formation is to be excluded.

Especially aerodynamic

The air guidance is significantly more aerodynamic and therefore more efficient due to the oval form and the smooth surface compared to conventional square air channels.

Perfectly compatible

A connection to ducts of other producers, e.g. spiral ducts or stainless steel, is easily possible.

Additional safety instructions

The employer or self-employed person must ensure that industrial or professional users of diisocyanates have successfully completed safe use training.

Ultra light

The VENTAFLEX® air duct Classic has a weight saving up to 70 % compared to a comparable insulated air channel at same length. The weight allows the application on statically loaded roofs.

Absolutely hygienic

Because of the smooth surfaces VENTAFLEX® systems are very easy to clean and fulfill the hygiene requirement of VDI 6022. Due to the high chemical resistance the use of conventional industrial cleaners is absolutely unproblematic.

Space optimized and individually adapted

Everywhere where the installation height is limited and a round cross section can not be installed, the VENTAFLEX® air duct Classic is the right choice. Due to the modular system the air ducts can be perfectly adapted to the requirements.

Variable planning

The VENTAFLEX® standard product range offers the planner wide possibilities in his project planning: Ducts of the series 500-1250, curves, T-pieces, reductions and much more. The special thing about it are the highly variable moulded parts, which are produced according to requirement and planning.

VENTAFLEX®

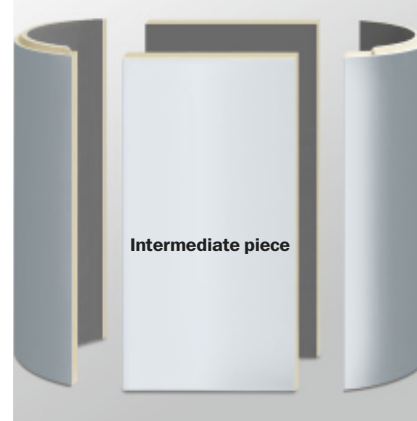
air duct Classic

for room · facade · roof

Proven fields of application

- industrial-/exhibition halls
- swimming pools/sports facilities
- hotels/gastronomy
- schools/daycare facilities
- hospitals/care facilities
- statically loaded roofs
- food industry
- pharmaceutical industry/research
- highTech production

The structure of a VENTAFLEX Classic air duct oval: The width of the duct is adaptable thanks to the modular principle – up to 2270 mm



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Personal consulting at VENTAFLEX® under +49 (0) 2505 – 93 829-0



The VENTAFLEX® air duct Classic oval



Material

Highly insulating PUR rigid foam

Standard coating inside/outside

GRP (glass fiber reinforced plastic)

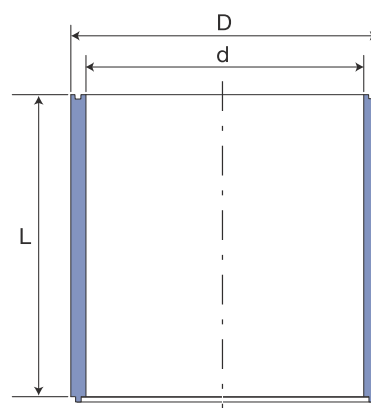
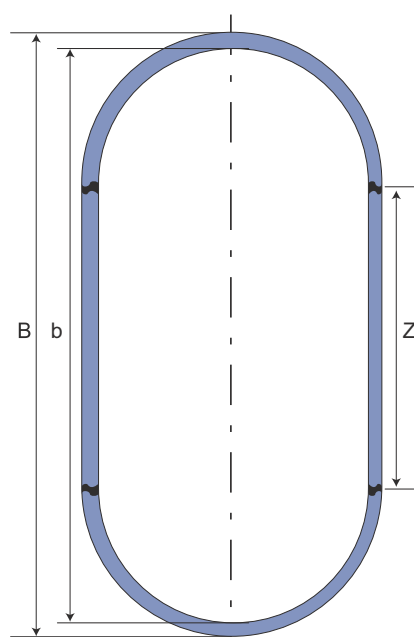
Colour

Light grey (RAL 7035)

series	Z mm	d mm	d mm	b mm	b mm	L mm	weight kg/piece	surface qm	free cross section qm
500	250	520	580	770	830	1000	8,2	2,13	0,34
	500	520	580	1020	1080	1000	10,0	2,64	0,47
	750	520	580	1270	1330	1000	11,8	3,14	0,60
	1000	520	580	1520	1580	1000	13,5	3,64	0,73
630	250	650	710	900	960	1000	9,7	2,55	0,49
	500	650	710	1150	1210	1000	11,4	3,05	0,66
	750	650	710	1400	1460	1000	13,2	3,55	0,82
	1000	650	710	1650	1710	1000	15,0	4,05	0,98
710	250	730	790	980	1040	1000	10,6	2,80	0,60
	500	730	790	1230	1290	1000	12,3	3,30	0,78
	750	730	790	1480	1540	1000	14,1	3,80	0,97
	1000	730	790	1730	1790	1000	15,9	4,30	1,15
800	250	820	880	1070	1130	1000	11,6	3,08	0,73
	500	820	880	1320	1380	1000	13,3	3,59	0,94
	750	820	880	1570	1630	1000	15,1	4,09	1,14
	1000	820	880	1820	1880	1000	16,9	4,59	1,35
900	250	920	980	1170	1230	1000	12,7	3,40	0,89
	500	920	980	1420	1480	1000	14,4	3,90	1,12
	750	920	980	1670	1730	1000	16,2	4,40	1,35
	1000	920	980	1920	1980	1000	18,0	4,90	1,58
1250	250	1270	1330	1520	1580	1000	16,6	4,50	1,58
	500	1270	1330	1770	1830	1000	18,3	5,00	1,90
	750	1270	1330	2020	2080	1000	20,1	5,50	2,22
	1000	1270	1330	2270	2330	1000	21,9	6,00	2,54

Weight indication without reinforcement

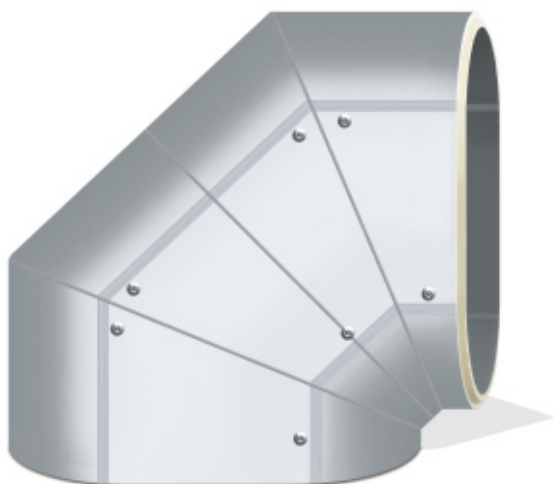
series	d*hyd mm	inner dimensions	item no.
500	770	520/770	185203004
	810	520/1020	185213004
	840	520/1270	185223004
	860	520/1520	185233004
630	950	650/900	186503004
	990	650/1150	186513004
	1030	650/1400	186523004
	1050	650/1650	186533004
710	1070	730/980	187303004
	1110	730/1230	187313004
	1140	730/1480	187323004
	1170	730/1730	187333004
800	1190	820/1070	188203004
	1240	820/1320	188213004
	1270	820/1570	188223004
	1300	820/1820	188233004
900	1330	920/1170	189203004
	1380	920/1420	189213004
	1410	920/1670	189223004
	1440	920/1920	189233004
1250	1820	1270/1520	1812703004
	1870	1270/1770	1812713004
	1910	1270/2020	1812723004
	1950	1270/2270	1812733004



d = inside diameter
D = outside diameter
L = length
B = width (outside)
b = width (inside)
Z = intermediate piece



The VENTAFLEX® air duct Classic oval Curve 90° vertical



Material

Highly insulating PUR rigid foam

Standard coating inside/outside

GRP (glass fiber reinforced plastic)

Colour

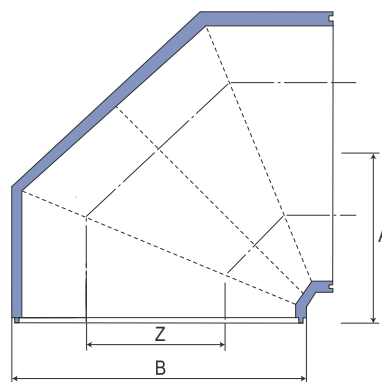
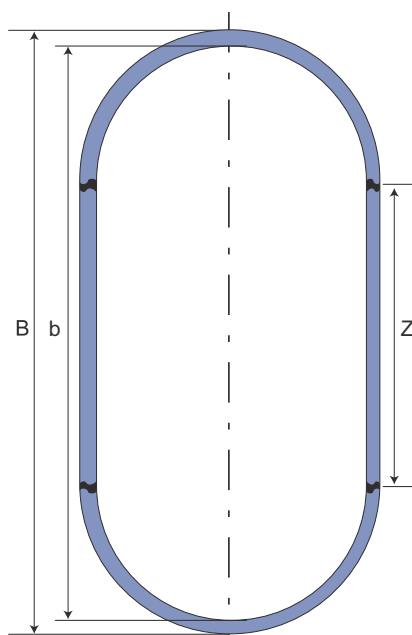
Light grey (RAL 7035)

**Upon request curves can be produced
in any other needed angle**

series	Z mm	d mm	d mm	b mm	b mm	axial dimension A	weight kg/piece	surface qm	cross section
500	250	520	580	770	830	1207	16,4	4,28	0,34
	500	520	580	1020	1080	1207	20,0	5,28	0,47
	750	520	580	1270	1330	1207	23,6	6,28	0,60
	1000	520	580	1520	1580	1207	27,0	7,28	0,73
630	250	650	710	900	960	1207	19,4	5,10	0,49
	500	650	710	1150	1210	1207	22,8	6,10	0,66
	750	650	710	1400	1460	1207	26,4	7,10	0,82
	1000	650	710	1650	1710	1207	30,0	8,10	0,98
710	250	730	790	980	1040	1207	21,2	5,60	0,60
	500	730	790	1230	1290	1207	24,6	6,60	0,78
	750	730	790	1480	1540	1207	28,2	7,60	0,97
	1000	730	790	1730	1790	1207	31,8	8,60	1,15
800	250	820	880	1070	1130	1207	23,2	6,18	0,73
	500	820	880	1320	1380	1207	26,6	7,18	0,94
	750	820	880	1570	1630	1207	30,2	8,16	1,14
	1000	820	880	1820	1880	1207	33,8	9,18	1,35
900	250	920	980	1170	1230	1207	25,4	6,80	0,89
	500	920	980	1420	1480	1207	28,8	7,80	1,12
	750	920	980	1670	1730	1207	32,4	8,80	1,35
	1000	920	980	1920	1980	1810	54,0	14,70	1,58
1250	250	1270	1330	1520	1580	1207	33,2	9,00	1,58
	500	1270	1330	1770	1830	1207	36,6	10,00	1,90
	750	1270	1330	2020	2080	1811	60,3	16,50	2,22
	1000	1270	1330	2270	2330	1811	65,7	18,00	2,54

Weight indication without reinforcement

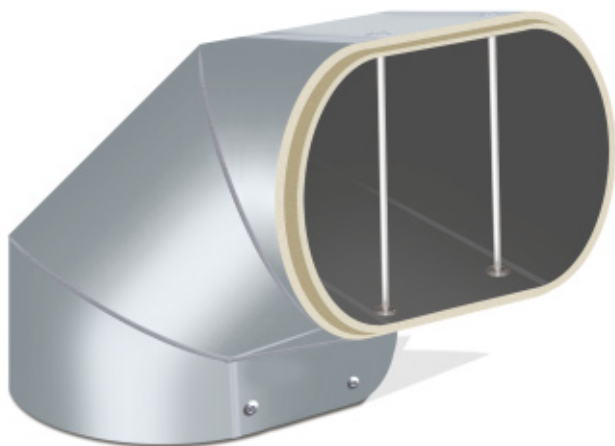
series	d*hyd mm	inner dimensions	item no.
500	770	520/770	945203004
	810	520/1020	945213004
	840	520/1270	945223004
	860	520/1520	945233004
630	950	650/900	946503004
	990	650/1150	946513004
	1030	650/1400	946523004
	1050	650/1650	946533004
710	1070	730/980	947303004
	1110	730/1230	947313004
	1140	730/1480	947323004
	1170	730/1730	947333004
800	1190	820/1070	948203004
	1240	820/1320	948213004
	1270	820/1570	948223004
	1300	820/1820	948233004
900	1330	920/1170	949203004
	1380	920/1420	949213004
	1410	920/1670	949223004
	1440	920/1920	949233004
1250	1820	1270/1520	9412703004
	1870	1270/1770	9412713004
	1910	1270/2020	9412723004
	1950	1270/2270	9412733004



d = inside diameter
D = outside diameter
B = width (outside)
b = width (inside)
Z = intermediate piece
A = axial dimension



The VENTAFLEX® air duct Classic oval Curve 90° horizontal



Material

Highly insulating PUR rigid foam

Standard coating inside/outside

GRP (glass fiber reinforced plastic)

Colour

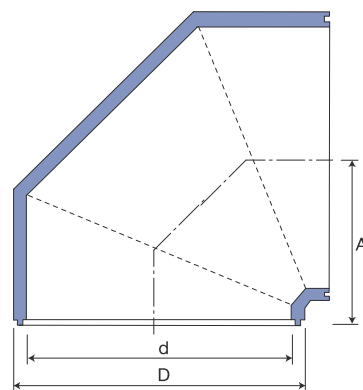
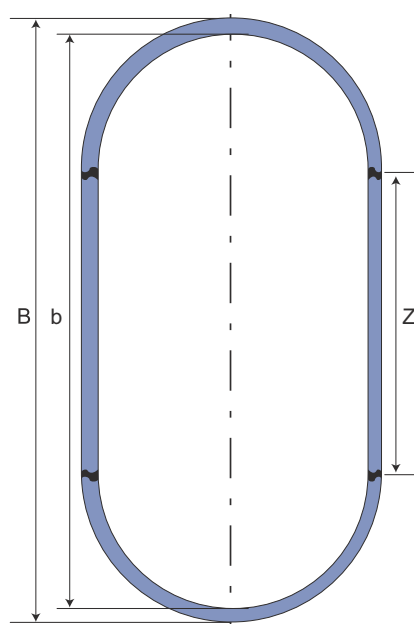
Light grey (RAL 7035)

**Upon request curves can be produced
in any other needed angle**

series	Z mm	d mm	d mm	b mm	b mm	axial dimension A	weight kg/piece	surface qm	cross section
500	250	520	580	770	830	598	8,2	2,13	0,34
	500	520	580	1020	1080	598	10,0	2,64	0,47
	750	520	580	1270	1330	598	11,8	3,14	0,60
	1000	520	580	1520	1580	598	13,5	3,64	0,73
630	250	650	710	900	960	602	9,7	2,55	0,49
	500	650	710	1150	1210	602	11,4	3,05	0,66
	750	650	710	1400	1460	602	13,2	3,55	0,82
	1000	650	710	1650	1710	602	15,0	4,05	0,98
710	250	730	790	980	1040	604	10,6	2,80	0,60
	500	730	790	1230	1290	604	12,3	3,30	0,78
	750	730	790	1480	1540	604	14,1	3,80	0,97
	1000	730	790	1730	1790	604	15,9	4,30	1,15
800	250	820	880	1070	1130	607	11,6	3,08	0,73
	500	820	880	1320	1380	607	13,3	3,59	0,94
	750	820	880	1570	1630	607	15,1	4,09	1,14
	1000	820	880	1820	1880	607	16,9	4,59	1,35
900	250	920	980	1170	1230	610	12,7	3,40	0,89
	500	920	980	1420	1480	610	14,4	3,90	1,12
	750	920	980	1670	1730	610	16,2	4,40	1,35
	1000	920	980	1920	1980	610	18,0	4,90	1,58
1250	250	1270	1330	1520	1580	899	16,6	6,75	1,58
	500	1270	1330	1770	1830	899	18,3	7,50	1,90
	750	1270	1330	2020	2080	899	20,1	8,25	2,22
	1000	1270	1330	2270	2330	899	21,9	9,00	2,54

Weight indication without reinforcement

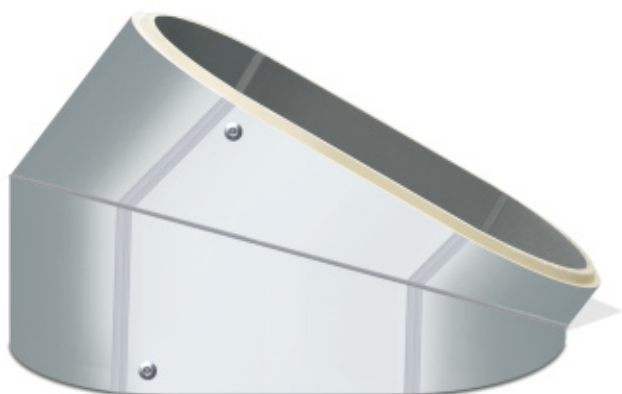
series	d*hyd mm	inner dimensions	item no.
500	770	520/770	945203104
	810	520/1020	945213104
	840	520/1270	945223104
	860	520/1520	945233104
630	950	650/900	946503104
	990	650/1150	946513104
	1030	650/1400	946523104
	1050	650/1650	946533104
710	1070	730/980	947303104
	1110	730/1230	947313104
	1140	730/1480	947323104
	1170	730/1730	947333104
800	1190	820/1070	948203104
	1240	820/1320	948213104
	1270	820/1570	948223104
	1300	820/1820	948233104
900	1330	920/1170	949203104
	1380	920/1420	949213104
	1410	920/1670	949223104
	1440	920/1920	949233104
1250	1820	1270/1520	9412703104
	1870	1270/1770	9412713104
	1910	1270/2020	9412723104
	1950	1270/2270	9412733104



d = inside diameter
D = outside diameter
B = width (outside)
b = width (inside)
Z = intermediate piece
A = axial dimension



The VENTAFLEX® air duct Classic oval Curve 45° vertical



Material

Highly insulating PUR rigid foam

Standard coating inside/outside

GRP (glass fiber reinforced plastic)

Colour

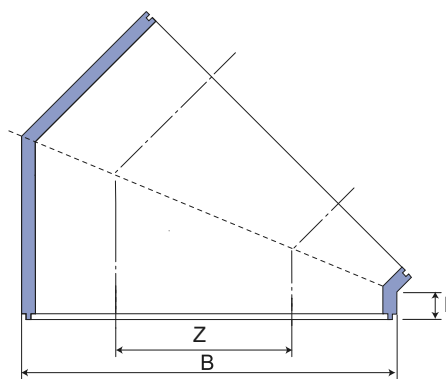
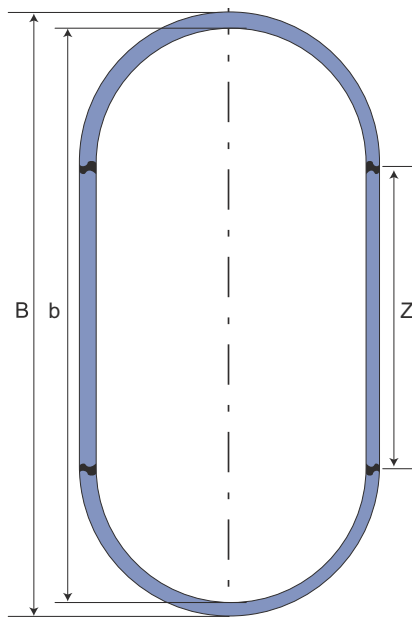
Light grey (RAL 7035)

**Upon request curves can be produced
in any other needed angle**

series	Z mm	d mm	d mm	b mm	b mm	L side length	weight kg/piece	surface qm	cross section
500	250	520	580	770	830	328	8,2	2,13	0,34
	500	520	580	1020	1080	276	10,0	2,64	0,47
	750	520	580	1270	1330	225	11,8	3,14	0,60
	1000	520	580	1520	1580	173	13,5	3,64	0,73
630	250	650	710	900	960	301	9,7	2,55	0,49
	500	650	710	1150	1210	249	11,4	3,05	0,66
	750	650	710	1400	1460	198	13,2	3,55	0,82
	1000	650	710	1650	1710	145	15,0	4,05	0,98
710	250	730	790	980	1040	285	10,6	2,80	0,60
	500	730	790	1230	1290	233	12,3	3,30	0,78
	750	730	790	1480	1540	181	14,1	3,80	0,97
	1000	730	790	1730	1790	129	15,9	4,30	1,15
800	250	820	880	1070	1130	266	11,6	3,08	0,73
	500	820	880	1320	1380	214	13,3	3,59	0,94
	750	820	880	1570	1630	162	15,1	4,09	1,14
	1000	820	880	1820	1880	111	16,9	4,59	1,35
900	250	920	980	1170	1230	245	12,7	3,40	0,89
	500	920	980	1420	1480	193	14,4	3,90	1,12
	750	920	980	1670	1730	142	16,2	4,40	1,35
	1000	920	980	1920	1980	340	27,0	7,35	1,58
1250	250	1270	1330	1520	1580	173	16,6	4,50	1,58
	500	1270	1330	1770	1830	121	18,3	5,00	1,90
	750	1270	1330	2020	2080	319	30,2	8,25	2,22
	1000	1270	1330	2270	2330	267	32,9	9,00	2,54

Weight indication without reinforcement

series	d*hyd mm	inner dimensions	item no.
500	770	520/770	445203004
	810	520/1020	445213004
	840	520/1270	445223004
	860	520/1520	445233004
630	950	650/900	446503004
	990	650/1150	446513004
	1030	650/1400	446523004
	1050	650/1650	446533004
710	1070	730/980	447303004
	1110	730/1230	447313004
	1140	730/1480	447323004
	1170	730/1730	447333004
800	1190	820/1070	448203004
	1240	820/1320	448213004
	1270	820/1570	448223004
	1300	820/1820	448233004
900	1330	920/1170	449203004
	1380	920/1420	449213004
	1410	920/1670	449223004
	1440	920/1920	449233004
1250	1820	1270/1520	4412703004
	1870	1270/1770	4412713004
	1910	1270/2020	4412723004
	1950	1270/2270	4412733004

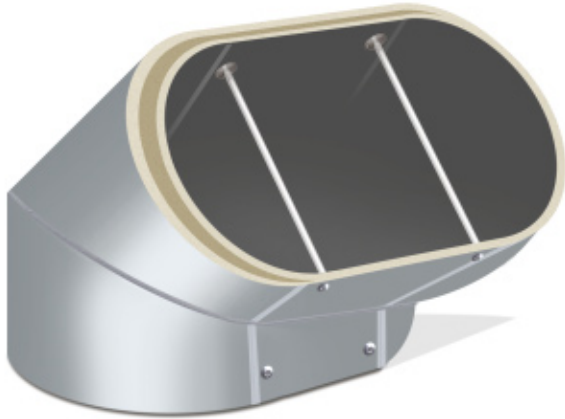


d = inside diameter
D = outside diameter
B = width (outside)
b = width (inside)
Z = intermediate piece
L = side length



The VENTAFLEX® air duct Classic oval

Curve 45° horizontal



Material

Highly insulating PUR rigid foam

Standard coating inside/outside

GRP (glass fiber reinforced plastic)

Colour

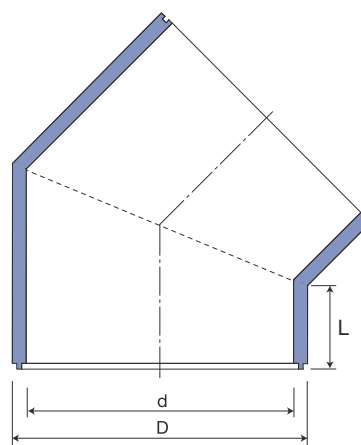
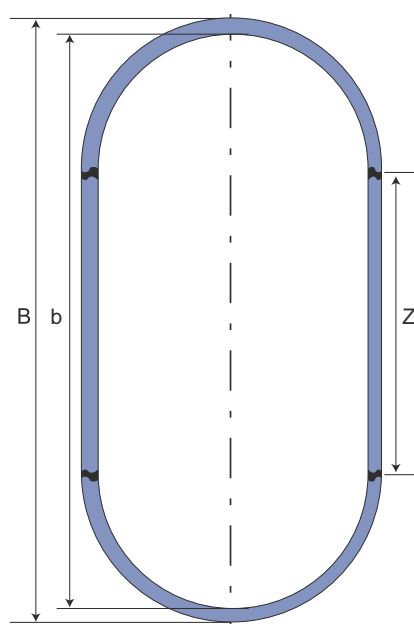
Light grey (RAL 7035)

**Upon request curves can be produced
in any other needed angle**

series	Z mm	d mm	d mm	b mm	b mm	L side length	weight kg/piece	surface qm	cross section
500	250	520	580	770	830	370	8,2	2,13	0,34
	500	520	580	1020	1080	370	10,0	2,64	0,47
	750	520	580	1270	1330	370	11,8	3,14	0,60
	1000	520	580	1520	1580	370	13,5	3,64	0,73
630	250	650	710	900	960	343	9,7	2,55	0,49
	500	650	710	1150	1210	343	11,4	3,05	0,66
	750	650	710	1400	1460	343	13,2	3,55	0,82
	1000	650	710	1650	1710	343	15,0	4,05	0,98
710	250	730	790	980	1040	326	10,6	2,80	0,60
	500	730	790	1230	1290	326	12,3	3,30	0,78
	750	730	790	1480	1540	326	14,1	3,80	0,97
	1000	730	790	1730	1790	326	15,9	4,30	1,15
800	250	820	880	1070	1130	310	11,6	3,08	0,73
	500	820	880	1320	1380	310	13,3	3,59	0,94
	750	820	880	1570	1630	310	15,1	4,09	1,14
	1000	820	880	1820	1880	310	16,9	4,59	1,35
900	250	920	980	1170	1230	287	12,7	3,40	0,89
	500	920	980	1420	1480	287	14,4	3,90	1,12
	750	920	980	1670	1730	287	16,2	4,40	1,35
	1000	920	980	1920	1980	287	18,0	4,90	1,58
1250	250	1270	1330	1520	1580	225	16,6	4,50	1,58
	500	1270	1330	1770	1830	225	18,3	5,00	1,90
	750	1270	1330	2020	2080	225	20,1	5,50	2,22
	1000	1270	1330	2270	2330	225	21,9	6,00	2,54

Weight indication without reinforcement

series	d*hyd mm	inner dimensions	item no.
500	770	520/770	445203104
	810	520/1020	445213104
	840	520/1270	445223104
	860	520/1520	445233104
630	950	650/900	446503104
	990	650/1150	446513104
	1030	650/1400	446523104
	1050	650/1650	446533104
710	1070	730/980	447303104
	1110	730/1230	447313104
	1140	730/1480	447323104
	1170	730/1730	447333104
800	1190	820/1070	448203104
	1240	820/1320	448213104
	1270	820/1570	448223104
	1300	820/1820	448233104
900	1330	920/1170	449203104
	1380	920/1420	449213104
	1410	920/1670	449223104
	1440	920/1920	449233104
1250	1820	1270/1520	4412703104
	1870	1270/1770	4412713104
	1910	1270/2020	4412723104
	1950	1270/2270	4412733104

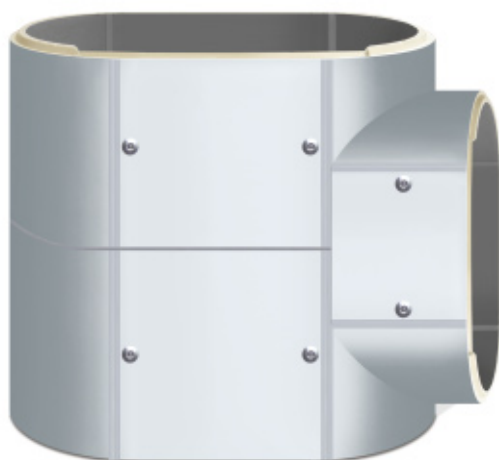


d = inside diameter
D = outside diameter
B = width (outside)
b = width (inside)
Z = intermediate piece
L = side length

VENTAFLEX®
More efficiency in air conduction



The VENTAFLEX® air duct Classic oval T-piece 90° vertical



Material

Highly insulating PUR rigid foam

Standard coating inside/outside

GRP (glass fiber reinforced plastic)

Colour

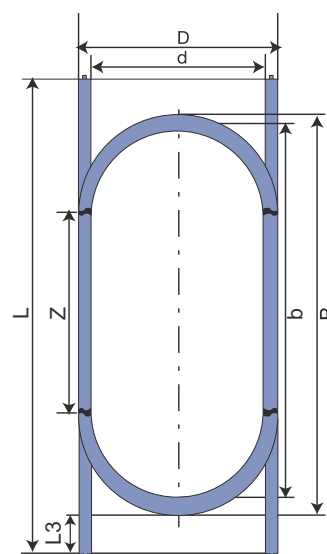
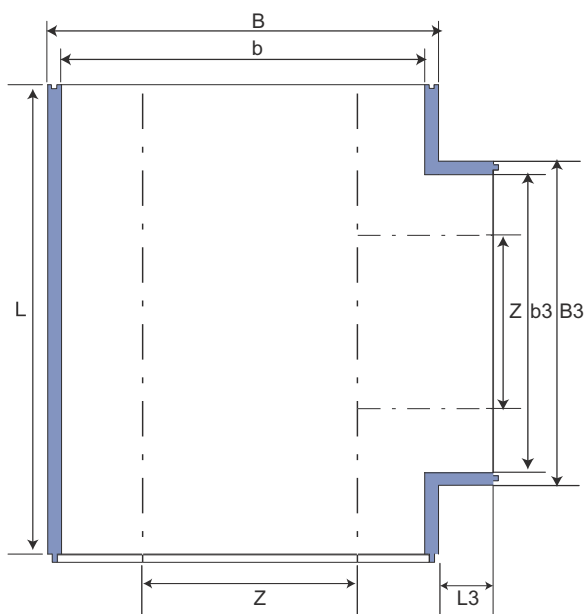
Light grey (RAL 7035)

**Upon request T-pieces can be produced
in any other needed angle**

series	Z mm	d mm	d mm	b mm	b mm	L mm	weight kg/piece	surface qm	cross section
500	250	520	580	770	830	1000	12,3	1,65	0,34
	500	520	580	1020	1080	1500	20,0	3,27	0,47
	750	520	580	1270	1330	1500	23,6	4,72	0,60
	1000	520	580	1520	1580	2000	33,8	7,73	0,73
630	250	650	710	900	960	1500	19,4	4,30	0,49
	500	650	710	1150	1210	1500	22,8	4,73	0,66
	750	650	710	1400	1460	2000	33,0	7,69	0,82
	1000	650	710	1650	1710	2000	37,5	8,24	0,98
710	250	730	790	980	1040	1500	21,2	4,58	0,60
	500	730	790	1230	1290	1500	24,6	4,95	0,78
	750	730	790	1480	1540	2000	35,3	8,03	0,97
	1000	730	790	1730	1790	2000	39,8	8,52	1,15
800	250	820	880	1070	1130	1500	23,2	4,87	0,73
	500	820	880	1320	1380	2000	33,3	7,85	0,94
	750	820	880	1570	1630	2000	37,8	9,22	1,14
	1000	820	880	1820	1880	2500	47,5	12,24	1,35
900	250	920	980	1170	1230	1500	25,4	5,15	0,89
	500	920	980	1420	1480	2000	36,0	8,26	1,12
	750	920	980	1670	1730	2000	40,5	8,75	1,35
	1000	920	980	1920	1980	2500	54,0	13,73	1,58
1250	250	1270	1330	1520	1580	2000	41,5	9,18	1,58
	500	1270	1330	1770	1830	2000	45,75	9,50	1,90
	750	1270	1330	2020	2080	2500	60,3	13,81	2,22
	1000	1270	1330	2270	2330	2500	65,7	14,25	2,54

Weight indication without reinforcement

series	d*hyd mm	inner dimensions	item no.
500	770	520/770	785203004
	810	520/1020	785213004
	840	520/1270	785223004
	860	520/1520	785233004
630	950	650/900	786503004
	990	650/1150	786513004
	1030	650/1400	786523004
	1050	650/1650	786533004
710	1070	730/980	787303004
	1110	730/1230	787313004
	1140	730/1480	787323004
	1170	730/1730	787333004
800	1190	820/1070	788203004
	1240	820/1320	788213004
	1270	820/1570	788223004
	1300	820/1820	788233004
900	1330	920/1170	789203004
	1380	920/1420	789213004
	1410	920/1670	789223004
	1440	920/1920	789233004
1250	1820	1270/1520	7812703004
	1870	1270/1770	7812713004
	1910	1270/2020	7812723004
	1950	1270/2270	7812733004



d = inside diameter
D = outside diameter
B = width (outside)
b = width (inside)

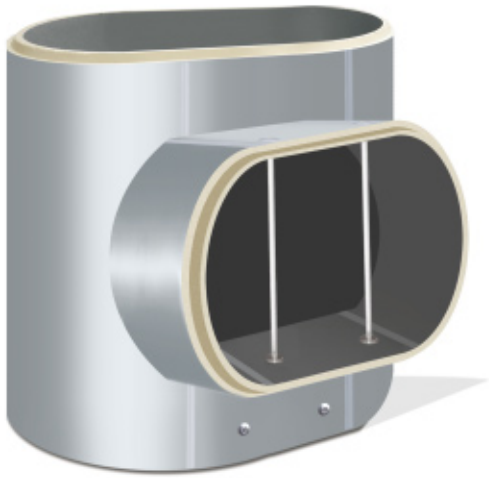
Z = intermediate piece
L = length (T-piece)
L3 = length (outgoing) = $\frac{L \cdot B3}{2}$

VENTAFLEX®
More efficiency in air conduction



The VENTAFLEX® air duct Classic oval

T-piece 90° horizontal



Material

Highly insulating PUR rigid foam

Standard coating inside/outside

GRP (glass fiber reinforced plastic)

Colour

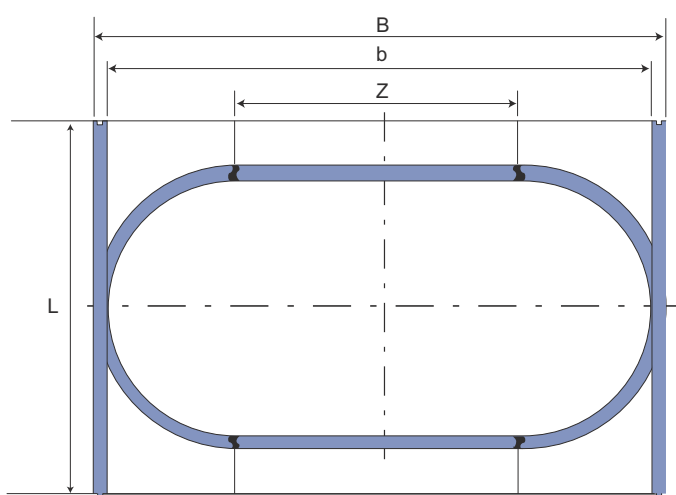
Light grey (RAL 7035)

Upon request T-pieces can be produced in any other needed angle

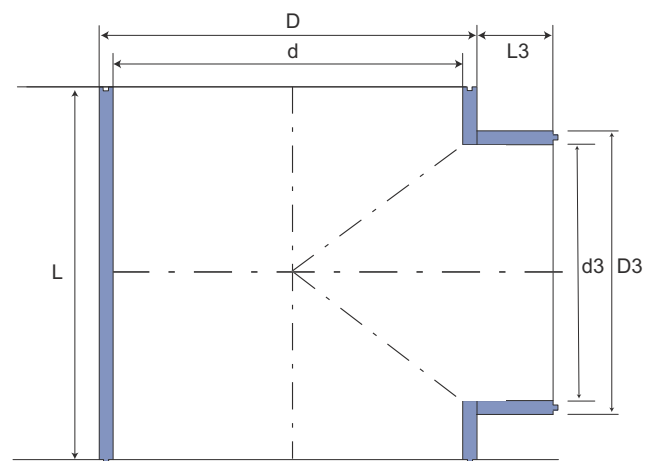
series	Z mm	d mm	d mm	b mm	b mm	L mm	weight kg/piece	surface qm	cross section
500	250	520	580	770	830	1000	7,4	2,12	0,34
	500	520	580	1020	1080	1000	10,0	2,85	0,47
	750	520	580	1270	1330	1000	11,7	3,33	0,60
	1000	520	580	1520	1580	1000	13,3	3,81	0,73
630	250	650	710	900	960	1000	9,1	2,60	0,49
	500	650	710	1150	1210	1000	10,6	3,02	0,66
	750	650	710	1400	1460	1000	12,0	3,44	0,82
	1000	650	710	1650	1710	1000	13,5	3,85	0,98
710	250	730	790	980	1040	1500	16,8	4,81	0,60
	500	730	790	1230	1290	1500	17,6	5,04	0,78
	750	730	790	1480	1540	1500	22,1	6,31	0,97
	1000	730	790	1730	1790	1500	24,7	7,07	1,15
800	250	820	880	1070	1130	1500	17,9	5,12	0,73
	500	820	880	1320	1380	1500	20,4	5,83	0,94
	750	820	880	1570	1630	1500	22,9	6,53	1,14
	1000	820	880	1820	1880	1500	25,3	7,24	1,35
900	250	920	980	1170	1230	1500	19,0	5,42	0,89
	500	920	980	1420	1480	1500	21,3	6,08	1,12
	750	920	980	1670	1730	1500	23,6	6,74	1,35
	1000	920	980	1920	1980	1500	25,9	7,39	1,58
1250	250	1270	1330	1520	1580	2000	33,4	9,54	1,58
	500	1270	1330	1770	1830	2000	36,40	10,40	1,90
	750	1270	1330	2020	2080	2000	39,4	11,25	2,22
	1000	1270	1330	2270	2330	2000	42,4	12,11	2,54

Weight indication without reinforcement

series	d*hyd mm	inner dimensions	item no.
500	770	520/770	785203104
	810	520/1020	785213104
	840	520/1270	785223104
	860	520/1520	785233104
630	950	650/900	786503104
	990	650/1150	786513104
	1030	650/1400	786523104
	1050	650/1650	786533104
710	1070	730/980	787303104
	1110	730/1230	787313104
	1140	730/1480	787323104
	1170	730/1730	787333104
800	1190	820/1070	788203104
	1240	820/1320	788213104
	1270	820/1570	788223104
	1300	820/1820	788233104
900	1330	920/1170	789203104
	1380	920/1420	789213104
	1410	920/1670	789223104
	1440	920/1920	789233104
1250	1820	1270/1520	7812703104
	1870	1270/1770	7812713104
	1910	1270/2020	7812723104
	1950	1270/2270	7812733104



Front view



Side view

d = inside diameter
D = outside diameter
B = width (outside)
b = width (inside)

Z = intermediate piece
L = length (T-piece)
 $L3 = \text{length (outgoing)} = \frac{L \cdot D3}{2}$

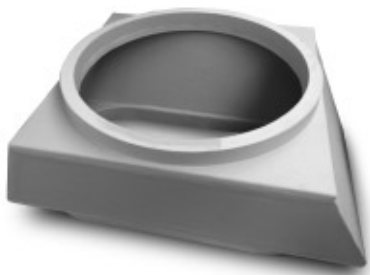
VENTAFLEX®
More efficiency in air conduction

Special components

Manufacture for individual projects

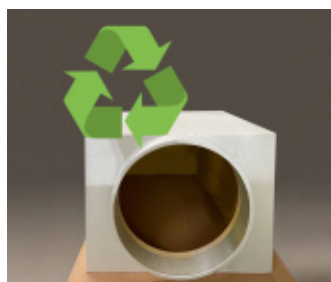
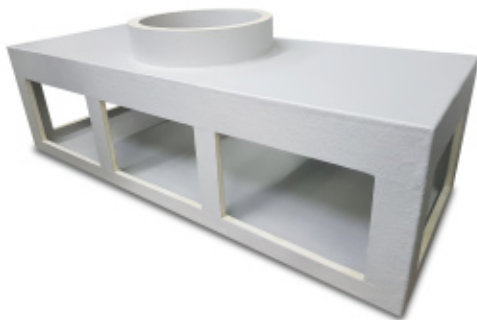
... customized solution!

Round cross section on oval?
Oval on square? The solution comes from VENTAFLEX®:
We manufacture special components, adapting to each system, which neatly connect different duct forms and –sizes with each other.



Functionality and optics

VENTAFLEX® has developed a new surface finishing process especially for special components. This means that every custom-made product has the high resistance to chemicals, abrasion and weathering that characterizes all VENTAFLEX® air ducts. Our workpieces leave production with a smooth and even surface - good looks are also important to us!



Finally reycable!

Material purity was a goal on the way to even more sustainability:
Sorted PUR residues are processed in order to be used as raw material for the production of new components at VENTAFLEX®.

Everything from a single source

The workpieces are manufactured completely by us without any detours and delivered to their place of use – constant availability and punctual delivery are our service promise.

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VENTAFLEX Classic supplies-system oval

Optimized components –
Customized and multiply tested



“Everything from one provider”!
You find all materials in our
supplies to install a complete
duct system professionally.

The supplies are – depending on
the application – functionally
combinable. We like to advise you
on the ideal combination of your
components and the material!



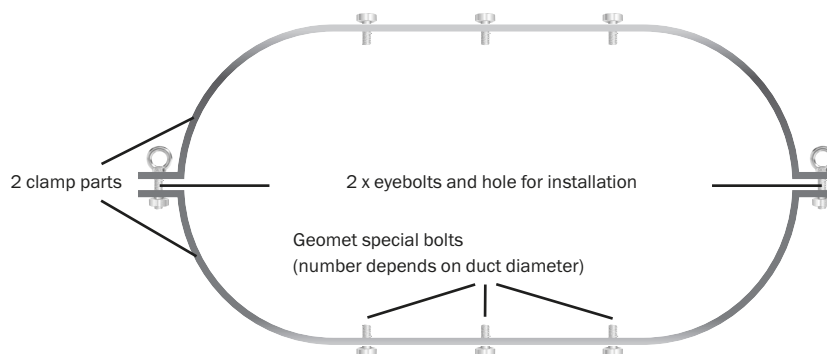
Content	Page
VENTAFLEX® oval-clamp	3.17
Oval-compensator	3.18
Inspection cover	3.19
VentaFit	3.20

VENTAFLEX® Classic oval-clamp

For the connection of air ducts oval with the installation option of placing on stands or hanging.

Material

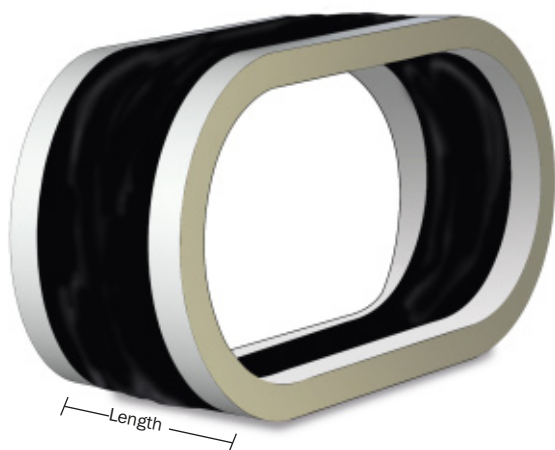
Stainless steel



Please pay attention to the processing information.
Additionally an adhesion with the special glue
VentaFit has to be made.

for ducts with the measures ø mm	item no.
Ø 520 x 770/30	4245203000
Ø 520 x 1.020/30	4245213000
Ø 520 x 1.270/30	4245223000
Ø 520 x 1520/30	4245233000
Ø 650 x 900/30	4246503000
Ø 650 x 1.150/30	4246513000
Ø 650 x 1.400/30	4246523000
Ø 650 x 1.650/30	4246533000
Ø 730 x 980/30	4247303000
Ø 730 x 1.230/30	4247313000
Ø 730 x 1.480/30	4247323000
Ø 730 x 1.730/30	4247333000
Ø 820 x 1.070/30	4248203000
Ø 820 x 1.320/30	4248213000
Ø 820 x 1.570/30	4248223000
Ø 820 x 1.820/30	4248233000
Ø 920 x 1.170/30	4249203000
Ø 920 x 1.420/30	4249213000
Ø 920 x 1.670/30	4249223000
Ø 920 x 1.920/30	4249233000
Ø 1270 x 1.520/30	42412703000
Ø 1270 x 1.770/30	42412713000
Ø 1270 x 2.020/30	42412723000
Ø 1270 x 2.270/30	42412733000

Oval-compensator for thermal expansion compensation and vibration damping (vibration decoupling)



Length when extended = 420 mm

Installation length = 390 mm

Material

Highly insulating PUR rigid foam

Standard coating inside/outside

GRP (glass fiber reinforced plastic)

Colour

Light grey (RAL 7035)

Wear part with limited warranty

Expansion joints must be positioned in such a way that any changes in length that occur can be fully accommodated.

The adjacent duct sections must be routed appropriately (e.g. using sliding bearings) and secured at fixed points.

series	for ducts with the measures Ø mm	Z mm	d mm	item no.
500	Ø 520 x 770/30	250	520	845203004
	Ø 520 x 1.020/30	500	520	845213004
	Ø 520 x 1.270/30	750	520	845223004
	Ø 520 x 1.520/30	1000	520	845233004
630	Ø 650 x 900/30	250	650	846503004
	Ø 650 x 1.150/30	500	650	846513004
	Ø 650 x 1.400/30	750	650	846523004
	Ø 650 x 1.650/30	1000	650	846533004
710	Ø 730 x 980/30	250	730	847303004
	Ø 730 x 1.230/30	500	730	847313004
	Ø 730 x 1.480/30	750	730	847323004
	Ø 730 x 1.730/30	1000	730	847333004
800	Ø 820 x 1.070/30	250	820	848203004
	Ø 820 x 1.320/30	500	820	848213004
	Ø 820 x 1.570/30	750	820	848223004
	Ø 820 x 1.820/30	1000	820	848233004
900	Ø 920 x 1.170/30	250	920	849203004
	Ø 920 x 1.420/30	500	920	849213004
	Ø 920 x 1.670/30	750	920	849223004
	Ø 920 x 1.920/30	1000	920	849233004
1250	Ø 1270 x 1.520/30	250	1270	8412703004
	Ø 1270 x 1.770/30	500	1270	8412713004
	Ø 1270 x 2.020/30	750	1270	8412723004
	Ø 1270 x 2.270/30	1000	1270	8412733004

The maximum surface temperature must be used for the design. During summer, roof surfaces can reach very high temperatures due to solar radiation. This results in a significant temperature difference compared to winter conditions, which must be taken into account during the design process.

Calculation example (simplified):

$$\Delta L = 0,00005 \cdot 10 \cdot 100$$

Result: $\Delta L \approx 0,50 \text{ m} = 50 \text{ mm}$

Consequently:

A 10 m long duct can expand by approx. 50 mm. This movement must be transmitted via sliding bearings and accommodated by suitable expansion joints, installed at appropriate intervals.



Inspection cover



series	cutout dimensions mm	material: galvanized sheet	material: stainless steel
		item no.	item no.
200	100 x 200	252003010	252003020
250	100 x 200	252503010	252503020
300	100 x 200	253003010	253003020
400	200 x 300	254205010	254205020
500	200 x 300	255205010	255205020
630	300 x 400	256505010	256505020
710	300 x 400	257303010	257303020
800	300 x 400	258205010	258205020
900	300 x 400	259205010	259205020
1250	300 x 400	2512702010	2512703020

VentaFit-6022



VentaFit is a special developed glue for the adhesion of VENTAFLEX® air ducts Classic. The inner- and outer sealing of connection points is easily possible as well.

Colour	Quantity	Item no.
black	580 ml	0030015001
gray	580 ml	0030015004

Tubular bag press



Especially for tubular bags with 400 ml or 600 ml

quantity	item no.
1	0030019001

Material requirements

The required amount of glue depends on the number of connection points – and of course on the diameter or rather the form of the duct. On the basis of the chart the expected quantity can be calculated, which can be produced by one bag.

series	inside dimensions	Number of adhesion- or rather connection points, which can be produced with one tubular bag
		VentaFit
500	520/770	2
	520/1020	2
	520/1270	1
	520/1520	1
630	650/900	2
	650/1150	1
	650/1400	1
	650/1650	0,75
710	730/980	1
	730/1230	1
	730/1480	0,75
	730/1730	0,75
800	820/1070	1
	820/1320	0,75
	820/1570	0,75
	820/1820	0,5
900	920/1170	0,75
	920/1420	0,75
	920/1670	0,5
	920/1920	0,5
1250	1270/1520	0,5
	1270/1770	0,5
	1270/2020	0,25
	1270/2270	0,25

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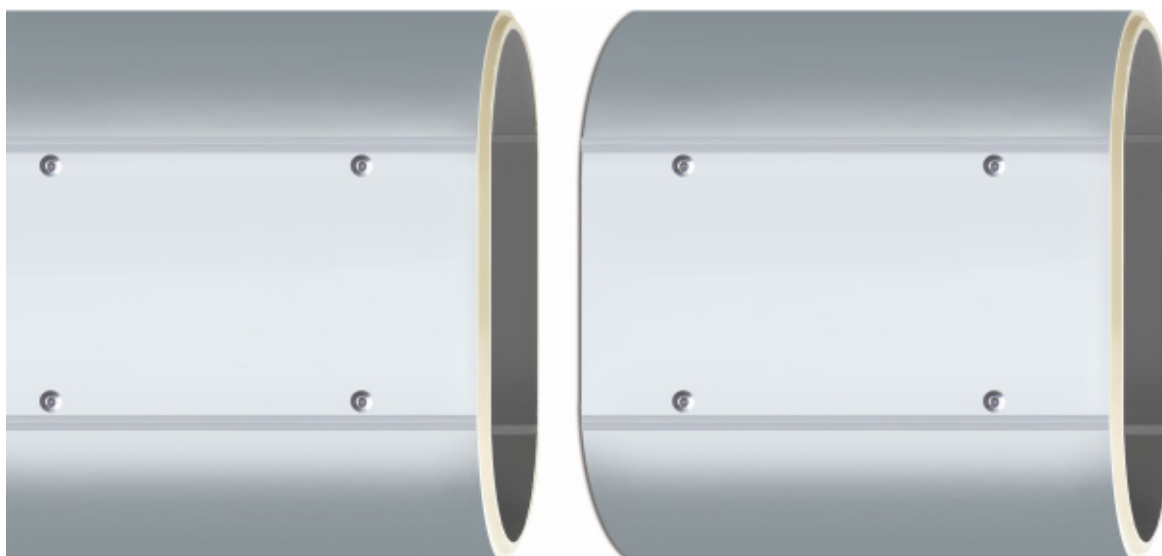
info@ventaflex.de
www.ventaflex.de

INSTALLATION INSTRUCTION

VENTAFLEX®

air duct Classic

for room · facade · roof



VENTAFLEX® AIR DUCT CLASSIC OVAL

Responsibility

The installation instruction for VENTAFLEX® products are a non-binding recommendation which is not legally binding. They are based on construction data and installation experience. An overall responsibility for the system on the part of VENTAFLEX® is not possible, because it solely develops, produces and delivers components and modules for the preparation of ventilation- and heating systems.

Please read this installation instruction carefully before starting the installation and make sure that all necessary materials and tools are ready to be used.

Safety note

Installation work may only be done by skilled workers who have sufficient knowledge in

- safety regulations
- accident prevention regulations
- guidelines and recognized rules of the technology (e.g. VDE-provisions, DIN-standards) because of their professional training, experience and instruction.

The skilled workers must

- be able to assess the assigned work, recognize possible dangers and avoid them
- be authorized to carry out the necessary work and action by those responsible for safety of the plant.

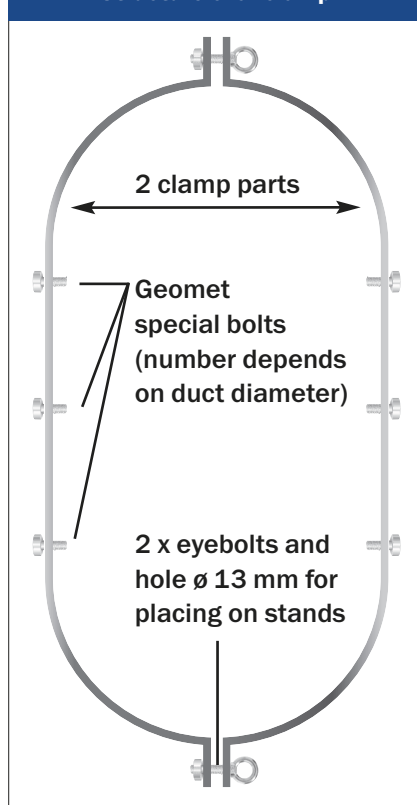
Quick help

If you have any further questions regarding the installation or other VENTAFLEX® products, please contact our hotline or call us under **+49 (0) 25 05 - 93 829 -20**. We will now lead you through the installation step by step.

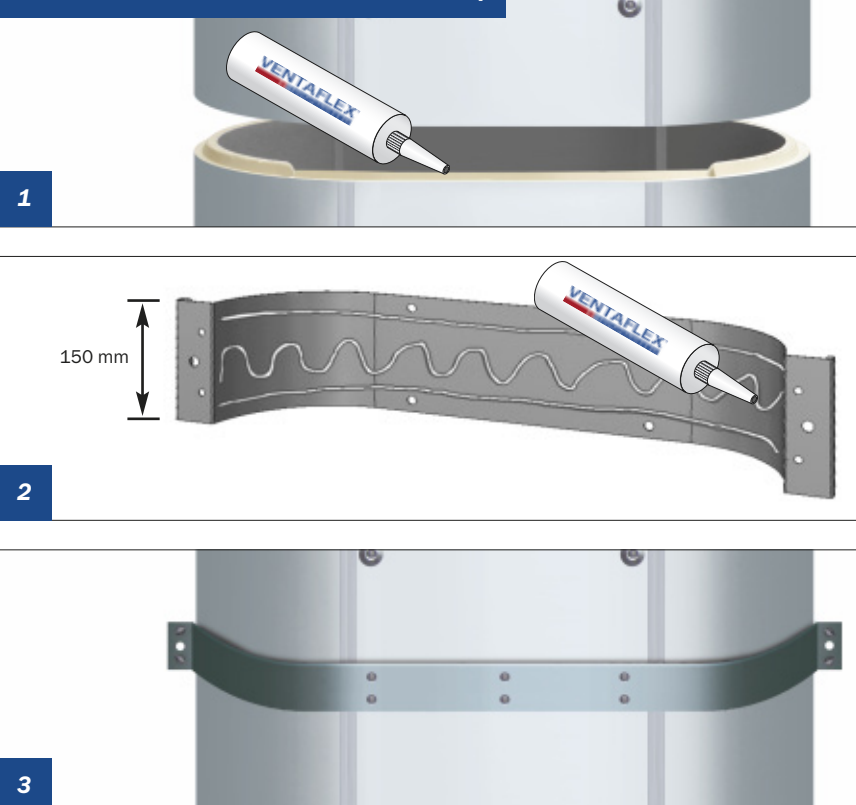
You find further generally valid information about the processing of VENTAFLEX® air ducts under www.ventaflex.de

Content	Page
Oval clamp	3.22
Mounting/suspension	3.23
Length adjustment	3.24
Compensator	3.25
Rectangular duct transition	3.26
Roof duct	3.27

Structure oval-clamp



Installation VENTAFLEX® Classic oval clamp



VentaFit is a special glue for PUR rigid foam. Ideal results are reached at a processing temperature of 5° C to 35° C. Skin building time is after approx. 20 min. Indications of quantity are found on the cartridge.

Tip:

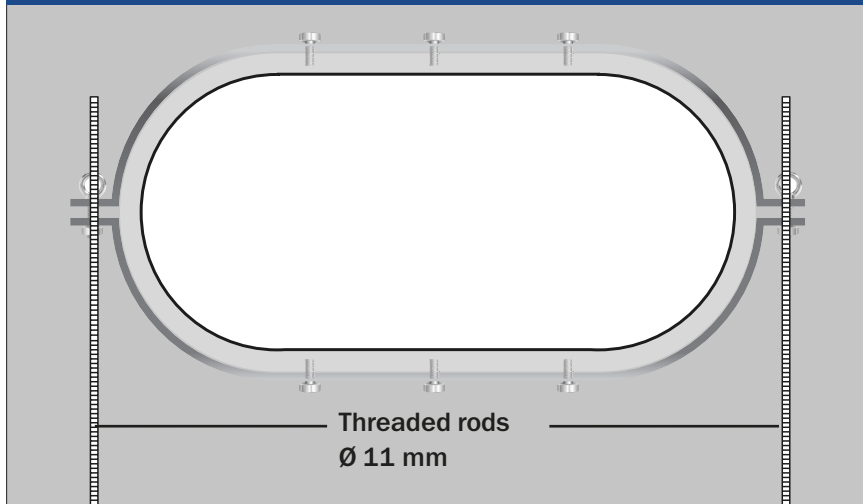
At low ambient temperature the flowability can be improved by placing the cartridges in a bucket of warm water before handling them.

Apply the adhesive all around the various levels of the joint. Ensure that all bonding and sealing surfaces are free of dust, grease and other deposits. Place a second duct on top of the first and align until the tongue and groove interlock. Then seal the glued seams from the outside with adhesive and apply it generously across the width of the clamp.

Place the VENTAFLEX® Classic oval clamps around the joint. Tighten the eyebolts on the sides and press them firmly onto the adhesive surface, then fit the special screws into all the existing drill holes in the clamps and screw them into the duct.

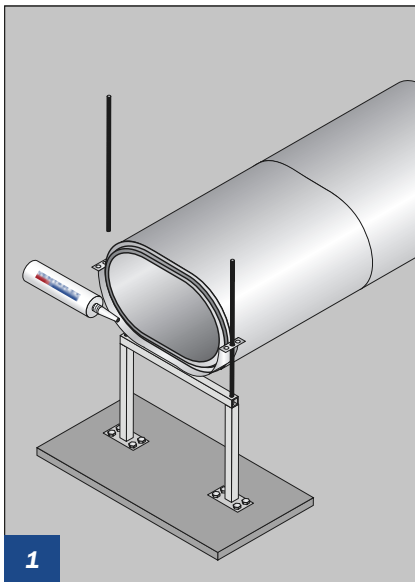
For the mounting of the VENTAFLEX® Classic oval clamps only use the specifically developed Geomet special bolts to maintain the tightness of the duct.

Mounting/Suspension with VENTAFLEX® Classic Oval Clamps

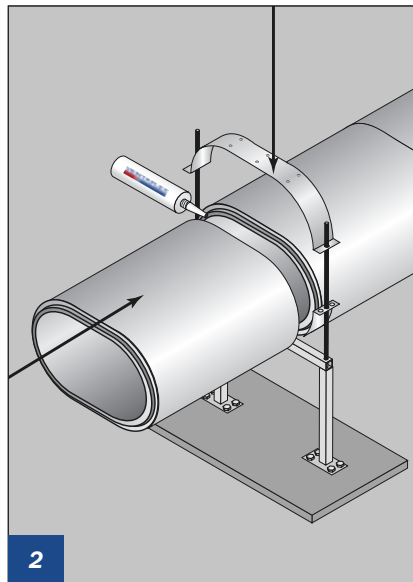


VENTAFLEX® Classic Oval Clamps are used both to securely connect duct sections and to mount or suspend the system.

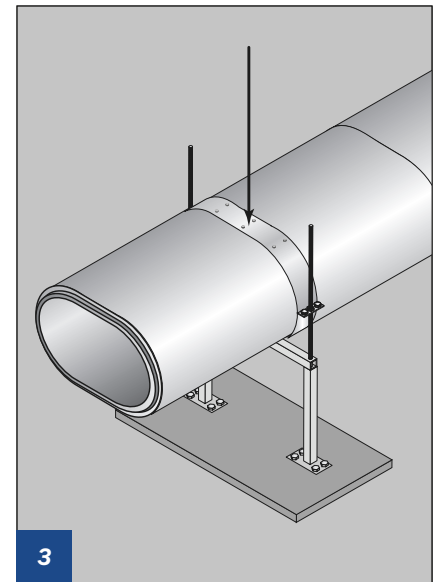
Washed concrete slabs as foundation for the construction avoids the penetration of the roof membrane. We recommend individually reconciling a possible wind load.



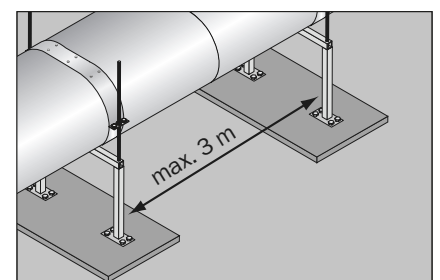
Place the VENTAFLEX® Classic Oval Clamp on the lower support. Then install the air duct as described in 3.21.



The upper clamp is threaded onto the threaded rods and installed as described in 3.21.

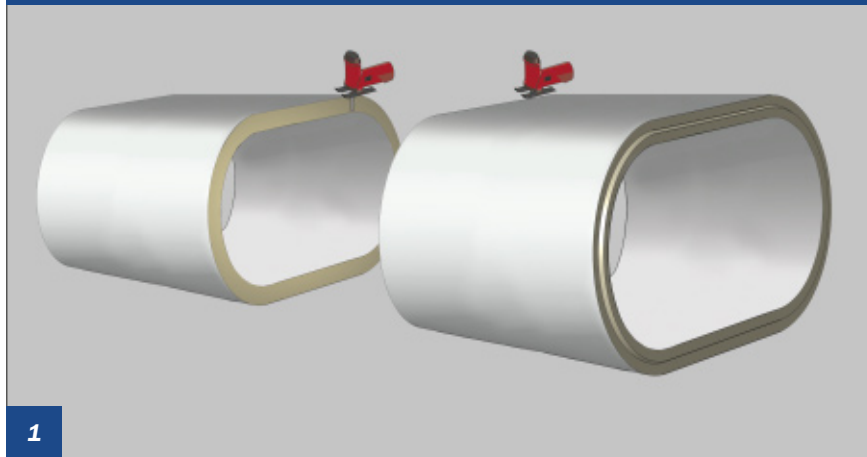


Following that put down the upper VentaFix clamp and screw it together



The distance between two VentaFix clamps should not exceed 3 m.

Generation of exact duct length

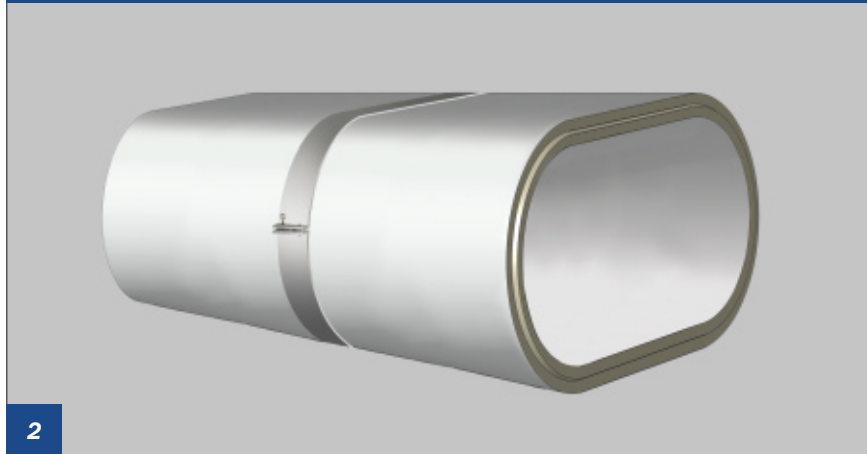


Remove groove or tongue at the connection point of the VENTAFLEX® air duct Classic Oval.

Tip:

We recommend to cut the VENTAFLEX® air duct Classic with a jigsaw with a metal saw blade.

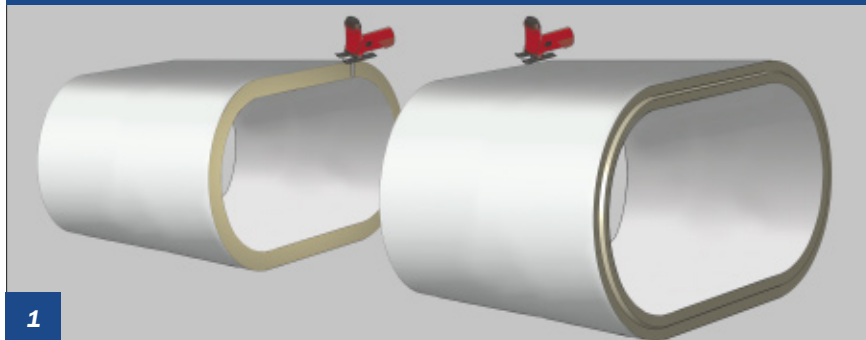
Connecting the segments with the oval clamp



After cutting, apply a generous amount of adhesive to the cut end (see "Installation of Oval Clamp"). Place the two VENTAFLEX® Classic Oval air ducts end-to-end and spread the adhesive by applying pressure while moving the duct back and forth.

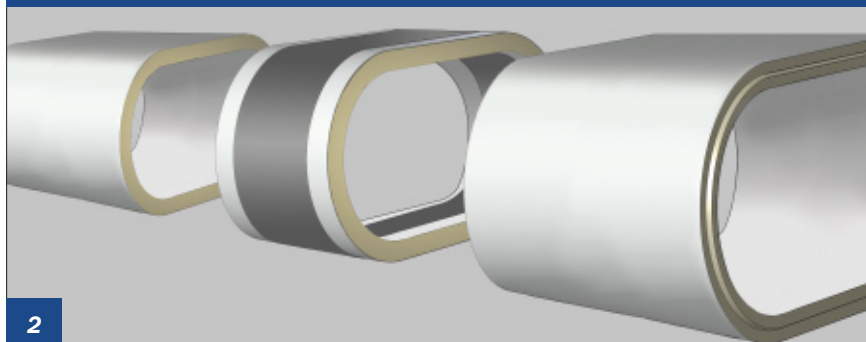
Finally, place both parts of the oval clamp in the center of the joint and screw them together.

Installation of a compensator for thermal expansion compensation



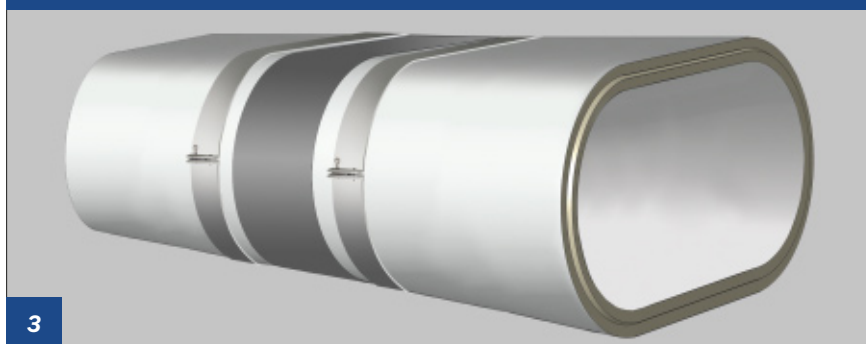
1

Placement of the oval compensator between the duct sections



2

Connecting the segments with the oval clamp



3

Remove groove or tongue at the connection point of the VENTAFLEX® air duct Classic Oval.

Tip:

We recommend to cut the VENTAFLEX® air duct Classic with a jigsaw with a metal saw blade.

Expansion joints must be positioned in such a way that any changes in length that occur can be fully accommodated.

The adjacent duct sections must be routed appropriately (e.g. using sliding bearings) and secured at fixed points.

After cutting, apply a generous amount of adhesive to the cut end (see "Installation of Oval Clamp"). Place the two VENTAFLEX® Classic Oval air ducts end-to-end and spread the adhesive by applying pressure while moving the duct back and forth.

Finally, place both parts of the oval clamp in the center of the joint and screw them together.

The maximum surface temperature must be used for the design. During summer, roof surfaces can reach very high temperatures due to solar radiation. This results in a significant temperature difference compared to winter conditions, which must be taken into account during the design process.

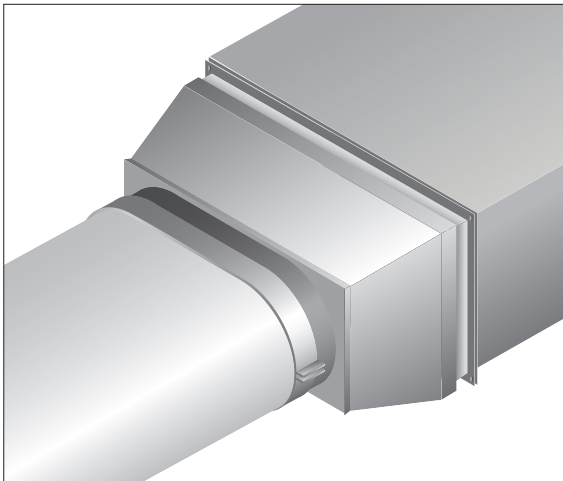
Calculation example (simplified):

$$\Delta L = 0,00005 \cdot 10 \cdot 100$$

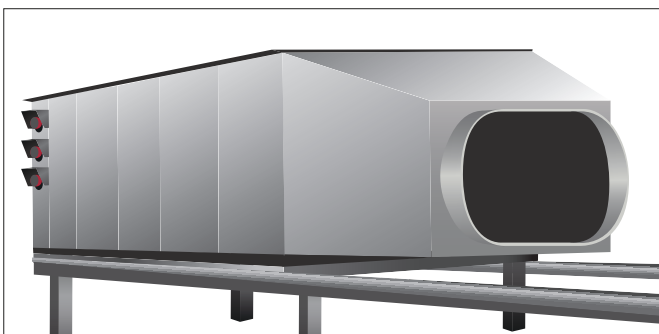
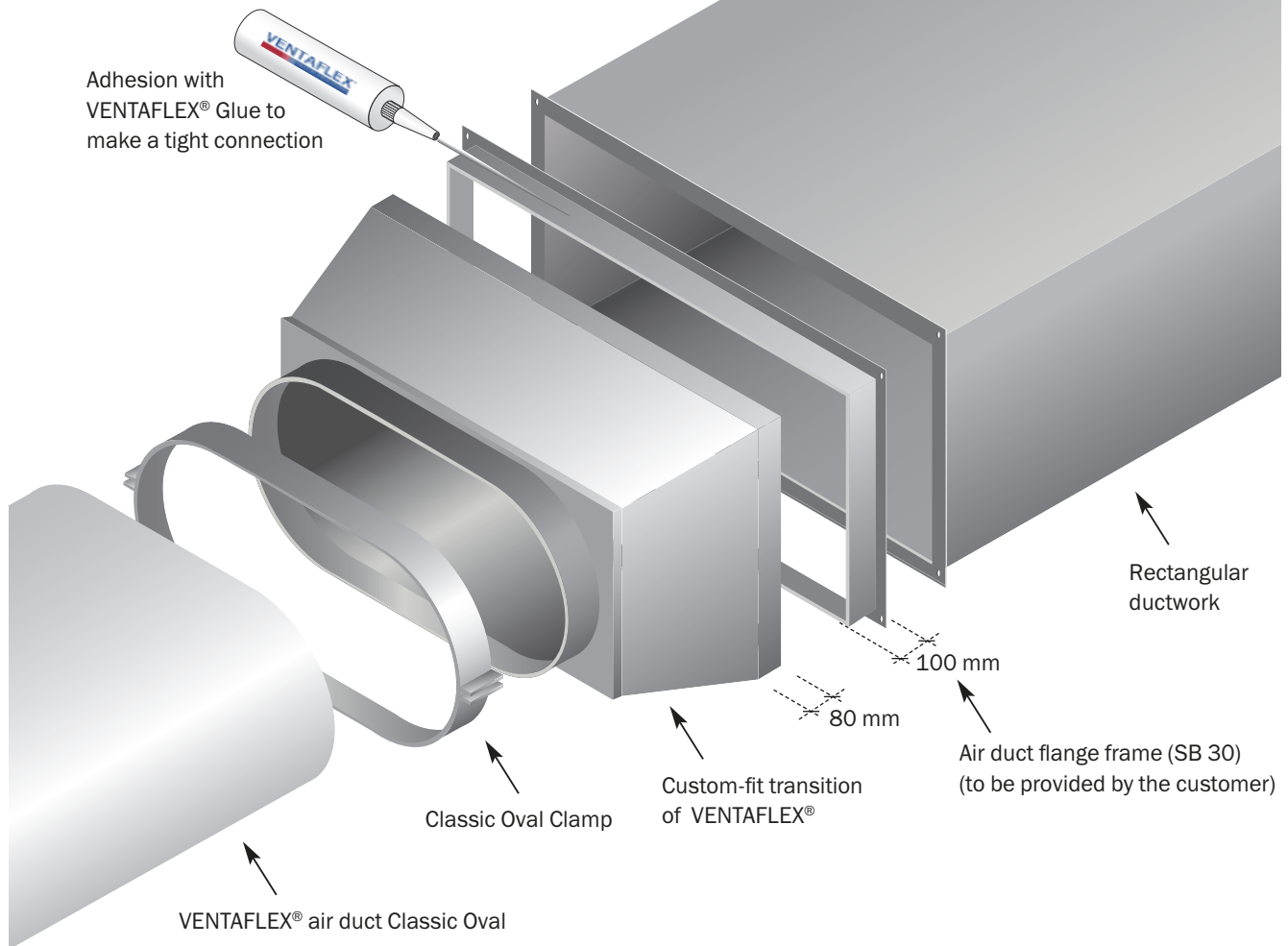
$$\text{Result: } \Delta L \approx 0,50 \text{ m} = 50 \text{ mm}$$

Consequently:

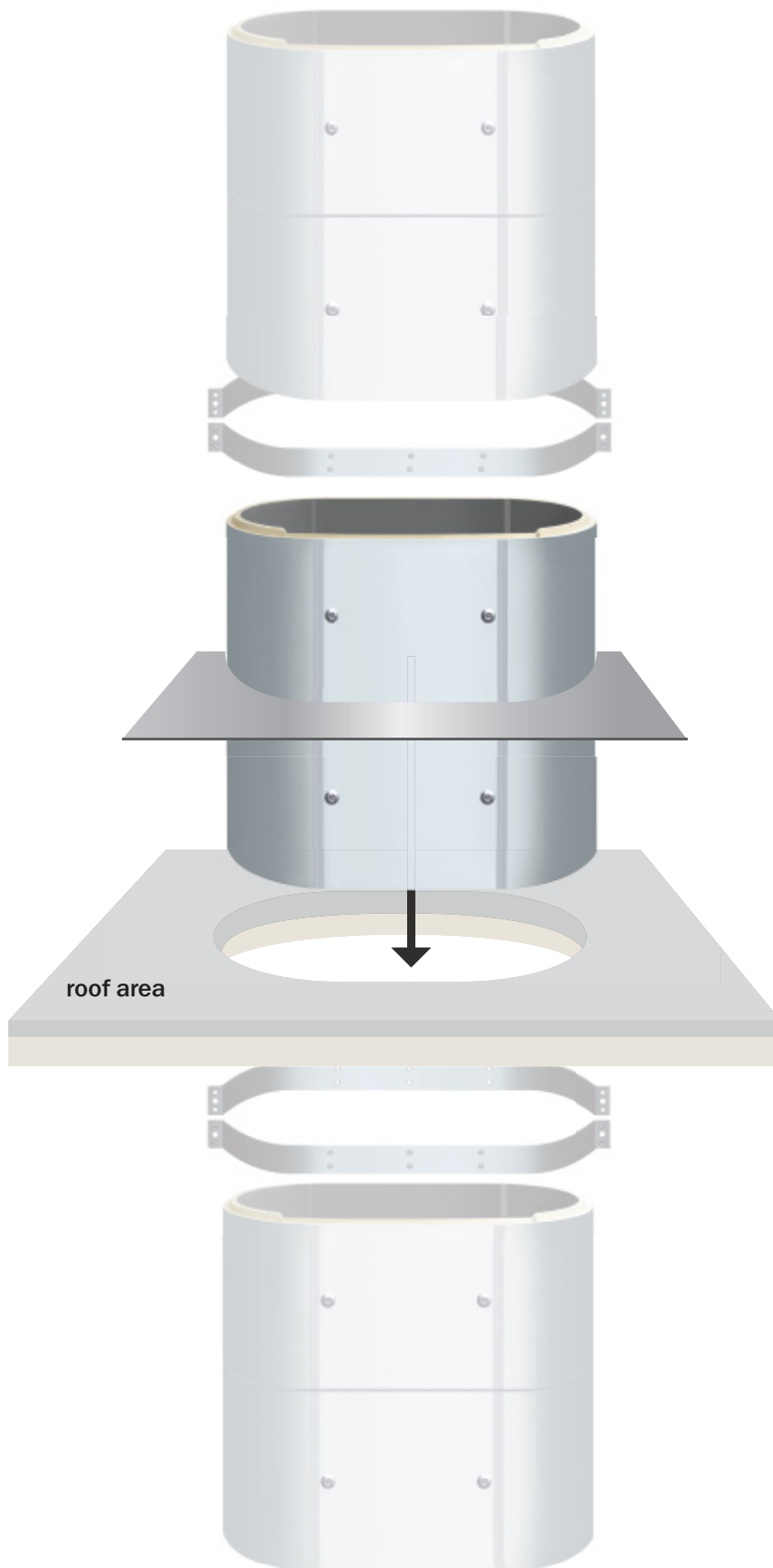
A 10 m long duct can expand by approx. 50 mm. This movement must be transmitted via sliding bearings and accommodated by suitable expansion joints, installed at appropriate intervals.



Installation of a tight connection between VENTAFLEX® air duct Classic Oval and rectangular ductwork



Also suitable as a connection with transition to the correct dimension for the HVAC systems



1

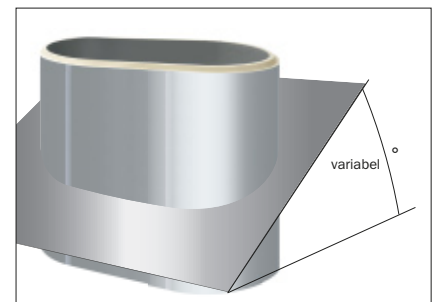
Make roof cut-out.

2

Place VENTAFLEX® Classic roof duct centered on the opening of the roof membrane, push it through the opening and connect it with the roof membrane generously.

3

Connect the duct segments as shown (see „Installation Oval Clamp“).



If required VENTAFLEX® produces a roof duct according to the angle the roof inclination.

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