

Brink Semi Rigid 3" HRV Duct



High Performance,
Anti-static, Anti-microbial
Semi Rigid Duct for Brink
FLAIR ERV/HRV

BENEFITS

- Semi rigid - easy to push or pull through stud walls
- High compressive strength - can be poured into slabs
- Anti-static, greatly reduced dust accumulation
- Anti-microbial, greatly reduces bacteria & fungi propagation
- Easy to cut straight with proprietary semi rigid cut-off tool
- Fast and reliable connections to:
 - Brink manifolds
 - 2 and 3 port system register boxes

PRODUCT PROPERTIES

3" (75mm) duct in 164' (50m) lengths - allows for direct runs from manifold in mechanical room to register boxes. These layouts prevent cross talk between rooms. Sound-absorbing material - reduces noise transfer even further.

Smooth inner surface, significantly reduces air resistance compared to competitors. This resulting in low pressure drops and assists in getting the desired ventilation airflows to register boxes.

The semi rigid nature of the ducts assures bends will have sufficiently long radius' for a smooth airflow and unimpeded airflow

GENERAL CONDITIONS

Bending tighter than specified, can result in higher pressure drop, turbulence and other undesired side effects (noise).

For use in single family homes and as otherwise permitted by AHJ.



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TECHNICAL SPECS		
Exterior shell	polyethylene (HDPE-mod.) approved for food contact, grey	
Interior lining	Anti microbial*, antistatic, Smooth surface,color:silver	
Attribute	Norm	Value
Material		polyethylene (HDPE-mod.) approved for food contact
Compressive strength	EN 61386-24	500N
Impact resistance:	EN 61386-24	passed
Longitudinal stiffness:	EN 13180:2004	3x Diameter (semi rigid) flexible ducts
Global migration (average):	EN 1186-3:2005 EN 1186-14:2005	< 0.5 mg/dm ²
UV stability		Passed - Do not expose to direct sunlight/UV
Exterior dimension / length		2.95" (75mm) - 50m long (164')
Interior free area		2.4" (61mm)
Minimum recommended bending radius	>50F (> 10C)	6.5" (0.17m)
Duct tightness	DIN EN 12237	Airtight Class D - ATC2 (<0.22%)
Operating pressure range		-750 to +2000Pa
Temperature range		5°F to +122°F (-15°C to +50°C)
Conductivity		0.0397mK/W
National Building code of Canada	Section 3.6.5 Section 9.33.6	Air Duct and Plenum Systems - Complies Air Duct Systems - complies

* The original, patented method of confirming the dispersion of microbiologically active components in the polymer allows for immediate verification of the presence of active substances, their proper dispersion and concentration in the plastic. The UV-illuminated semi rigid ventilation duct evenly fluoresces with blue light for immediate microbiological protection analysis.



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Nominal dimension DN (mm)	Air velocity (m/s)						
	0.5	1.0	1.5	2.0	3.0	4.0	5.0
75mm	5.3	10.5	15.8	21.0	31.6	42.1	52.6

APPLICATION

Volumetric airflow rate (m ³ /hr)	Unit pressure drop (Pa/m)	Air velocity (m/s)	Pressure drop Coefficient of length A
10	0.41	0.97	0.040
15	0.46	1.45	0.039
20	0.87	1.94	0.036
25	1.42	2.42	0.035
30	2.13	2.91	0.032
35	2.99	3.39	0.030
40	4.01	3.88	0.028
45	5.20	4.36	0.026
50	6.56	4.85	0.023
55	8.09	5.33	0.021
60	9.80	5.82	0.020
Theoretical airflow rates below (not recommended)			
80	18.47	7.76	0.019
100	30.20	9.69	0.019
120	45.13	11.63	0.018
140	63.38	13.57	0.018
160	85.06	15.51	0.018