

Rigid Duct Systems Issue 1

Specification



Scope of works

Standard

MEV

A rigid circular (or equivalent rectangular) duct system shall be used to aid in the extraction of stale air from all 'wet rooms' in a dwelling when connected to a centralised mechanical extract ventilation system (cMEV) in accordance with the requirements of the Domestic Ventilation Compliance Guide 2010 edition.

The size of the duct shall match the size of the appliance duct connection and the installation space available shall determine the profile.

Domestic Ventilation Compliance Guide 2010 edition specific references are: Table 5, System 3 installation guidelines, 2.0 Ductwork.

MVHR

A rigid circular (or equivalent rectangular) duct system shall be used to aid in the extraction of stale air from all 'wet rooms' and the supply of fresh air to all 'habitable rooms' in a dwelling when connected to a balanced mechanical extract ventilation with heat recovery system (MVHR), in accordance with the requirements of the Domestic Ventilation Compliance Guide 2010 edition.

The size of the duct shall match the size of the appliance duct connection and the installation space available shall determine the profile.

Domestic Ventilation Compliance Guide 2010 edition specific references are: Table 7, System 4 installation guidelines, 2.0 Ductwork.

Example of MVHR specification

Domus Ventilation EasiPipe Ø150mm rigid circular (or equivalent rectangular) duct systems shall be used to aid in the extraction of stale air from all 'wet rooms' and the supply of fresh air to all 'habitable rooms' in a dwelling when connected to a Domus Ventilation HRX2 balanced mechanical extract ventilation with heat recovery system (MVHR) in accordance with the requirements of the Domestic Ventilation Compliance Guide 2010 edition.

The duct system shall be as short and direct as possible with as few ninety degree bends as is practical – to keep overall duct system resistance to a minimum.

All joints shall be sealed using Domus Ventilation DDSEAL acrylic sealant and each duct shall be supported and insulated in accordance with the Domestic Ventilation Compliance Guide 2010 edition.

For further information please contact Domus Ventilation's Technical Team on 03443 715 523 or email vent.technical@domusventilation.co.uk

Manufacturer

Domus Ventilation

Product range

Domus Ventilation Rigid Duct

Materials

Ducts: Extruded uPVC (White)

Fittings: Moulded Polystyrene (White)

Size

Circular duct:

100mm, 125mm and 150mm inside diameter – male fittings

Rectangular duct:

110mm x 54mm (80mm diameter pipe equivalent), 204mm x 60mm (125mm equivalent), 220mm x 90mm (150mm equivalent), 234mm x 29mm (80mm equivalent) and 308mm x 29mm (100mm equivalent) outside dimensions – female fittings

Accessories

- ▶ Thermal rigid duct insulation
- ▶ Duct supports
- ▶ Grilles, outlets, airbricks, terminals and valves
- ▶ FireBrake connectors
- ▶ Duct attenuation silencers. Microban protected options available

Resistance data in Pascals (Pa)

	@15l/s	@30l/s	@60l/s	@120l/s	@180l/s
135-4	0.17	0.5	1.1	-	-
1100-4	0.5	1.4	3.1	-	-
1200-4	1.0	2.8	6.2	-	-
2100-4	0.5	1.4	3.1	-	-
490	5.6	21.1	80.1	-	-
491	2.1	8.2	31.4	-	-
493	0.9	4.2	20.4	-	-
494	25.0	44.9	101.6	-	-
495	25.0	44.9	101.6	-	-
497	1.3	5.9	26.9	-	-
498	1.3	5.9	26.9	-	-

	@15l/s	@30l/s	@60l/s	@120l/s	@180l/s
135-5	0.07	0.25	0.67	-	-
1100-5	0.2	0.7	1.9	-	-
1200-5	0.4	1.4	3.8	-	-
2100-5	0.2	0.7	1.9	-	-
590	2.0	8.4	34.9	-	-
591	0.7	2.9	12.2	-	-
593	0.2	0.9	4.3	-	-
594	18.3	31.5	61.7	-	-
595	18.3	31.5	61.7	-	-
119	1.5	5.9	24.0	-	-
498	1.3	5.9	26.9	-	-

	@15l/s	@30l/s	@60l/s	@120l/s	@180l/s
135-6	0.04	0.14	0.42	-	-
1100-6	0.1	0.4	1.2	-	-
1200-6	0.2	0.8	2.4	-	-
2100-6	0.1	0.4	1.3	-	-
690	1.0	4.2	18.2	-	-
693	0.1	0.2	1.1	-	-
694	13.6	23.5	43.6	-	-
695	13.6	23.5	43.6	-	-
118	0.6	2.2	8.8	-	-

	@15l/s	@30l/s	@60l/s	@120l/s	@180l/s
DD010	1.8	6.3	21.5	-	-
DD015	2.7	9.75	32.25	-	-
D1-2000	3.6	12.6	43.0	-	-
D2-1000	1.8	6.3	21.5	-	-
DD020	0.3	1.4	6.3	-	-
DD027	19.9 2	1.2	16.9	-	-
DD030	8.1	33.1	136.4	-	-
DD040	8.1	33.1	136.4	-	-
DD050	9.8	39.8	161.9	-	-
DD055	3.7	15.5	65.8	-	-
DD060	15.6	62.8	252.7	-	-
DD070	3.7	14.6	58.0	-	-
DD071	4.8	20.4	86.2	-	-
DD075	2.6	12.7	63.0	-	-

	@15l/s	@30l/s	@60l/s	@120l/s	@180l/s
510	0.5	1.5	5.2	-	-
515	0.75	2.25	7.8	-	-
D3-2000	1.0	3.0	10.4	-	-
520	0.1	0.4	1.5	-	-
527	21.9	41.1	43.2	-	-
440	1.4	5.3	19.9	-	-
441	7.3	29.1	116.4	-	-
540	1.7	6.9	27.1	-	-
541	2.7	11.1	45.9	-	-
545	0.7	2.1	6.3	-	-
640	1.8	7.4	29.8	-	-
641	1.1	4.5	18.3	-	-
550	2.1	8.4	33.7	-	-
555	0.6	2.7	13.2	-	-
560	2.6	10.8	44.3	-	-
570	0.7	2.9	11.5	-	-
575	0.6	2.7	13.4	-	-

	@15l/s	@30l/s	@60l/s	@120l/s	@180l/s
910	-	-	0.95	3.29	6.82
915	-	-	1.42	4.93	10.23
D4-2000	-	-	1.9	6.58	13.64
941	-	-	5.3	20.4	44.8
950	-	-	9.0	35.7	79.6
951	-	-	3.6	14.9	34.4
955	-	-	4.6	19.74	46.5
960	-	-	7.0	28.8	65.9
961	-	-	9.0	34.0	75.0
970	-	-	3.7	14.1	30.7
975	-	-	6.0	26.76	64.2

	@15l/s	@30l/s	@60l/s	@120l/s	@180l/s
20150	7.2	24.8	85.7	-	-
20200	9.6	33.0	114.2	-	-
2005	3.8	14.8	57.2	-	-
2007	10.0	37.3	139.1	-	-
2008	1.21	4.81	19.08	-	-
2010	5.45	19.91	72.7	-	-
2011	4.49	8.59	29.67	-	-
2013	7.9	31.5	126.0	-	-

	@15l/s	@30l/s	@60l/s	@120l/s	@180l/s
30150	4.5	16.1	56.3	-	-
30200	4.9	16.22	53.6	-	-
3005	6.11	23.67	91.66	-	-
3007	2.62	10.42	41.52	-	-
3008	1.14	4.09	14.71	-	-
3010	3.09	11.48	42.62	-	-
3011	2.23	7.7	26.61	-	-
3013	4.3	15.8	58.9	-	-

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