



Verplas Radial Ducting Range

SYSTEM OVERVIEW

The technology behind the lifestyle



Verplas Radial Ducting



- Minimises air leakage
- Reduces installation time
- Reduces number of fittings
- Ideal for tight spaces
- Anti-bacterial coating as standard
- No sealing rings required

Radial ducting solutions are the ideal for residential MVHR applications. When space constraints are key the 75mm $\varnothing$ ducts can be easily threaded through the building, connected to each room using Verplas purpose designed manifold boxes and plenum connections.

Verplas range of manifold boxes are acoustically lined to assist with reducing noise transfer through the ducting system into the home.

Our 75mm spigots grip and hold the radial in place to prevent any dislodging of ducts during installation. Unlike other systems there is no need for any additional sealing rings.

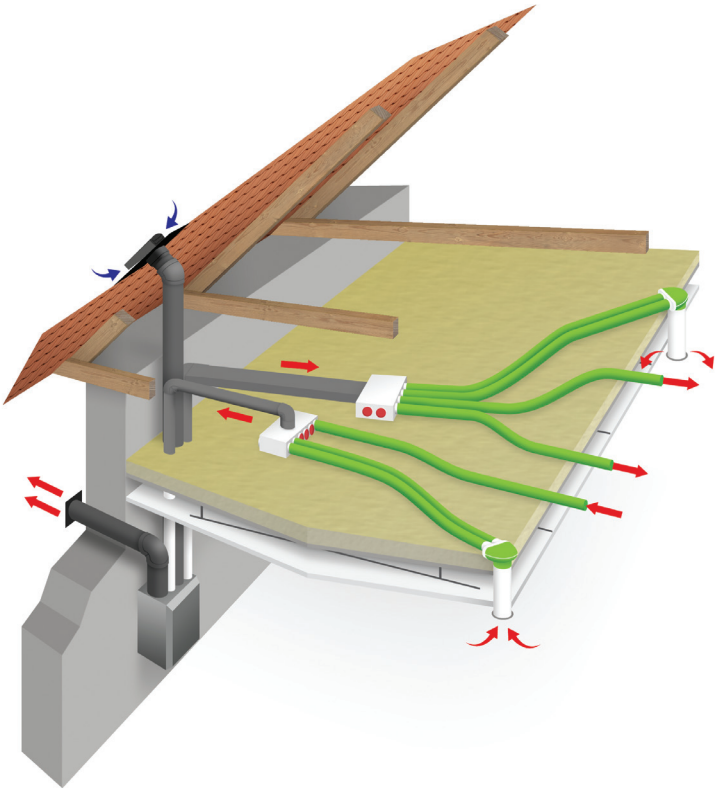
Verplas Radial Ducting range is available as a 75mm external diameter circular duct and with a full range of associated ancillaries including insulated ducting sleeves and fire solutions.

Verplas Radial Ducting range is available as a 75mm external diameter, circular 50 metre duct, manufactured with an antibacterial coating applied to the inner lining, to assist with the build-up of harmful contaminants. With a full range of associated ancillaries including insulated ducting sleeves and fire products, Verplas offers the complete radial solution.

Our range is compatible with all Verplas 125mm/150mm diameter and 220x90mm standard PVC ducting & self-seal fittings allowing for easy connection. Verplas low resistance plenums are supplied as standard with double spigots meaning only one product needs to be stocked on site for either single or double duct applications.

We understand that ease of installation is critical on large self-build and new build applications, Verplas Radial minimises the requirements for additional fittings such as bends, connectors and T-pieces this in turn can reduce installation labour time.

Commissioning and balancing airflow is easy using our standard 125mm supply and extract air valves.



With minimum and maximum operating temperatures for Verplas radial ducting between -40° to 90° and designed to withstand 800N of pressure, Verplas radial is tough enough to be installed into today's UK domestic self-build and new build marketplace.

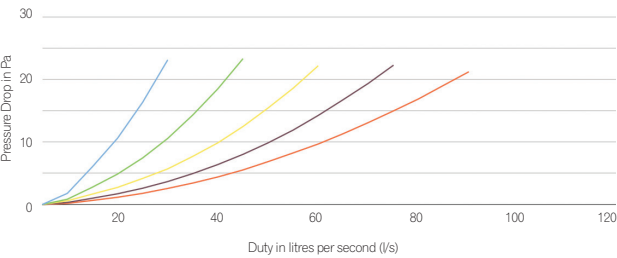
Verplas Radial Ducting is fully SAP tested and is recognised within SAP calculations for use within new build applications. The system provides low airflow leakage results when compared to traditional PVC ducting systems.

The Verplas Radial range has been independently airflow performance tested by the British Research Establishment.

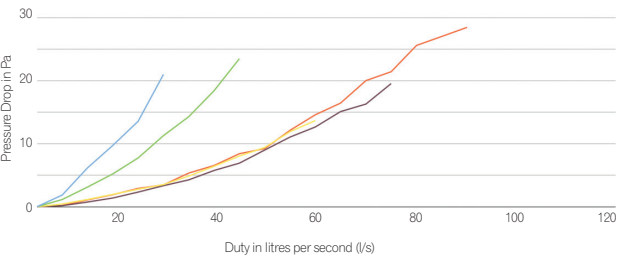


Verplas Radial Ducting

6 CONNECTION ROUND 150mm TOP MANIFOLD BOX

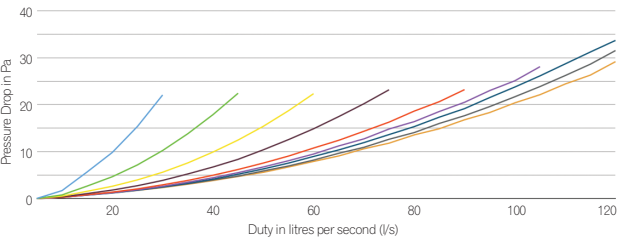


DUTY [l/s]	NO OF OPEN OUTLETS (Pa)					
	2	3	4	5	6	
0	0	0	0	0	0	
8	1.79	0.85	0.60	0.33	0.18	
15	6.06	2.78	1.68	1.01	0.66	
20	10.62	4.88	2.74	1.72	1.16	
25	16.38	7.46	4.18	2.61	1.79	
30	23.18	10.59	5.71	3.68	2.58	
35		14.35	7.72	4.96	3.44	
40		18.55	9.89	6.41	4.42	
45		23.37	12.50	8.04	5.54	
50			15.47	9.88	6.87	
55			18.64	11.93	8.27	
60			22.24	14.28	9.70	
65				16.82	11.36	
70				19.43	13.14	
75				22.33	15.01	
80					16.93	
85					19.11	
90					21.27	
95						
100						
105						
110						
115						
120						

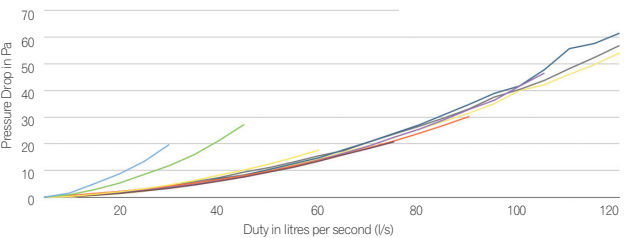


DUTY [l/s]	NO OF OPEN OUTLETS (Pa)					
	2	3	4	5	6	
0	0	0	0	0	0	
8	1.86	1.15	0.44	0.17	0.20	
15	6.18	3.13	1.16	0.75	1.09	
20	9.74	5.22	1.97	1.39	1.92	
25	13.57	7.75	2.78	2.33	2.91	
30	21.01	11.29	3.52	3.34	3.47	
35		14.30	4.88	4.27	5.35	
40		18.42	6.42	5.76	6.55	
45		23.50	8.05	6.92	8.42	
50			9.41	9.00	9.23	
55			11.91	11.06	12.13	
60			13.68	12.66	14.60	
65				15.11	16.46	
70				16.30	20.02	
75				19.56	21.44	
80					25.61	
85					27.04	
90					28.48	
95						
100						
105						
110						
115						
120						

10 CONNECTION 150mm ROUND MANIFOLD BOX



DUTY [l/s]	NO OF OPEN OUTLETS (Pa)									
	2	3	4	5	6	7	8	9	10	
0	0	0	0	0	0	0	0	0	0	
8	1.67	0.75	0.50	0.33	0.24	0.23	0.23	0.30	0.28	
15	5.66	2.64	1.53	1.04	0.79	0.73	0.71	0.79	0.75	
20	9.82	4.64	2.60	1.79	1.35	1.23	1.17	1.24	1.19	
25	15.37	7.16	3.96	2.72	2.04	1.85	1.75	1.78	1.72	
30	22.08	10.23	5.60	3.85	2.91	2.59	2.44	2.41	2.33	
35		13.81	7.58	5.23	3.84	3.47	3.24	3.13	3.03	
40		17.88	9.90	6.71	4.95	4.42	4.12	3.95	3.82	
45		22.45	12.47	8.35	6.18	5.51	5.17	4.77	4.69	
50			15.39	10.38	7.55	6.72	6.30	5.87	5.58	
55			18.71	12.55	9.04	8.05	7.54	6.93	6.71	
60			22.36	14.87	10.76	9.48	8.96	8.19	7.90	
65				17.47	12.41	11.21	10.36	9.64	9.07	
70				20.21	14.34	12.71	11.92	10.91	10.60	
75				23.19	16.29	14.82	13.63	12.63	11.80	
80					18.64	16.39	15.33	14.06	13.56	
85					20.66	18.56	17.35	16.01	14.88	
90						20.52	19.17	17.66	16.79	
95						23.02	21.53	19.60	18.33	
100						25.11	23.78	21.70	20.40	
105						28.12	26.16	23.88	22.14	
110							28.71	26.22	24.42	
115							31.25	28.65	26.32	
120							33.72	31.56	29.19	



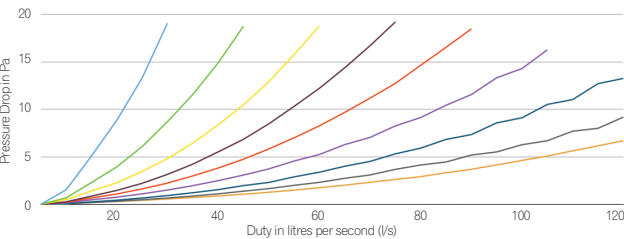
DUTY [l/s]	NO OF OPEN OUTLETS (Pa)									
	2	3	4	5	6	7	8	9	10	
0	0	0	0	0	0	0	0	0	0	
8	1.48	0.87	0.24	0.14	0.58	0.48	0.21	0.45	0.04	
15	4.98	2.77	1.07	0.73	1.38	1.22	0.81	1.27	0.60	
20	8.67	5.22	1.97	1.40	2.13	1.92	1.51	2.10	1.28	
25	13.37	8.51	3.15	2.33	3.02	2.78	2.42	3.12	2.20	
30	19.70	11.78	4.54	3.32	4.13	3.80	3.56	4.33	3.34	
35		15.90	6.21	4.54	5.25	4.83	4.92	5.73	4.69	
40			21.25	8.24	6.00	6.61	6.38	6.98	7.33	6.25
45			27.25	10.16	7.56	8.14	7.96	8.32	9.41	8.01
50				12.38	9.41	9.71	9.75	10.35	11.07	10.50
55				14.92	11.26	11.71	11.80	12.61	13.24	12.11
60				17.72	13.52	13.77	14.00	14.81	15.54	14.27
65					15.99	16.01	16.49	17.82	17.47	16.92
70					18.28	18.56	19.22	20.76	20.72	19.30
75					20.78	21.09	22.49	23.93	23.68	22.39
80						23.94	25.50	27.11	26.59	25.53
85						26.99	29.06	30.96	29.72	28.46
90							32.92	34.82	33.14	31.55
95							36.35	38.91	37.53	35.06
100							41.58	41.67	40.35	39.93
105							46.51	47.79	43.78	42.15
110								55.69	48.20	46.05
115								57.61	52.36	49.65
120								61.48	56.85	54.07

KEY Number of open outlets
2 3 4 5 6 7 8 9 10 11 12 13 14

Verplas Radial Ducting

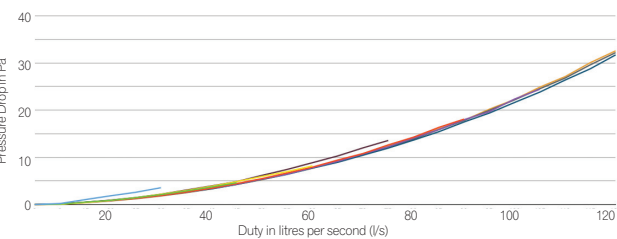
10 CONNECTION ROUND HORIZONTAL 150mm MANIFOLD BOX

SUPPLY

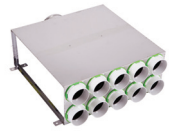


DUTY [l/s]	NO OF OPEN OUTLETS (Pa)									
	2	3	4	5	6	7	8	9	10	
0	0	0	0	0	0	0	0	0	0	0
8	1.53	0.69	0.51	0.27	0.23	0.17	0.07	0.06	0.08	
15	5.10	2.30	1.41	0.87	0.67	0.48	0.26	0.20	0.21	
20	8.86	3.95	2.28	1.47	1.10	0.76	0.44	0.33	0.31	
25	13.31	6.09	3.47	2.22	1.63	1.11	0.67	0.49	0.43	
30	19.10	8.71	4.83	3.16	2.24	1.51	0.93	0.67	0.57	
35		11.58	6.46	4.24	3.00	1.97	1.23	0.88	0.72	
40		14.90	8.38	5.53	3.83	2.50	1.55	1.11	0.89	
45		18.78	10.49	6.86	4.76	3.09	1.98	1.39	1.07	
50			12.92	8.49	5.84	3.74	2.31	1.66	1.28	
55			15.79	10.33	7.02	4.57	2.90	2.01	1.50	
60			18.82	12.24	8.28	5.26	3.39	2.32	1.76	
65				14.40	9.70	6.30	4.02	2.75	2.02	
70				16.73	11.20	7.06	4.53	3.10	2.33	
75				19.24	12.76	8.27	5.33	3.69	2.63	
80					14.67	9.16	5.93	4.15	2.92	
85					16.56	10.45	6.85	4.47	3.34	
90					18.50	11.58	7.36	5.20	3.70	
95						13.35	8.59	5.53	4.16	
100						14.32	9.13	6.29	4.63	
105						16.30	10.54	6.71	5.10	
110						11.05	7.72	5.65		
115						12.73	8.02	6.17		
120						13.28	9.20	6.71		

EXTRACT

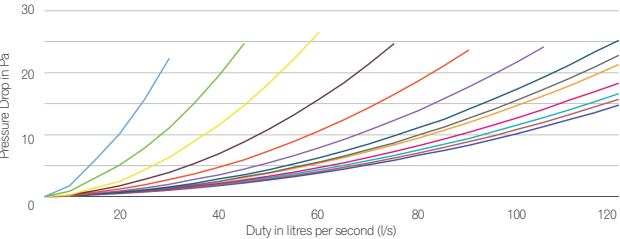


DUTY [l/s]	NO OF OPEN OUTLETS (Pa)									
	2	3	4	5	6	7	8	9	10	
0	0	0	0	0	0	0	0	0	0	0
8	0.19	0.07	0.01	0.09	0.09	0.10	0.13	0.08	0.05	
15	1.03	0.49	0.40	0.48	0.44	0.45	0.48	0.41	0.37	
20	1.83	0.86	0.85	0.92	0.82	0.82	0.86	0.78	0.73	
25	2.58	1.44	1.44	1.46	1.31	1.30	1.33	1.26	1.20	
30	3.55	2.09	2.18	2.18	1.91	1.90	1.91	1.85	1.79	
35		2.86	2.96	3.06	2.64	2.61	2.59	2.55	2.49	
40		3.71	3.85	3.93	3.44	3.41	3.30	3.36	3.31	
45			4.60	4.84	4.85	4.43	4.30	4.27	4.24	
50				5.94	6.17	5.48	5.38	5.31	5.33	
55				6.98	7.43	6.69	6.43	6.38	6.52	
60				8.19	8.86	7.92	7.81	7.71	7.75	
65					10.29	9.42	9.15	8.94	9.13	
70					12.00	10.80	10.72	10.45	10.65	
75					13.57	12.63	12.24	11.95	12.21	
80						14.27	14.10	13.65	13.88	
85						16.34	15.88	15.42	15.87	
90						18.10	17.98	17.49	17.82	
95							19.68	19.38	19.96	
100							22.36	21.63	22.18	
105							24.43	23.83	24.54	
110								26.38	26.80	
115								28.78	29.62	
120								31.72	32.20	



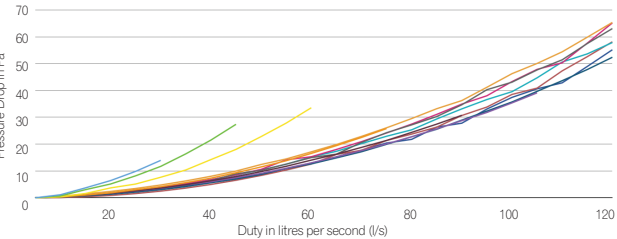
14 CONNECTION ROUND 150mm HORIZONTAL MANIFOLD BOX

SUPPLY



DUTY [l/s]	NO OF OPEN OUTLETS (Pa)													
	2	3	4	5	6	7	8	9	10	11	12	13	14	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	1.75	0.87	0.27	0.26	0.20	0.14	0.11	0.09	0.10	0.09	0.11	0.09	0.09	
15	5.80	2.96	1.40	0.96	0.70	0.51	0.40	0.34	0.37	0.33	0.35	0.30	0.30	
20	10.11	5.07	2.45	1.73	1.23	0.89	0.70	0.60	0.64	0.58	0.58	0.52	0.50	
25	15.65	7.82	4.32	2.79	1.90	1.39	1.09	0.95	0.99	0.88	0.87	0.78	0.75	
30	22.36	11.11	6.35	3.91	2.77	1.99	1.57	1.37	1.40	1.24	1.20	1.09	1.04	
35		15.09	8.97	5.34	3.67	2.79	2.14	1.88	1.89	1.67	1.59	1.45	1.39	
40		19.61	11.57	6.95	4.77	3.52	2.88	2.46	2.44	2.15	2.03	1.87	1.78	
45			24.73	14.74	8.84	5.95	4.45	3.53	3.22	3.07	2.70	2.53	2.33	
50				18.31	10.92	7.40	5.49	4.35	3.86	3.78	3.31	3.08	2.85	
55				22.25	13.22	8.93	6.63	5.30	4.76	4.55	3.96	3.68	3.42	
60				26.52	15.74	10.62	7.89	6.27	5.58	5.40	4.70	4.35	4.04	
65					18.39	12.42	9.23	7.36	6.55	6.31	5.46	5.05	4.74	
70					21.44	14.38	10.73	8.51	7.62	7.32	6.35	5.84	5.44	
75					24.69	16.49	12.31	9.81	8.66	8.36	7.27	6.64	6.23	
80						18.73	13.92	11.16	9.98	9.47	8.24	7.54	7.05	
85						21.13	15.81	12.47	11.22	10.71	9.29	8.46	7.94	
90						23.67	17.72	14.14	12.67	11.97	10.39	9.37	8.88	
95							19.76	15.77	14.10	13.36	11.58	10.50	9.81	
100							21.89	17.48	15.69	14.82	12.79	11.63	10.93	
105							24.17	19.29	17.33	16.30	14.10	12.77	11.99	
110								21.19	19.04	17.84	15.55	13.98	13.20	
115								23.28	20.85	19.55	16.89	15.27	14.45	
120								25.21	22.80	21.32	18.30	16.62	15.70	

EXTRACT

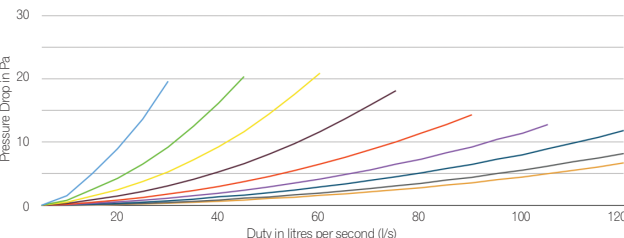


DUTY [l/s]	NO OF OPEN OUTLETS (Pa)													
	2	3	4	5	6	7	8	9	10	11	12	13	14	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	1.13	0.70	0.34	0.29	0.30	0.36	0.22	0.18	0.58	0.47	0.38	0.05	0.37	
15	3.70	3.03	1.60	1.03	0.98	1.00	0.74	0.77	1.48	1.08	1.11	0.37	0.90	
20	6.41	5.14	3.68	1.84	1.69	1.66	1.33	1.45	2.37	1.78	1.85	0.86	1.50	
25	9.85	8.19	5.13	2.99	2.58	2.49	2.10	2.36	3.47	2.70	2.79	1.57	2.28	
30	13.95	11.71	7.66	4.14	3.62	3.49	3.05	3.48	4.77	3.83	3.92	2.48	3.25	
35		16.38	10.37	5.64	4.90	4.82	4.18	4.84	6.29	5.19	5.24	3.62	4.40	
40		21.51	14.24	7.32	6.34	5.99	5.61	6.41	8.02	6.76	6.76	4.97	5.74	
45			27.39	18.04	9.32	7.92	7.49	7.00	8.90	9.96	8.56	8.48	6.54	
50				22.81	11.50	9.75	9.10	8.69	10.24	12.41	10.59	10.39	8.33	
55				27.84	13.81	11.74	11.01	10.90	12.56	14.48	14.13	12.50	10.34	
60				33.56	16.54	14.04	13.03	12.63	14.97	17.13	15.31	15.24	12.58	
65					19.44	16.25	15.23	14.87	16.25	19.85	18.01	17.32	16.15	
70					22.48	18.78	17.57	17.16	20.62	22.88	20.93	20.17	17.71	
75					25.80	21.38	20.10	19.93	24.26	26.09	24.15	22.94	21.36	
80						24.39	22.74	22.75	27.18	29.53	27.47	25.33	23.74	
85						27.46	25.69	25.55	30.29	33.21	31.09	29.38	26.34	
90						30.75	28.74	28.95	34.67	36.24	34.93	33.14	30.68	
95							31.81	32.33	40.29	41.20	38.04	36.63	33.83	
100							35.37	35.72	43.10	46.27	43.32	39.55	38.53	
105							39.11	39.68	47.66	50.08	47.87	44.72	40.88	
110								43.65	51.43	54.41	50.32	50.61	47.31	
115								47.81	57.50	59.86	57.66	53.64	52.60	
120								52.38	63.08	65.37	65.17	57.88	58.15	



10 CONNECTION RECTANGULAR 220x90mm HORIZONTAL MANIFOLD BOX

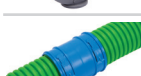
SUPPLY



DUTY	NO OF OPEN OUTLETS (Pa)									
l/[s]	2	3	4	5	6	7	8	9	10	
0	0	0	0	0	0	0	0	0	0	
8	1.51	0.78	0.48	0.29	0.14	0.09	0.05	0.01	0.01	
15	5.00	2.50	1.46	0.87	0.47	0.31	0.17	0.08	0.05	
20	8.95	4.26	2.45	1.46	0.81	0.53	0.30	0.17	0.12	
25	13.67	6.53	3.77	2.19	1.23	0.80	0.48	0.29	0.21	
30	19.65	9.22	5.29	3.08	1.78	1.12	0.70	0.44	0.33	
35		12.52	7.20	4.11	2.33	1.52	0.96	0.61	0.47	
40		16.21	9.28	5.30	2.98	1.91	1.35	0.82	0.63	
45		20.40	11.66	6.59	3.75	2.38	1.60	1.14	0.82	
50			14.50	8.12	4.57	2.92	2.00	1.31	1.10	
55			17.61	9.78	5.51	3.53	2.41	1.66	1.27	
60			20.94	11.66	6.53	4.15	2.91	1.93	1.58	
65				13.72	7.61	4.88	3.38	2.29	1.81	
70				15.92	8.82	5.61	3.96	2.66	2.14	
75				18.16	10.04	6.52	4.52	3.08	2.46	
80					11.44	7.30	5.13	3.47	2.78	
85					12.80	8.33	5.83	4.00	3.21	
90					14.34	9.23	6.47	4.42	3.55	
95						10.45	7.31	5.04	4.06	
100						11.41	7.99	5.56	4.47	
105						12.79	8.96	6.20	5.01	
110							9.86	6.90	5.53	
115							10.77	7.49	6.07	
120							11.85	8.20	6.72	

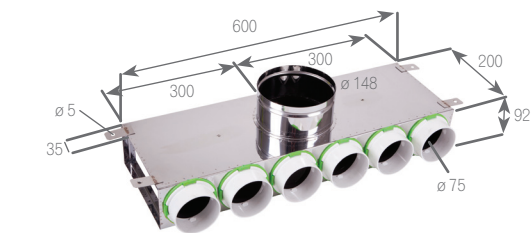
Verplas Radial Ducting

Verplas Radial Dimensional Data

ITEM	PART NUMBER	DUCTING DIAMETER Ø	DESCRIPTION	SUPPLIED
 6 Port Manifold Box	VR75-MAN-6	150mm Main Duct & 75mm Ø Radial	Acoustically lined stainless steel manifold box complete with 1x150mm Ø main input connection and 6x75mm Ø radial ducting connections	Individually
 10 Port Manifold Box	VR75-MAN-10	150mm Main Duct & 75mm Ø Radial	Acoustically lined stainless steel manifold box complete with 1x150mm Ø main input connection and 10x75mm Ø radial ducting connections	Individually
 14 Port Manifold Box	VR75-MAN-14	150mm Main Duct & 75mm Ø Radial	Acoustically lined stainless steel manifold box complete with 1x150mm Ø main input connection and 14x75mm Ø radial ducting connections	Individually
 10 Port Manifold Horizontal Box	VR75-MAN-10H	150mm Main Duct & 75mm Ø Radial	Acoustically lined stainless steel manifold box complete with 1x150mm Ø main input connection and 10x75mm Ø radial ducting connections	Individually
 10 Port Manifold Box	VR75-MAN-10R	220mm x 90mm Main Duct & 75mm Ø Radial	Acoustically lined stainless steel manifold box complete with 1x220x90mm main input connection and 10x75mm Ø radial ducting connections	Individually
 Radial Ducting	VR75-DUCT-50M	75mm Ø Radial	50m roll of Verplas 75mm Ø ducting complete with anti bacterial coating	Individually
 Radial Ducting Plenum	VR75-DUCT-PL	75mm Ø Radial	Radial fan plenum complete with 2x75mm radial ducting connections and 1x125mm connection	2 per box
 Radial Ducting End Cap	VR75-END-CAP	75mm Ø Radial	75mm Ø airtight end cap for insertion into spigots on Verplas Radial plenums and manifolds boxes	10 per box
 Radial Ducting Fixing Clamp	VR75-DUCT-CLAMP	75mm Ø Radial	75mm Ø ducting clamp for use with Verplas Radial Ducting. 5.0 size fixing screws supplied by others	10 per box
 Radial Ducting Connector	VR75-DUCT-CON	75mm Ø Radial	75mm diameter radial ducting connector with locking clips & complete with 2 sealing rings	Individually
 Radial Ducting 90° Bend	VR75-90-BEND	75mm Ø Radial	75mm diameter radial ducting 90° bend with locking clips & complete with 2 sealing rings	Individually
 Radial Ducting Fire Wrap	VR75-FIREWRAP	75mm Ø Radial	75mm Ø radial fire wrap 250mm in length, fire rated for 2 hours for masonry wall or concrete floor applications	Individually
 Radial Ducting Insulated Sleeve	VR75-DUCT-INS	75mm Ø Radial	10m roll of 75mm Ø radial insulation sleeve	Individually
 300mm Length 125mm Ø Pipe	VKC266	125mm Ø	300mm pre cut 125mm Ø PVC ducting for connection between radial plenum and internal grille	Individually
 Adjustable 125mm Extract Valve	MW124	125mm Ø	Fully commissionable 125mm white powder coated metal extract valve. Supplied complete with retaining ring for ceiling mounting	Individually
 Adjustable 125mm Supply Valve	MW125	125mm Ø	Fully commissionable 125mm white powder coated metal extract valve. Supplied complete with retaining ring for ceiling mounting	Individually

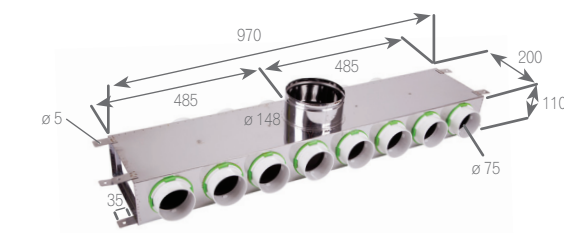
Verplas Radial Manifold Boxes

MANIFOLD BOX – 6 CONNECTIONS 75mm Ø
MAIN DUCT CONNECTION 150mm Ø



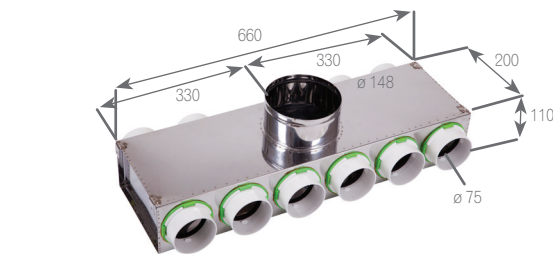
LENGTH 600mm x WIDTH 200mm x HEIGHT 92mm

MANIFOLD BOX – 14 CONNECTIONS 75mm Ø
MAIN DUCT CONNECTION 150mm Ø



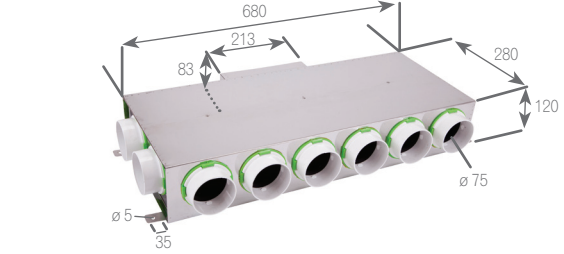
LENGTH 970mm x WIDTH 200mm x HEIGHT 110mm

MANIFOLD BOX – 10 CONNECTIONS 75mm Ø
MAIN DUCT CONNECTION 150mm Ø



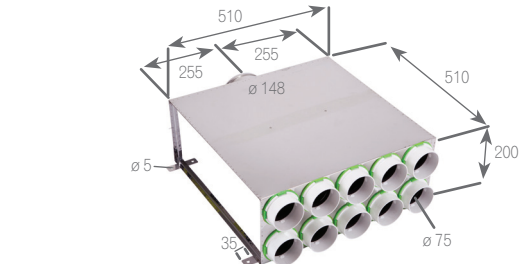
LENGTH 660mm x WIDTH 200mm x HEIGHT 110mm

MANIFOLD BOX RECTANGLE – 10 CONNECTIONS 75mm Ø
MAIN DUCT CONNECTION 220X90mm



LENGTH 680mm x WIDTH 280mm x HEIGHT 120mm

MANIFOLD BOX HORIZONTAL – 10 CONNECTIONS 75mm Ø
MAIN DUCT CONNECTION 150mm Ø



LENGTH 500mm x WIDTH 510mm x HEIGHT 200mm

VERPLAS RADIAL DUCTING DIMENSIONS



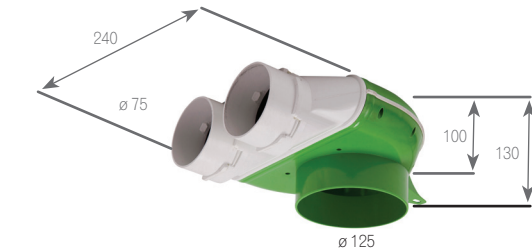
75mm OUTER DIAMETER
60mm INNER DIAMETER

All Verplas Radial manifold boxes are manufactured from stainless steel. Verplas Radial boxes are fully acoustically lined to help prevent noise transfer through the ducted system.

Each box is supplied complete with fixing tabs to speed up installation and positioning.

Click and Lock spigots remove the requirement for additional sealing rings on both the manifold boxes and ceiling plenum.

RADIAL DUCTING PLENUM
RADIAL DUCT CONNECTIONS 2x 75mm



MAIN DUCT CONNECTION 125mm DIAMETER



Verplas Limited, Unit 6-8 Verwood Industrial Estate
Blackhill, Verwood, Dorset BH31 6HA

T +44 (0)1202 825898
F +44 (0)1202 821600
W www.verplas.co.uk

E & O: Verplas policy of continuous innovation and improvement, we reserve the right to alter product specification and appearance without prior notice.