

Permitted loads and maximum distance between supports

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RECTANGULAR DUCTS

Thickness of steel sheet: 1 mm

width of duct [mm]	height of duct [mm]	number of ArmaFix AF duct supports [pc]	maximum load [N]	AF/ArmaFlex insulation thickness 19 mm		AF/ArmaFlex insulation thickness 25 mm		AF/ArmaFlex insulation thickness 32 mm		AF/ArmaFlex insulation thickness 50 mm	
				specific mass incl. insulation [kg/m]	max. distance between supports [m]	specific mass incl. insulation [kg/m]	max. distance between supports [m]	specific mass incl. insulation [kg/m]	max. distance between supports [m]	specific mass incl. insulation [kg/m]	max. distance between supports [m]
200	200	2	648	7.42	8.80	7.94	8.30	8.63	7.70	10.26	6.20
300	300	3	838	11.10	7.70	11.84	7.20	12.80	6.70	15.00	5.70
400	200	4	972	11.10	8.90	11.84	8.40	12.80	7.70	15.00	6.60
400	400	4	972	14.77	6.70	15.73	6.30	16.97	5.80	19.74	5.00
500	250	5	1067	13.85	7.80	14.76	7.40	15.93	6.80	18.56	5.90
500	500	5	1067	18.45	5.90	19.63	5.50	21.14	5.10	24.49	4.40
600	300	6	1134	16.61	7.00	17.68	6.50	19.05	6.10	22.12	5.20
600	600	6	1134	22.13	5.20	23.52	4.90	25.30	4.60	29.23	4.00
700	350	7	1181	19.37	5.00	20.60	5.80	22.18	5.40	25.67	4.70
700	700	7	1181	25.80	4.70	27.41	4.40	29.47	4.10	33.98	3.50
800	400	8	1215	22.13	5.60	23.52	5.30	25.30	4.90	29.23	4.20
800	800	8	1215	29.48	4.20	31.31	4.00	33.64	3.70	38.72	3.20
900	450	9	1239	24.88	5.10	26.44	4.80	28.43	4.40	32.79	3.90
900	900	9	1239	33.15	3.80	35.20	3.60	37.81	3.30	43.46	2.90
1000	500	10	1256	27.64	4.60	29.36	4.40	31.56	4.10	36.35	3.50
1000	1000	10	1256	36.83	3.50	39.10	3.30	41.98	3.00	48.21	2.70
1200	1200	12	1276	44.18	2.90	46.88	2.80	50.31	2.60	57.70	2.30

Due to the thin sheet metal, the load is not distributed evenly across the load-bearing elements. A load reduction factor from load-bearing element to load-bearing element = 2 was selected - from the outside to the inside in each case. Load capacity per element = 324 N with dynamic long-term load; PET load-bearing segments = 0.20 N/mm².

ROUND DUCTS

Thickness of steel sheet: 1 mm

diameter [mm]	number of ArmaFix AF duct supports [pc]	maximum load [N]	AF/ArmaFlex insulation thickness 19 mm		AF/ArmaFlex insulation thickness 25 mm		AF/ArmaFlex insulation thickness 32 mm	
			specific mass incl. insulation [kg/m]	max. distance between supports [m]	specific mass incl. insulation [kg/m]	max. distance between supports [m]	specific mass incl. insulation [kg/m]	max. distance between supports [m]
400	12	1296	11.60	11.5	12.36	11.0	13.33	10.0
500	15	1620	14.49	11.5	15.41	11.0	16.60	10.0
600	18	1944	17.38	11.5	18.47	11.0	19.87	10.0
700	21	2268	20.26	11.5	21.53	11.0	23.15	10.0
800	25	2592	23.15	11.5	24.59	11.0	26.42	10.0
900	28	2916	26.04	11.5	27.65	11.0	29.69	10.0
1000	31	3240	28.93	11.5	30.71	11.0	32.97	10.0
1200	37	3888	34.70	11.5	36.82	11.0	39.52	10.0

Because the individual segments of the flat support are rigid, it cannot fit absolutely snugly on round surfaces. However, the resulting polygon has no negative impact on the load-bearing capacity or the insulation effect. No problems arise regarding the adjoining ArmaFlex insulation.