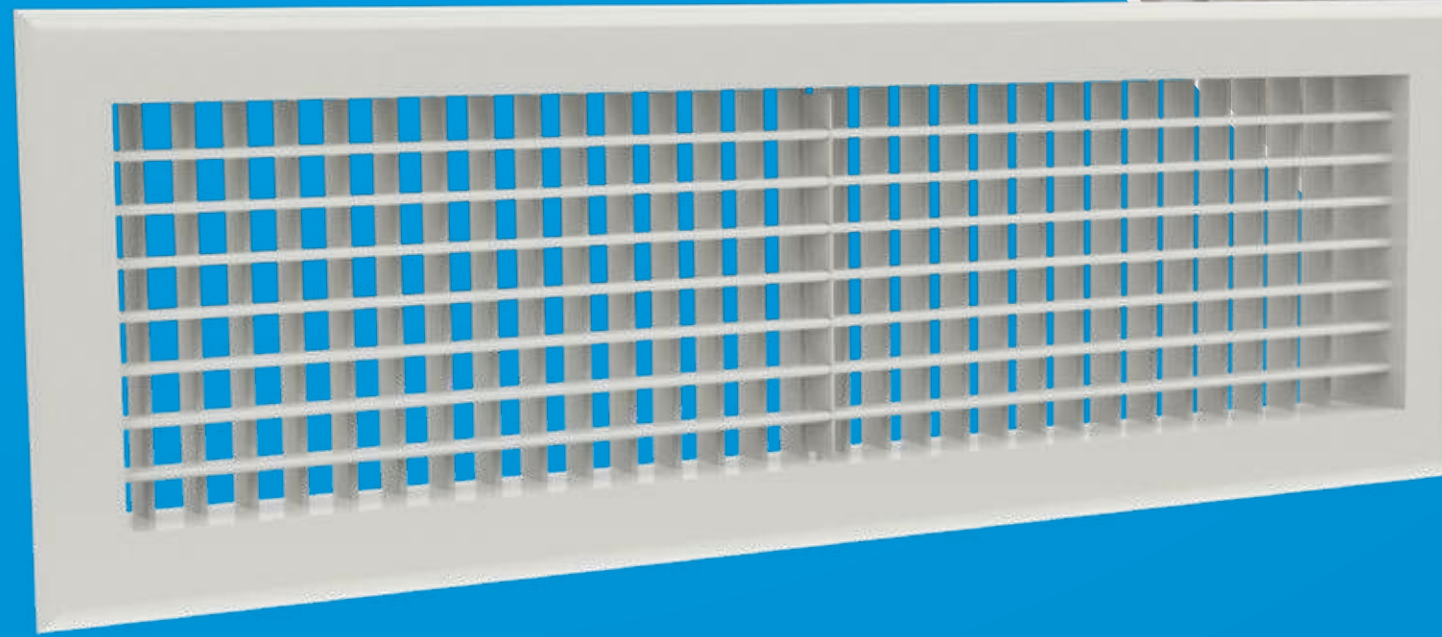


DMD

Double Deflection Grille



GENERAL FEATURES

DMD Double-Deflection Grille is designed to effectively distribute supply air into the space in ventilation and air-conditioning systems. Thanks to its structure suitable for horizontal or vertical air throw applications, it offers flexible use in different areas and adapts to project requirements with various sizes and application options.



MATERIAL

- Aluminum 6063 extrusion profile production
- Optional AISI 304 quality stainless steel production

SURFACE COATING

- RAL 9010 or RAL 9016 electrostatic powder paint as standard
- Optional
 - Different RAL color codes
 - Matt aluminum eloxal finish for a matte and metallic look
 - Unpainted manufacturing

INSTALLATION OPTIONS

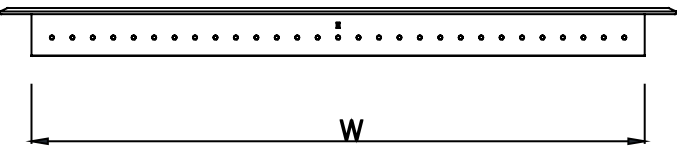
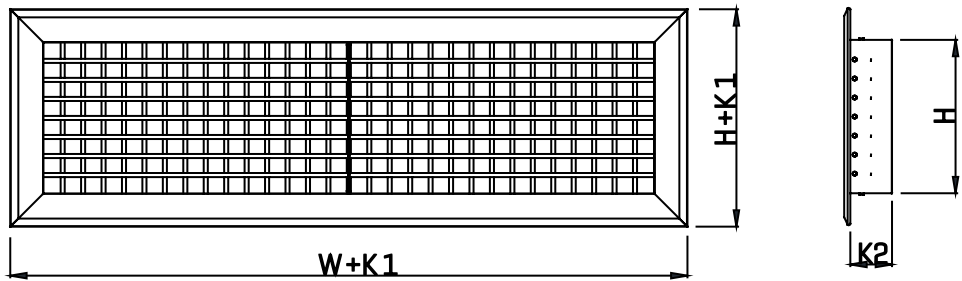
- Screw System
- Suspended Ceiling
- Clip-In Ceiling
- Mounting Bracket
- Without Mounting Hole
- Concealed
- Long Spring Clip
- Subframe Short Spring Clip

ACCESSORIES

- Optional
 - ZKD-Opposite Blade Air Adjustment Damper [Production from aluminum 6063 extrusion profile]

PRODUCT SELECTION

STANDARD DIMENSIONS



	K1 (mm)	K2 (mm)
22 mm Frame	41,6	30
31 mm Frame	62,6	46,8
Clip-in Frame	59.2	45
Stainless-Steel Frame	57,8	45

Standard Dimensions		H Height [mm]										
		50	100	200	300	400	500	600	700	800	900	1000
W Width [mm]	100	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	200	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	300	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	400	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	500	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	700	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	800	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	900	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	1100	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	1200	✓	✓	✓	✓	✓	✓	✓				
	1300	✓	✓	✓	✓	✓	✓	✓				
	1400	✓	✓	✓	✓	✓	✓	✓				
	1500	✓	✓	✓	✓	✓	✓	✓				
	1600	✓	✓	✓	✓	✓	✓	✓				
	1700	✓	✓	✓	✓	✓	✓	✓				
	1800	✓	✓	✓	✓	✓	✓	✓				

Table 1: Standard Dimensions

Note: Maximum dimension for the stainless steel production is 1200 mm x 600 mm.

PERFORMANCE DATA

Effective Area [m²]		H Height [mm]										
		50	100	200	300	400	500	600	700	800	900	1000
W Width [mm]	100	0,003	0,006	0,012	0,018	0,024	0,030	0,036	0,042	0,048	0,054	0,060
	200	0,006	0,012	0,024	0,036	0,048	0,060	0,072	0,084	0,096	0,108	0,120
	300	0,009	0,018	0,036	0,054	0,072	0,090	0,108	0,126	0,144	0,162	0,180
	400	0,012	0,024	0,048	0,072	0,096	0,120	0,144	0,168	0,192	0,216	0,240
	500	0,015	0,030	0,060	0,090	0,120	0,150	0,180	0,210	0,240	0,270	0,299
	600	0,018	0,036	0,072	0,108	0,144	0,180	0,216	0,252	0,288	0,323	0,359
	700	0,021	0,042	0,084	0,126	0,168	0,210	0,252	0,294	0,335	0,377	0,419
	800	0,024	0,048	0,096	0,144	0,192	0,240	0,288	0,335	0,383	0,431	0,479
	900	0,027	0,054	0,108	0,162	0,216	0,270	0,323	0,377	0,431	0,485	0,539
	1000	0,030	0,060	0,120	0,180	0,240	0,299	0,359	0,419	0,479	0,539	0,599
	1100	0,033	0,066	0,132	0,198	0,264	0,329	0,395	0,461	0,527	0,593	0,659
	1200	0,036	0,072	0,144	0,216	0,288	0,359	0,431				
	1300	0,039	0,078	0,156	0,234	0,311	0,389	0,467				
	1400	0,042	0,084	0,168	0,252	0,335	0,419	0,503				
	1500	0,045	0,090	0,180	0,270	0,359	0,449	0,539				
	1600	0,048	0,096	0,192	0,288	0,383	0,479	0,575				
	1700	0,051	0,102	0,204	0,305	0,407	0,509	0,611				
	1800	0,054	0,108	0,216	0,323	0,431	0,539	0,647				

Table 2: Effective Area

Flow Rate [m³/h]		Effective Velocity [m/s]														
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0
50	Effective Area [m²]	0.0278	0.0139	0.0093	0.0069	0.0056	0.0046	0.0040	0.0035	0.0031						
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17						
	Throw Distance [m]	1	2	2	3	3	3	4	4	4						
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	<15	<15	15						
100	Effective Area [m²]	0.0556	0.0278	0.019	0.014	0.011	0.009	0.008	0.007	0.006	0.006	0.005	0.004	0.004	0.003	
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17	21	30	42	55	70	
	Throw Distance [m]	1	2	2	3	3	4	4	4	4	5	5	6	6	6	
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	<15	15	18	21	26	30	34	37	
200	Effective Area [m²]	0.111	0.056	0.037	0.028	0.022	0.019	0.016	0.014	0.012	0.011	0.009	0.008	0.007	0.006	0.006
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17	21	31	42	56	71	88
	Throw Distance [m]	1	2	2	3	3	4	4	4	5	5	5	6	6	7	7
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	<15	18	22	24	29	33	37	40	43
300	Effective Area [m²]	0.167	0.083	0.056	0.042	0.033	0.028	0.024	0.021	0.019	0.017	0.014	0.012	0.010	0.009	0.008
	Pressure Drop [Pa]	0	1	4	8	13	19	27	36	47	60	19	27	36	47	60
	Throw Distance [m]	1	2	3	3	3	4	4	4	5	5	5	6	6	7	7
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	18	23	17	20	23	26	31	35	39	42	45
400	Effective Area [m²]	0.222	0.111	0.074	0.056	0.044	0.037	0.032	0.028	0.025	0.022	0.019	0.016	0.014	0.012	0.011
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17	21	31	42	56	71	89
	Throw Distance [m]	1	2	3	3	3	4	4	4	5	5	5	6	6	7	7
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	18	32	25	27	32	37	40	43	46
500	Effective Area [m²]	0.278	0.139	0.093	0.069	0.056	0.046	0.040	0.035	0.031	0.028	0.023	0.020	0.017	0.015	0.014
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17	21	31	42	56	71	89
	Throw Distance [m]	1	2	3	3	3	4	4	4	5	5	5	6	6	7	7
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	19	22	26	28	33	37	41	44	47
600	Effective Area [m²]	0.333	0.167	0.111	0.083	0.067	0.056	0.048	0.042	0.037	0.0333	0.028	0.024	0.021	0.019	0.017
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17	21	31	43	56	72	89
	Throw Distance [m]	1	2	3	3	3	4	4	4	5	4,9	6	6	6	7	7
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	16	20	23	26	29	34	38	42	45	48
700	Effective Area [m²]	0.389	0.194	0.130	0.097	0.078	0.065	0.056	0.049	0.043	0.0389	0.032	0.028	0.024	0.022	0.019
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17	21	31	43	56	72	89
	Throw Distance [m]	1	2	3	3	3	4	4	4	5	5,0	6	6	7	7	7
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	16	20	24	27	30	35	39	43	46	49
800	Effective Area [m²]	0,444	0,222	0,148	0,111	0,089	0,074	0,064	0,056	0,049	0,0444	0,037	0,032	0,028	0,025	0,022
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17	21	31	43	56	72	89
	Throw Distance [m]	1	2	3	3	3	4	4	4	5	5,0	6	6	7	7	7
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	17	21	25	28	31	35	40	43	46	49
900	Effective Area [m²]	0,500	0,250	0,167	0,125	0,100	0,083	0,071	0,063	0,056	0,0500	0,042	0,036	0,031	0,028	0,025
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17	21	31	43	56	72	89
	Throw Distance [m]	1	2	3	3	3	4	4	4	5	5,0	6	6	7	7	7
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	17	21	25	28	31	36	40	44	47	50
1000	Effective Area [m²]	0,556	0,278	0,185	0,139	0,111	0,093	0,079	0,069	0,062	0,0556	0,046	0,040	0,035	0,031	0,028
	Pressure Drop [Pa]	0	1	2	3	5	7	10	13	17	21	31	43	56	72	90
	Throw Distance [m]	1	2	3	3	3	4	4	4	5	5,0	6	6	7	7	7
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	18	22	25	29	32	36	41	44	47	50
1250	Effective Area [m²]		0,347	0,232	0,174	0,139	0,116	0,099	0,087	0,077	0,0694	0,058	0,050	0,043	0,039	0,035
	Pressure Drop [Pa]		1	2	3	5	7	10	13	17	21	31	43	56	72	90
	Throw Distance [m]		2	3	3	3	4	4	4	5	5	5,1	6	6	7	8
	Sound Pressure Level [dB(A)]		<15	<15	<15	<15	19	23	27	30	33	37	42	45	48	51
1500	Effective Area [m²]		0,417	0,278	0,208	0,167	0,139	0,119	0,104	0,0926	0,0833	0,069	0,060	0,052	0,046	0,042
	Pressure Drop [Pa]		1	2	3	5	7	10	13	17	21	31	43	57	72	90
	Throw Distance [m]		2	3	3	4	4	4	5	4,8	5,1	6	6	7	7	8
	Sound Pressure Level [dB(A)]		<15	<15	<15	<15	20	24	27	30	33	38	42	46	49	52
1750	Effective Area [m²]		0,486	0,324	0,243	0,194	0,162	0,139	0,122	0,1080	0,0972	0,081	0,069	0,061	0,054	0,049
	Pressure Drop [Pa]		1	2	3	5	7	10	13	17	21	31	43	57	72	90
	Throw Distance [m]		2	3	3	4	4	4	5	5	5	6	6	7	7	8
	Sound Pressure Level [dB(A)]		<15	<15	<15	15	20	24	28	31	34	39	43	47	50	53
2000	Effective Area [m²]		0,556	0,370	0,278	0,222	0,185	0,159	0,139	0,1235	0,1111	0,093	0,079	0,069	0,062	0,056
	Pressure Drop [Pa]		1	2	3	5	7	10	13	17	21	31	43	57	72	90
	Throw Distance [m]		2	3	3	4	4	4	5	5	5	6	6	7	7	8
	Sound Pressure Level [dB(A)]		<15	<15	<15	16	21	25	29	32	35	40	44	47	50	53
2500	Effective Area [m²]			0,463	0,347	0,278	0,232	0,198	0,174	0,1543	0,1389	0,116	0,099	0,087	0,077	0,069
	Pressure Drop [Pa]			2	3	5	7	10	14	17	21	31	43	57	73	90
	Throw Distance [m]			3	3	4	4	4	5	5	5	6	6	7	7	8
	Sound Pressure Level [dB(A)]			<15	<15	17	22	26	30	33	36	40	45	48	51	54

Flow Rate [m³/h]		Effective Velocity [m/s]														
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	3.0	3.5	4.0	4.5	5.0
3000	Effective Area [m²]			0,556	0,417	0,333	0,278	0,238	0,2083	0,1852	0,1667	0,139	0,119	0,104	0,093	0,0833
	Pressure Drop [Pa]			2	3	5	7	10	14	17	21	31	43	57	73	90
	Throw Distance [m]			3	3	4	4	4	5	5	5	6	6	7	7	8
	Sound Pressure Level [dB(A)]			<15	<15	18	23	27	30	34	36	41	45	49	52	55
4000	Effective Area [m²]			0,556	0,444	0,370	0,3175	0,2778	0,2469	0,2222	0,185	0,159	0,139	0,1235	0,1111	
	Pressure Drop [Pa]			3	5	7	10	14	17	22	31	43	57	73	91	
	Throw Distance [m]			3	4	4	4	5	5	5	6	6	7	7	8	
	Sound Pressure Level [dB(A)]			<15	19	24	28	32	35	38	43	47	50	53	56	
5000	Effective Area [m²]					0,556	0,4630	0,3968	0,3472	0,3086	0,2778	0,232	0,198	0,1736	0,1543	0,1389
	Pressure Drop [Pa]					5	7	10	14	17	22	31	43	57	73	91
	Throw Distance [m]					4	4	4	5	5	5	6	6	7	7	8
	Sound Pressure Level [dB(A)]					20	25	29	33	36	39	44	48	51	54	57
7500	Effective Area [m²]						0,595	0,521	0,4630	0,4167	0,347	0,298	0,260	0,232	0,208	
	Pressure Drop [Pa]						10	14	17	22	32	43	57	73	91	
	Throw Distance [m]							4	5	5	5	6	7	7	8	8
	Sound Pressure Level [dB(A)]						31	34	38	40	45	50	53	56	59	
10000	Effective Area [m²]									0,6173	0,5556	0,463	0,397	0,347	0,309	0,278
	Pressure Drop [Pa]									17	22	32	44	57	73	91
	Throw Distance [m]									5	6	6	7	7	8	8
	Sound Pressure Level [dB(A)]									39	42	47	51	54	58	60

Table 3: Supply Data

Note: Data were obtained with the air distribution equipment when the ambient air temperature difference is T=8 K

Throw Distance is the distance between the point where the air leaving the dispenser equipment reaches to velocity of 0.25 m/s, and the air dispenser equipment.

Flow Rate [m3 / h]		Effective Velocity [m/s]														
		0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0
50	Effective Area [m²]	0,0278	0,0139	0,0093	0,0069	0,006	0,005	0,004	0,003	0,003						
	Pressure Drop [Pa]	0	1	2	3	5	8	10	14	17						
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	<15	<15	16						
100	Effective Area [m²]	0,0556	0,0278	0,019	0,014	0,011	0,009	0,008	0,007	0,006	0,006	0,005	0,004	0,0035	0,0031	
	Pressure Drop [Pa]	0	1	2	3	5	8	10	14	18	22	32	44	58	74	
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	<15	<15	16	19	22	27	31	34	0,0056
	Effective Area [m²]	0,111	0,056	0,037	0,028	0,022	0,019	0,016	0,014	0,012	0,011	0,009	0,008	0,007	0,0062	93
200	Pressure Drop [Pa]	0	1	2	3	5	8	11	14	18	22	32	44	58	74	44
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	15	19	22	25	30	34	38	41	0,008
300	Effective Area [m²]	0,167	0,083	0,056	0,042	0,033	0,028	0,024	0,021	0,019	0,017	0,014	0,012	0,010	0,009	93
	Pressure Drop [Pa]	0	1	2	3	5	8	11	14	18	22	32	44	59	75	45
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	17	21	24	27	32	36	39	43	0,011
400	Effective Area [m²]	0,222	0,111	0,074	0,056	0,044	0,037	0,032	0,028	0,025	0,022	0,019	0,016	0,014	0,012	93
	Pressure Drop [Pa]	0	1	2	3	5	8	11	14	18	22	32	44	59	75	47
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	<15	18	22	25	28	33	37	41	44	0,014
500	Effective Area [m²]	0,278	0,139	0,093	0,069	0,056	0,046	0,040	0,035	0,031	0,028	0,023	0,020	0,017	0,015	93
	Pressure Drop [Pa]	0	1	2	3	5	8	11	14	18	22	32	45	59	75	48
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	15	19	23	26	29	34	38	42	45	0,017
600	Effective Area [m²]	0,333	0,167	0,111	0,083	0,067	0,056	0,048	0,042	0,037	0,0333	0,028	0,024	0,021	0,019	94
	Pressure Drop [Pa]	0	1	2	3	5	8	11	14	18	22	32	45	59	75	48
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	16	20	24	27	30	35	39	42	46	0,019
700	Effective Area [m²]	0,389	0,194	0,130	0,097	0,078	0,065	0,056	0,049	0,043	0,0389	0,032	0,028	0,024	0,022	94
	Pressure Drop [Pa]	0	1	2	3	5	8	11	14	18	22	32	45	59	75	49
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	17	21	24	28	30	35	40	43	46	0,022
800	Effective Area [m²]	0,444	0,222	0,148	0,111	0,089	0,074	0,063	0,056	0,049	0,0444	0,037	0,032	0,028	0,025	94
	Pressure Drop [Pa]	0	1	2	3	5	8	11	14	18	22	33	45	59	75	50
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	17	21	25	28	31	36	40	44	47	0,025
900	Effective Area [m²]	0,500	0,250	0,167	0,125	0,100	0,083	0,071	0,063	0,056	0,0500	0,042	0,036	0,031	0,028	94
	Pressure Drop [Pa]	0	1	2	3	5	8	11	14	18	22	33	45	59	75	50
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	18	22	26	29	32	36	41	44	47	0,028
1000	Effective Area [m²]	0,556	0,278	0,185	0,139	0,111	0,093	0,079	0,069	0,062	0,0556	0,046	0,040	0,035	0,031	94
	Pressure Drop [Pa]	0	1	2	3	5	8	11	14	18	22	33	45	59	76	51
	Sound Pressure Level [dB(A)]	<15	<15	<15	<15	<15	18	22	26	29	32	37	41	45	48	0,035
1250	Effective Area [m²]		0,347	0,231	0,174	0,139	0,116	0,099	0,087	0,077	0,0694	0,058	0,050	0,043	0,039	94
	Pressure Drop [Pa]		1	2	3	5	8	11	14	18	22	33	45	59	76	52
	Sound Pressure Level [dB(A)]		<15	<15	<15	<15	19	23	27	30	33	38	42	46	49	0,0417
1500	Effective Area [m²]		0,417	0,278	0,208	0,167	0,139	0,119	0,104	0,0926	0,0833	0,069	0,060	0,052	0,046	94
	Pressure Drop [Pa]		1	2	3	5	8	11	14	18	22	33	45	59	76	52
	Sound Pressure Level [dB(A)]		<15	<15	<15	15	20	24	28	31	34	39	43	46	50	0,0486
1750	Effective Area [m²]		0,486	0,324	0,243	0,194	0,162	0,139	0,122	0,1080	0,0972	0,081	0,069	0,061	0,054	94
	Pressure Drop [Pa]		1	2	3	5	8	11	14	18	22	33	45	59	76	53
	Sound Pressure Level [dB(A)]		<15	<15	<15	16	21	25	29	32	35	39	44	47	50	0,0556
2000	Effective Area [m²]		0,556	0,370	0,278	0,222	0,185	0,159	0,139	0,1235	0,1111	0,093	0,079	0,069	0,062	95
	Pressure Drop [Pa]		1	2	3	5	8	11	14	18	22	33	45	60	76	54
	Sound Pressure Level [dB(A)]		<15	<15	<15	16	21	26	29	32	35	40	44	48	51	0,0694
2500	Effective Area [m²]			0,463	0,347	0,278	0,231	0,198	0,174	0,1543	0,1389	0,116	0,099	0,087	0,077	95
	Pressure Drop [Pa]			2	3	5	8	11	14	18	23	33	45	60	76	55
	Sound Pressure Level [dB(A)]			<15	<15	17	22	27	30	33	36	41	45	49	52	0,0833
3000	Effective Area [m²]			0,556	0,417	0,333	0,278	0,238	0,2083	0,1852	0,1667	0,139	0,119	0,104	0,0926	95
	Pressure Drop [Pa]			2	3	5	8	11	14	18	23	33	45	60	76	56
	Sound Pressure Level [dB(A)]			<15	<15	18	23	27	31	34	37	42	46	50	53	0,1111

Table 4: Emiş Verileri Tablosu

Debi [m3 / h]		Efektif Hız [m/s]														
		0.5	1.0	1.5	2.0	2.5	3.0	0.5	1.0	1.5	2.0	2.5	3.0	2.0	2.5	3.0
4000	Effective Area [m²]				0,556	0,444	0,370	0,3175	0,2778	0,2469	0,2222	0,185	0,159	0,1389	0,1235	0,1111
	Pressure Drop [Pa]				3	5	8	11	14	18	23	33	45	60	76	95
	Sound Pressure Level [dB(A)]				<15	19	24	29	32	35	38	43	47	51	54	57
5000	Effective Area [m²]					0,556	0,4630	0,3968	0,3472	0,3086	0,2778	0,231	0,1984	0,1736	0,1543	0,1389
	Pressure Drop [Pa]					5	8	11	14	18	23	33	45	60	77	95
	Sound Pressure Level [dB(A)]					21	25	30	33	36	39	44	48	52	55	58
7500	Effective Area [m²]							0,5952	0,5208	0,4630	0,4167	0,347	0,298	0,2604	0,2315	0,2083
	Pressure Drop [Pa]							11	14	18	23	33	46	60	77	96
	Sound Pressure Level [dB(A)]							31	35	38	41	46	50	54	57	60
1000	Effective Area [m²]									0,6173	0,5556	0,463	0,3968	0,3472	0,3086	0,2778
	Pressure Drop [Pa]									18	23	33	46	60	77	96
	Sound Pressure Level [dB(A)]									39	42	47	51	55	58	61

Table 4 : Extract Data

Heating Mode [ΔT]	4	6	8	10	12
Throw Distance Coefficient	1.07	1.02	1	0.90	0.83
Cooling Mode [ΔT]	4	6	8	10	12
Throw Distance Coefficient	1.31	1.36	1.42	1.48	1.54

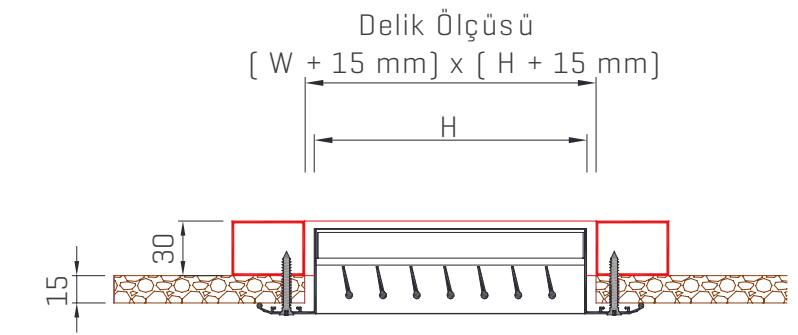
Table 5: Throw Distance Correction

Damper Positon	Pressure Correction Factor	Noise Generation [dB(A)]
Open	1,1	+1
%25 Closed	1,14	+4
%50 Closed	2,48	+14
%75 Closed	5,11	+29

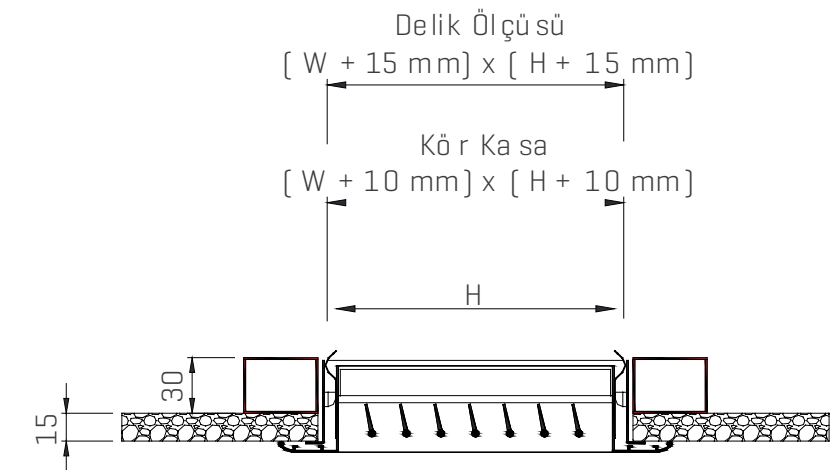
Table 6: Damper Pressure Correction

INSTALLATION

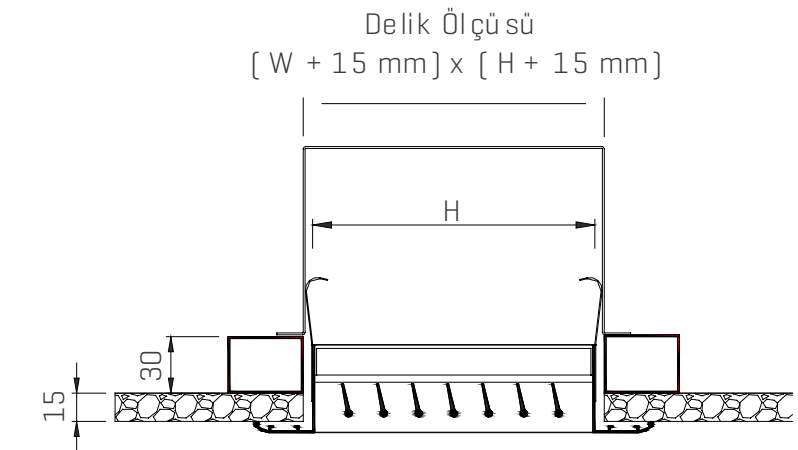
1. SCREW SYSTEM



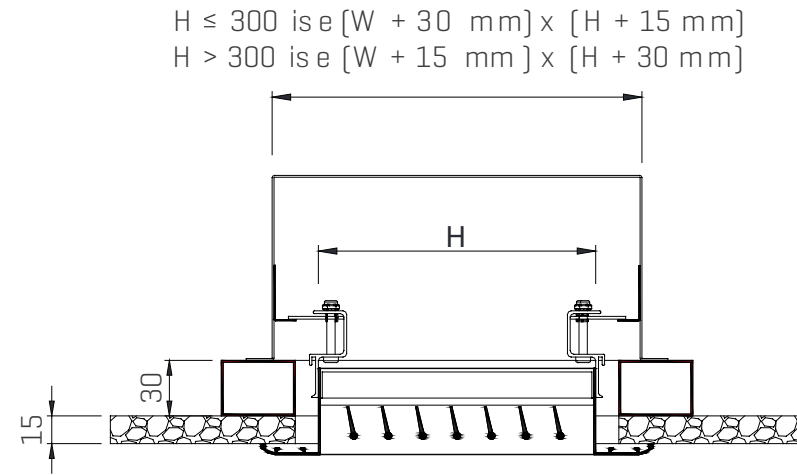
2. SHORT SPRING CLIP WITH SUBFRAME



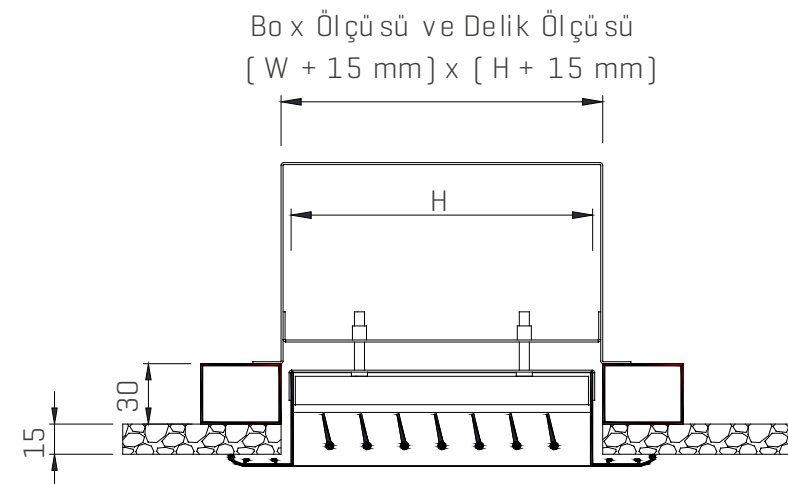
3. LONG SPRING CLIP



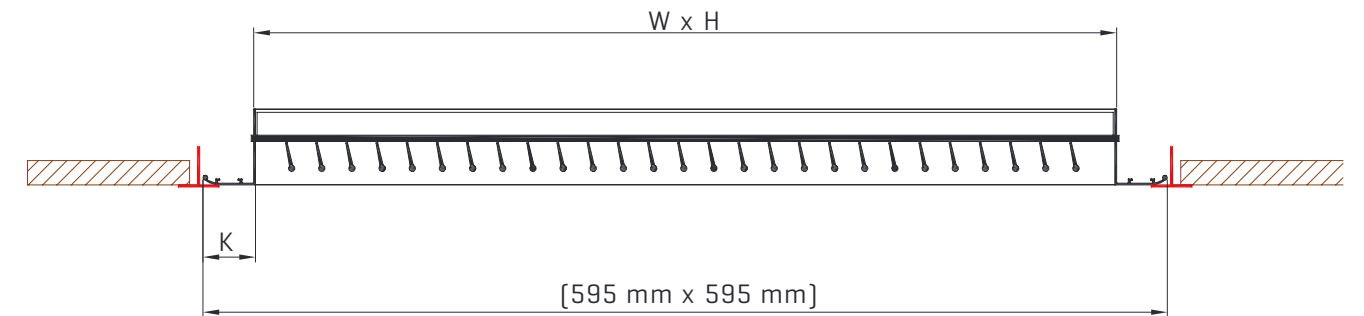
4. CONCEALED



5. MOUNTING



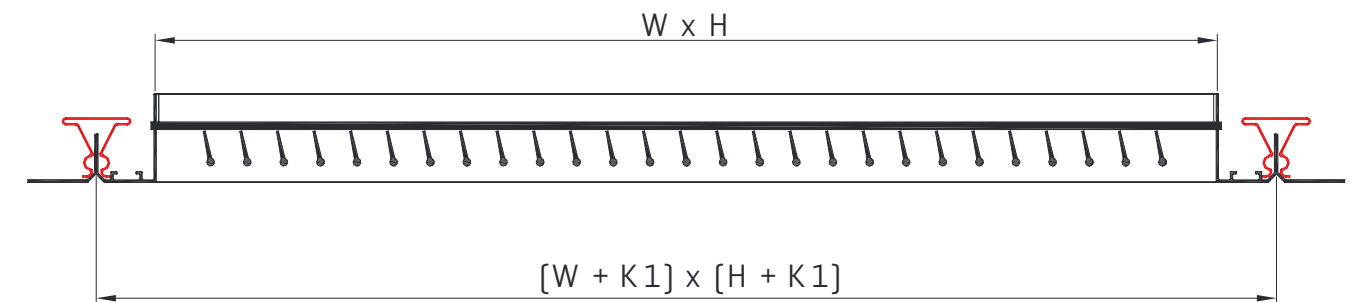
6. SUSPENDED CEILING



W and H dimensions that can be selected according to the frame sizes specified in the product selection, are shown in the adjacent table.

	W (mm)	H (mm)
22 mm Frame	553,4	553,4
31 mm Frame	532,4	532,4
Stainless-Steel Frame	542	542

7. CLIP-IN CEILING

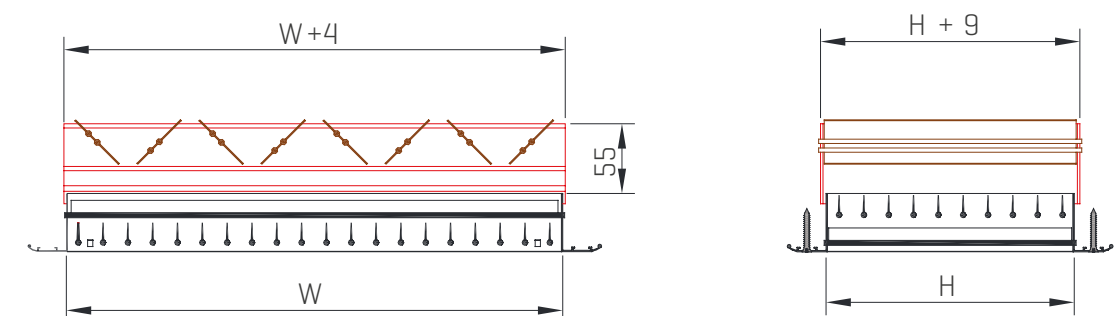


Note:

When the product material is selected as stainless steel, clip-in installation can not be done.

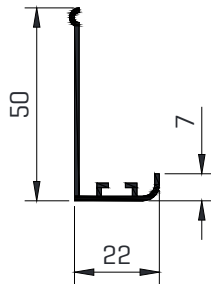
Clip-In Frame K1 = 59 mm	W (mm)	H (mm)
600x600	541	541
300x300	241	241

8. WITH DAMPER

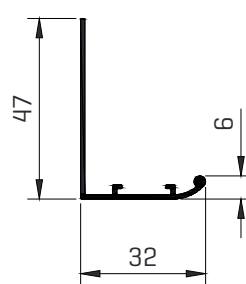


FRAME TYPES

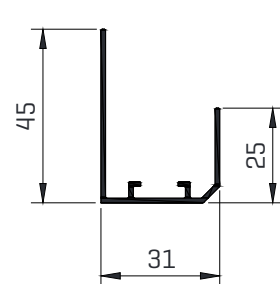
22 mm Frame



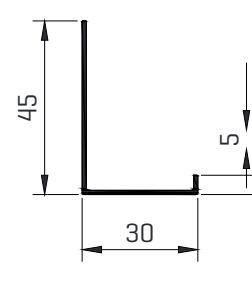
32 mm Frame



Clip-In Frame



Stainless Steel Frame



SIZE PARAMETERS

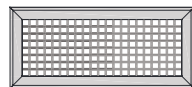
MAXIMUM MODUL SIZE

The standard dimensions of one module can be selected between 100 mm x 50 mm and 1800 mm x 1000 mm. For the stainless-steel production, maximum module dimension is 1200 mm x 600 mm. If the order dimension exceeds the module

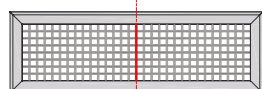
SUPPORT NUMBER PARAMETERS

Support is used only in aluminum products.

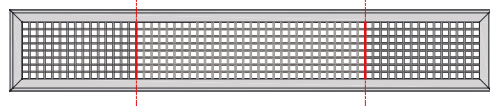
If $W < 600$, without support



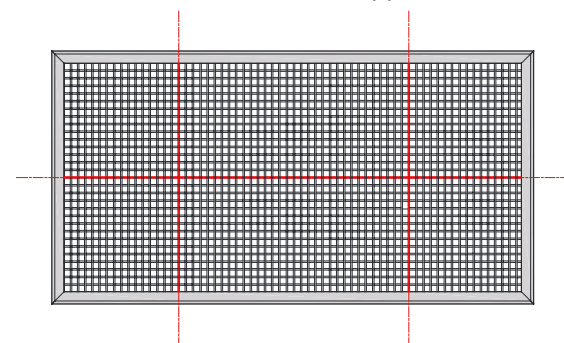
If $600 \leq W \leq 1200$, with 1 support



If $1200 < W \leq 1800$, with 2 support



If $600 < H \leq 1000$, with 1 support



PRODUCT SELECTION

Example: The air flow distributed in the space has been determined as 5000 m³/h. 10 double deflection grille will be used for blowing. The temperature difference in heating mode is 8K. Make your product selection.

Solution: Blowing rate for a grille, $5000/10=500$ m³/h

Effective areas corresponding to appropriate pressure loss and flow rate values are selected from the blow data table [Table 3]

For example, in an effective area of 0.04 m², the effective velocity is 3.5 m/s, pressure loss 10 Pa, throw distance 4 m and sound pressure 19 dB[A].

The appropriate grille size can be selected from the effective area table [Table 2] as 300 mm x 200 mm corresponding to the value of 0.04 m².

Throw Distance Correction Chart

In the previous example, the throw distance was found to be 4 m for the heating mode 8K. Refer to Throw Distance Correction

Chart for 10K heating mode. The multiplier value is 0.9.

Corrected throw distance = $4 \text{ m} \times 0.9 = 3.6 \text{ m}$

Opposite Blade Damper Condition

The pressure loss and sound pressure level changes in the damper product. Damper Correction Table [Table 6] should be used.

For example, for the tipper product with the damper closed at 50%, the corresponding pressure factor in the table is 2.48 and

sound production is +14 dB[A]

Total static pressure loss: $10 \times 2.48 = 24.8 \text{ Pa}$

Total sound reproduction: $19 + 14 = 33 \text{ dB[A]}$

PRODUCT ORDER CODES

You can place your orders for aluminum or stainless products according to the coding style by looking at the seperate tables given below.

ALUMINUM PRODUCT ORDER CODE

DMD. <A> . . <C> . <D> . <E> . <F> . <G>

A	Raw Material Type	
	ALM	Aluminum
B	Frame Type	
	02	22 mm frame
	01	32 mm frame
	09	Clip-in frame
C	Damper	
	ZD	Opposite Blade Damper
	DZ	Without Damper
D	Installation Type	
	VD	Screw System
	KR	Suspended Ceiling
	KL	Clip-In Ceiling
	KP	Mounting Bracket
	MD	Without Mounting Hole
	MN	Concealed
	UK	Long Spring Clip
	KD	Subframe Short Spring Clip
	KK	Short Clips
E	Horizontal Dimesions [W] [mm]	
	0000	You can view it from standard dimensions.
F	Vertical Dimesions [H] [mm]	
	0000	You can view it from standard dimensions.
G	Paint	
	00	Unpainted
	S1	Standard Painted - RAL 9010
	S2	Standard Painted - RAL 9016
	XX	Special Painted

Sample Coding: DMD.ALM.01.DZ.VD.0500.0200.S1

STAINLESS-STEEL PRODUCT ORDER CODE

DMD. <A> . . <C> . <D> . <E> . <F> . <G>

A	Damper	
	ZD	Opposite Blade Damper
	DZ	Without Damper
B	Installation Type	
	VD	Screw System
	KR	Suspended Ceiling
	KL	Clip-In Ceiling
	KP	Mounting Bracket
	MD	Without Mounting Hole
	MN	Concealed
	UK	Long Spring Clip
	KD	Subframe Short Spring Clip
	KK	Short Clips
C	Horizontal Dimensions [W] [mm]	
	0000	You can view it from standard dimensions.
B	Vertical Dimensions [H] [mm]	
	0000	You can view it from standard dimensions.

Sample Coding: DMD.PAS.32.DZ.VD.0500.0200.00

SUSTAINABILITY SOLUTIONS AT DOGU HVAC



We offer supplementary health insurance to our employees to promote healthy living. We also plan health-focused initiatives such as smoking cessation programs.



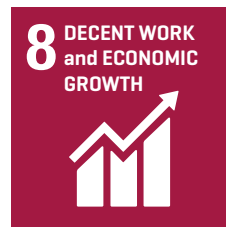
Through the DOGU HVAC CLUB project, we organize technical tours of our factory, participate in career events, and provide sponsorships to support the skill development of university and technical high school students.



In 2024, we increased female employment in our administrative and production departments. This step aims to contribute to gender equality by offering a workplace with equal rights for all employees.



Our R&D center's 2,500 m² solar panels and 0.6 MW annual capacity solar energy systems reduce our carbon footprint. We generate our electricity, ensuring a reliable, sustainable, and accessible clean energy source.



Decent Work and Economic Growth: As an employer brand, our primary goal is to protect our employees' rights and create a workplace founded on equality and justice for all employees.



We enhance indoor air quality with environmentally friendly and energy-efficient products, ensuring adherence to European standards.



We minimize waste through lean production policies and emphasize recycling, simultaneously increasing efficiency in our production processes.



We support environmental protection through our eco-friendly, sustainable, energy-efficient product lines and R&D efforts focused on reducing waste that could contribute to climate change.



We value transparency and accountability, working with associations like ISKAV to prevent corruption and unfair competition, aligning with sectoral ethical values.



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promotional video

