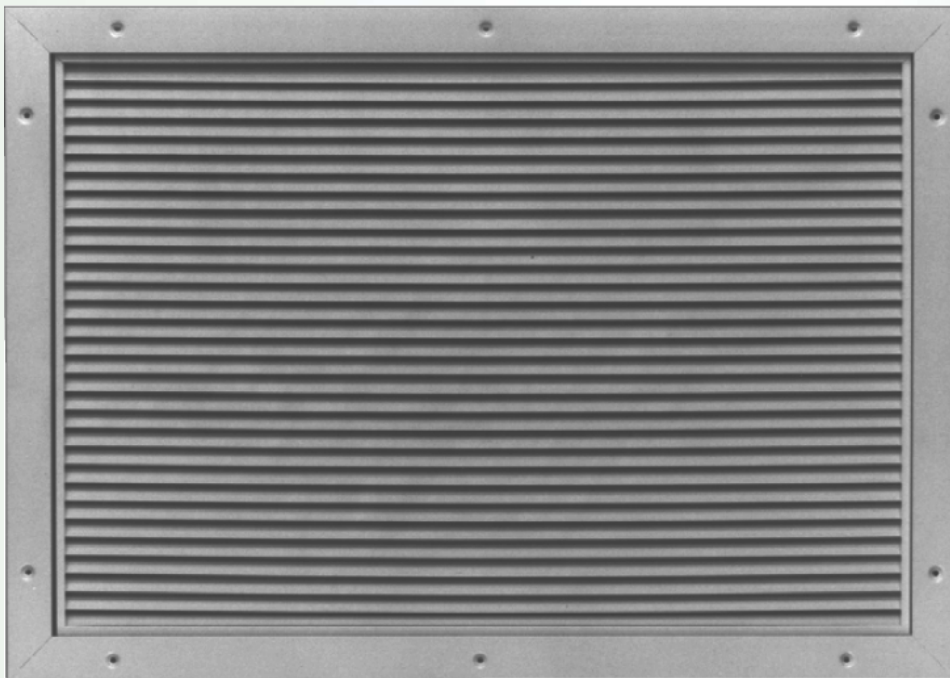




Door Grilles



Specialized Grilles | Door Return | Description

Door Return Grilles

DGS-(L/S) • Steel

Models:

DGS-L
DGS-S

These Products Include:

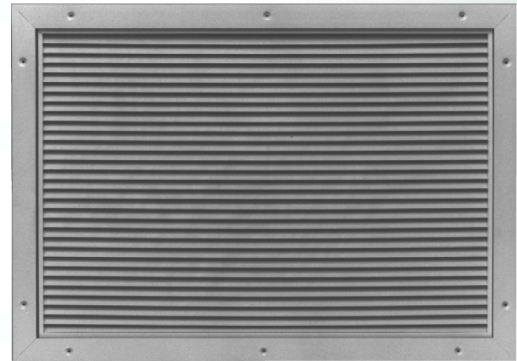
- 26# White Finish.
- Available Border Types:
1# - Surface Mount
7# - Channel F frame
- Countersunk Screw Holes.
- 8# x 1¼-inch long Phillips Flat Head Sheet Metal Screws, Painted White.

DGS-L

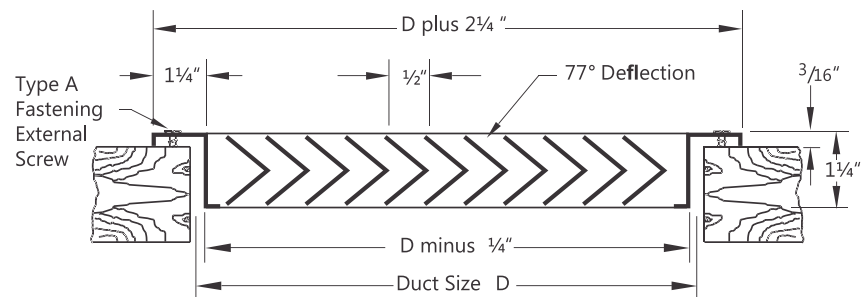
- Sight proof.
- Used in doors and partitions.
- Included v-blades block vision and provide extra strength.
- -20gauge steel blades.
- Blades parallel to the long dimension.

DGS-S

- Same as DGS-L with blades parallel to the short dimension.

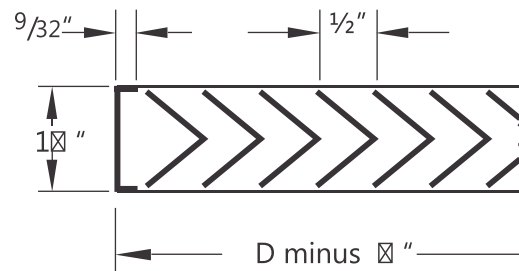


Border Type 1 • Surface Mount



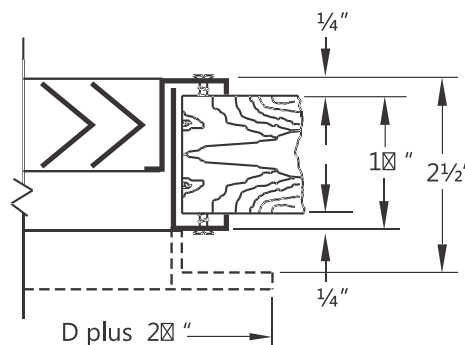
Available sizes (D" x D") Border Type 1 are 6 x 4 inches through 30 x 30 inches in -1inch increments.

Border Type 7 • Channel F frame



Available sizes (D" x D") Border Type 1 are 6 x 4 inches through 30 x 30 inches in -1inch increments.

Auxiliary Frame



Available sizes (D" x D") Border Type 1 are 6 x 4 inches through 30 x 30 inches in -1inch increments.



Specialized Grilles | Door Return | Description

Door Return Grilles (continued)

DGL -(L/S) • Aluminum

Models:

DGL-L
DGL-S

These Products Include:

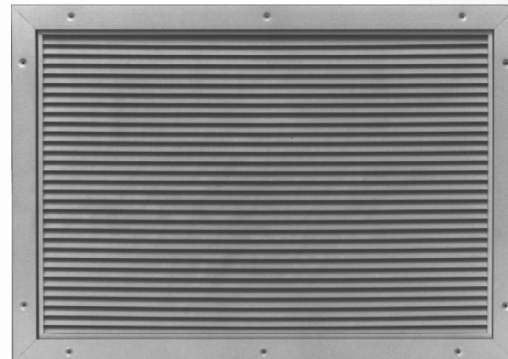
- 26# White Finish.
- Available Border Types:
1# - Sur face Mount.
- Countersunk Screw Holes.
- 8# x 1¼-inch long Ph illips Flat Head Sheet Metal Screws, Painted White.

DGL-L

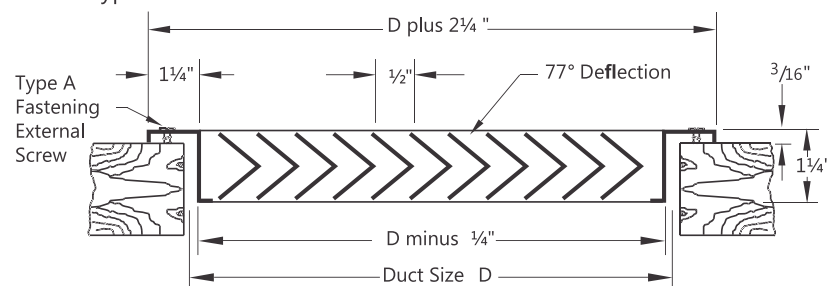
- Sight proof.
- Used in doors and partitions.
- Included v-blades block vision and provide extra strength.
- Aluminum blades.
- Blades parallel to the long dimension.

DGL-S

- Same as **DGL-L** with blades parallel to the short dimension.

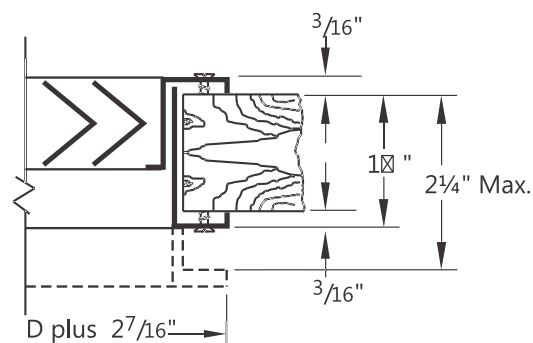


Border Type 1 • Sur face Mount



Available sizes (D" x D") Border Type 1 are 6 x 4 inches through 30 x 30 inches in -1inch increments.

Auxiliary Frame



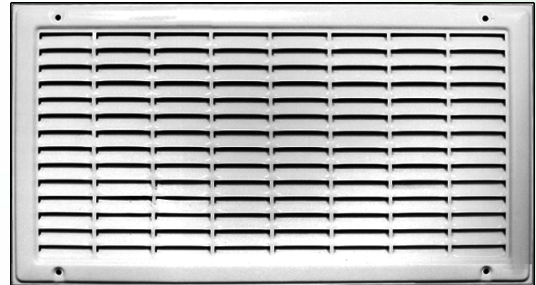
Available sizes (D" x D") Border Type 1 are 6 x 4 inches through 30 x 30 inches in -1inch increments.



Specialized Grilles | Door Return | Description

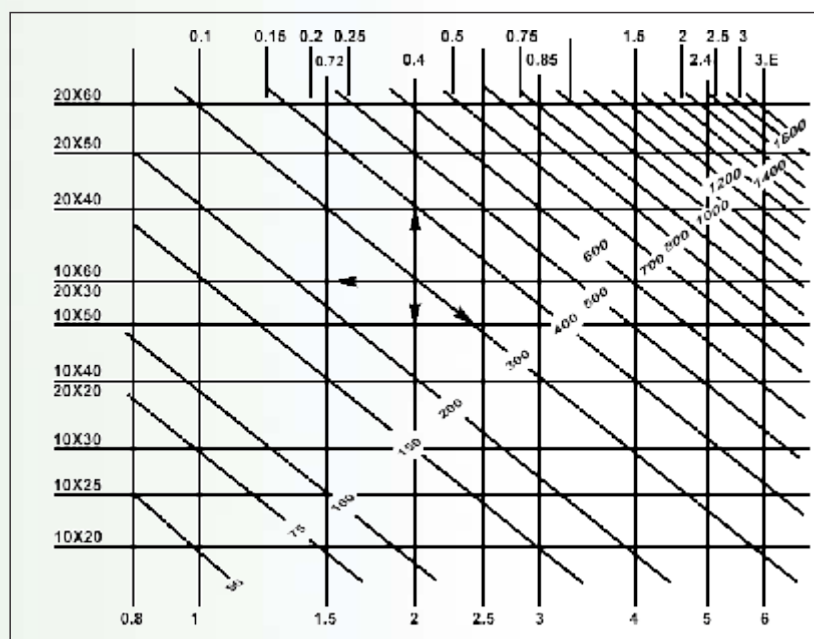
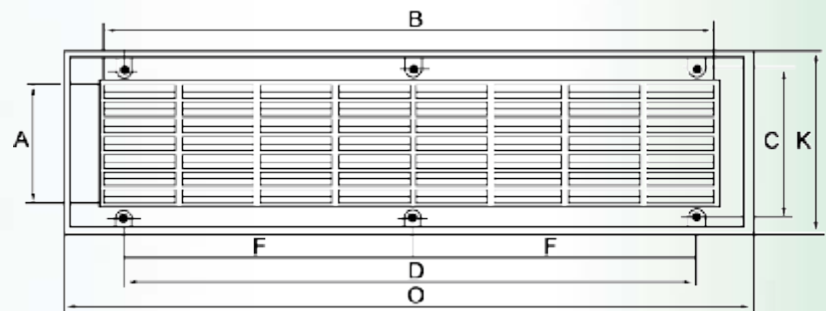
DG 13 Grilles :

- It consists of either steel or Aluminum.
- Plates thermally painted.
- Despite of the high flow rates, noise level is very low.
- Because of its appearance it will be highly recommended.
- Easily fitted by screws.
- Sight proof.
- Used in doors and partitions.
- Steel sheets handled by special templates.
- Slots parallel to the long dimension.



A mm	C mm	N mm
100	125	150
200	225	250
		A 150

A mm	D mm	F mm	O mm
200	167	—	250
250	217	—	300
300	267	—	350
400	367	—	450
500	467	—	550
600	567	283.5	650
			B+50





Specialized Grilles | Door Return | Performance Data

Performance Data

DGS and DGL Door Grilles

Performance based on nominal sizes shown in bold.

				NC 20		NC 30				NC 40			
Nominal Duct Size (in)	Nominal Duct Area sq. ft	Core Area sq. ft	Core Velocity Velocity Pressure CT-700 Static Pressure T-700 Static Pressure	200	250	300	350	400	450	500	550	600	
				0.003	0.004	0.006	0.008	0.010	0.013	0.016	0.019	0.022	
				0.028	0.044	0.063	0.086	0.113	0.143	0.176	0.213	0.254	
				0.027	0.043	0.062	0.084	0.110	0.139	0.172	0.208	0.247	
6x6	0.25	0.19	Airflow, cfm	38	48	57	67	76	86	95	105	114	
			NC (Noise Criteria)	15	20	24	27	30	32	34	36	38	
8x6	0.33	0.26	Airflow, cfm	52	65	78	91	104	117	160	143	156	
			NC (Noise Criteria)	16	21	25	28	31	33	36	38	39	
10x6	0.42	0.34	Airflow, cfm	68	85	102	119	136	153	170	187	204	
			NC (Noise Criteria)	18	22	26	29	32	35	37	39	41	
8x8	0.44	0.37	Airflow, cfm	74	93	111	130	148	167	185	204	222	
			NC (Noise Criteria)	18	23	26	30	32	35	37	39	41	
12x6	0.50	0.41	Airflow, cfm	82	103	123	144	164	185	205	226	246	
			NC (Noise Criteria)	18	23	27	30	33	35	38	40	41	
14x6	0.58	0.48	Airflow, cfm	96	120	144	168	192	216	240	264	288	
			NC (Noise Criteria)	19	24	28	32	34	37	39	41	43	
16x6	0.67	0.57	Airflow, cfm	114	143	171	200	228	257	285	314	342	
NC (Noise Criteria)			20	24	28	31	34	36	38	40	42		
10x10	0.69	0.59	Airflow, cfm	118	148	177	207	236	266	295	325	354	
			NC (Noise Criteria)	20	25	28	32	34	37	39	41	43	
18x6	0.75	0.63	Airflow, cfm	126	158	189	221	252	284	315	347	378	
			NC (Noise Criteria)	20	25	29	32	35	37	39	41	43	
20x6	0.83	0.72	Airflow, cfm	144	180	216	252	288	324	360	396	432	
NC (Noise Criteria)			21	25	29	33	35	38	40	42	44		
22x6	0.92	0.77	Airflow, cfm	154	193	231	270	308	347	385	424	462	
			NC (Noise Criteria)	21	26	30	33	36	38	40	42	44	
24x6	1.00	0.88	Airflow, cfm	176	220	264	308	352	396	440	484	528	
NC (Noise Criteria)			22	26	30	33	36	39	41	43	45		
30x6	1.25	1.11	Airflow, cfm	222	278	333	389	444	500	555	611	666	
NC (Noise Criteria)			23	27	31	34	37	40	42	44	46		
14x14	1.36	1.22	Airflow, cfm	244	305	366	437	488	549	610	671	732	
			NC (Noise Criteria)	23	28	32	35	38	40	42	44	46	
18x12	1.50	1.35	Airflow, cfm	270	338	405	473	540	608	675	743	810	
			NC (Noise Criteria)	24	28	32	35	38	41	43	45	47	
22x10	1.53	1.37	Airflow, cfm	274	343	411	480	548	617	685	754	822	
			NC (Noise Criteria)	24	28	32	35	38	41	43	45	47	
30x8	1.67	1.49	Airflow, cfm	298	373	447	522	596	671	745	820	894	
NC (Noise Criteria)			24	28	32	35	38	41	43	45	47		
42x6	1.75	1.59	Airflow, cfm	318	398	477	557	636	716	795	875	954	
NC (Noise Criteria)			24	29	33	36	39	41	43	45	47		
16x16	1.78	1.62	Airflow, cfm	324	405	486	567	648	729	810	891	972	
			NC (Noise Criteria)	24	29	33	36	39	41	44	46	47	
24x12	2.00	1.82	Airflow, cfm	364	455	546	637	728	819	910	1001	1092	
			NC (Noise Criteria)	25	30	33	37	39	42	44	46	48	
18x18	2.25	2.07	Airflow, cfm	414	518	621	725	828	932	1035	1139	1242	
			NC (Noise Criteria)	25	30	34	37	40	42	45	47	48	
24x14	2.33	2.14	Airflow, cfm	428	535	642	749	856	963	1070	1177	1284	
			NC (Noise Criteria)	26	30	34	37	40	42	45	47	49	
30x12	2.50	2.29	Airflow, cfm	458	573	687	802	916	1031	1145	1260	1374	
			NC (Noise Criteria)	26	31	34	38	40	43	45	47	49	
24x16	2.67	2.46	Airflow, cfm	493	615	738	861	984	1107	1230	1353	1476	
			NC (Noise Criteria)	26	31	35	38	41	43	45	47	49	
20x20	2.78	2.57	Airflow, cfm	514	643	771	900	1028	1157	1288	1414	1542	
			NC (Noise Criteria)	26	31	35	38	41	43	46	48	49	
30x16	3.33	3.11	Airflow, cfm	622	778	933	1089	1244	1400	1555	1711	1866	
NC (Noise Criteria)			27	32	36	39	42	44	46	48	50		
22x22	3.36	3.14	Airflow, cfm	628	785	942	1099	1256	1413	1570	1727	1884	
			NC (Noise Criteria)	27	32	36	39	42	44	46	48	50	
24x22	3.67	3.43	Airflow, cfm	686	858	1029	1201	1372	1544	1715	1887	2058	
			NC (Noise Criteria)	28	32	36	39	42	45	47	49	51	
30x18	3.75	3.50	Airflow, cfm	700	875	1050	1225	1400	1575	1750	1925	2100	
			NC (Noise Criteria)	28	32	36	39	42	45	47	49	51	
24x24	4.00	3.75	Airflow, cfm	750	938	1125	1313	1500	1688	1875	2063	2250	
			NC (Noise Criteria)	28	33	36	40	43	45	47	49	51	
30x24	5.00	4.71	Airflow, cfm	942	1178	1413	1649	1884	2120	2355	2591	2826	
NC (Noise Criteria)			29	34	37	41	43	46	48	50	52		
28x28	5.44	5.16	Airflow, cfm	1032	1290	1548	1806	2064	2322	2580	2838	3096	
			NC (Noise Criteria)	29	34	38	41	44	46	49	51	52	
30x28	5.83	5.51	Airflow, cfm	1102	1378	1653	1929	2204	2480	2755	3031	3306	
			NC (Noise Criteria)	30	34	38	41	44	47	49	51	53	
30x30	6.25	5.94	Airflow, cfm	1188	1485	1782	2079	2376	2673	2970	3267	3564	
			NC (Noise Criteria)	30	35	38	42	44	47	49	51	53	

NC 50

- Static pressures are negative, in inches of water, measured per ANSI/ASHRAE Standard 70-2006.

- NC based on room absorption of 10dB, re 10⁻¹² watts, measured per ANSI/ASHRAE Standard 70-2006.



Specialized Grilles | Door Return | Specifications

Suggested Division 15 Specifications

Door Return Grilles

Models:

- DGS • Steel
- DGL • Aluminum

DGS • Steel Door Grille

Door return grilles shall be  Model DGS for the sizes and mounting types as shown on the plans and outlet schedule. Construction shall be of steel with a 1¼-inch border width. The border and blades shall be of 20-gauge steel. Inverted V-blades with a deflection angle of 77° shall be used to create a sight proof design and provide additional stiffness to the grille. Corners shall be welded with full penetration resistance welds with a reinforcing patch for extra strength. Screw holes shall be countersunk for a neat appearance.

The grille finish shall be #26 white. The finish shall be an anodic acrylic paint, baked at 315° F for 30 minutes. The pencil hardness must be HB to H. The paint must pass a 100-hour ASTM B117 Corrosive Environments Salt Spray Test without creepage, blistering or deterioration of film. The paint must pass a 250-hour ASTM D870 Water Immersion Test. The paint must also pass the ASTM D2794 Reverse Impact Cracking Test with a 50-inch pound force applied.

The manufacturer shall provide published performance data for the grille. The grille shall be tested in accordance with ANSI/ASHRAE Standard 70-2006.

DGL • Aluminum Door Grille

Door return grilles shall be  Model DGL for the sizes and mounting types as shown on the plans and outlet schedule. Outer borders shall be constructed of heavy extruded aluminum with a thickness of 0.040 to 0.050-inch and shall have countersunk screw holes for a neat appearance. Border width shall be 1¼-inch on all sides and shall be interlocked at the four corners and mechanically staked to form a rigid frame.

Extruded aluminum inverted V-blades with a deflection angle of 77° shall be used to create a sight proof design and provide additional stiffness to the grille.

The grille finish shall be #26 white. The finish shall be an anodic acrylic paint, baked at 315° F for 30 minutes. The pencil hardness must be HB to H. The paint must pass a 100-hour ASTM B117 Corrosive Environments Salt Spray Test without creepage, blistering or deterioration of film. The paint must pass a 250-hour ASTM D870 Water Immersion Test. The paint must also pass the ASTM D2794 Reverse Impact Cracking Test with a 50-inch pound force applied.

The manufacturer shall provide published performance data for the grille. The grille shall be tested in accordance with ANSI/ASHRAE Standard 70-2006.

Model Number Specification

Model		Width	Border Type		Optional Auxiliary Frame	
DGS	Steel		Surface Mount	1	Border Type 1 Only	AF
DGL	Aluminum		Channel Frame	7		
XXXXX	X	X	X	X	XX	XX
Parallel to Long Dimension		L		White (std.)	26	Finish
Parallel to Short Dimension				S	Aluminum	
				Mill	04	
Blade Orientation						