

GFB-10

- The GeoFlow series is designed to integrate with the Armstrong DesignFlex™ System. It is an excellent choice for a single slot, high performance interior applications. The GeoFlow diffusers complement the Titus FlowBar™ linear diffuser system, ideally suited for perimeter applications.
- The time-proven aerodynamic FlowBar™ borders and pattern controllers in the GeoFlow provide superior throw, low pressure-drop and peak airflow throw patterns.
- The GeoFlow diffuser is shipped fully assembled with flush filler panel, snap-on plenum and is ready to install out of the box.
- The GeoFlow diffuser can be easily field adjusted for directional pattern control including blank off options to provide multiple airflow patterns.
- Diffuser is heavy wall, extruded aluminum, Snap-on plenums are galvanized steel and available in top or side inlets.



GFB-10

MODELS:

GFB-10 / 1" Slot
GFB-10 / 1" Slot / Insulated
GFR-10 / 1" Perforated Return

FINISHES:

A26 Whitelume
A01 Silverlume
A02 Gun Metal Gray
A84 Tech Black

Border and filler panel: specified finish
Interior components: Black
Non-standard finishes available



See website for Specifications



GFB-10

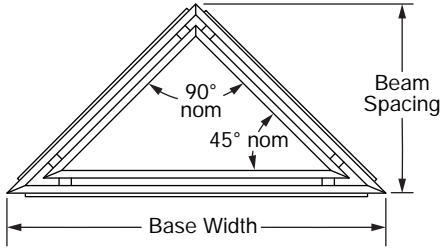


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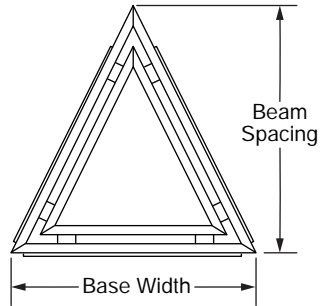
GEOFLOW

GFB-10 AND GFBI-10

TRI

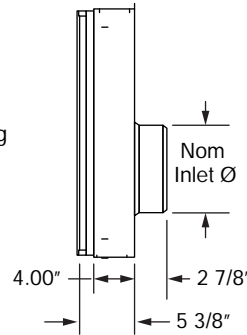


24" Beam x 48" Base

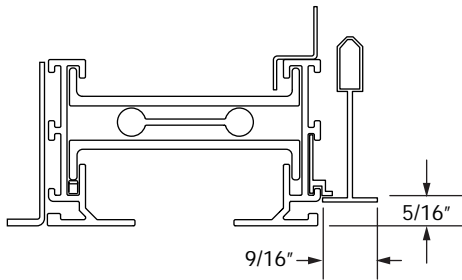
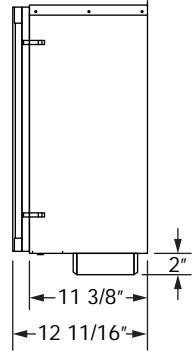


24" Beam x 48" Base
48" Beam x 48" Base

TOP INLET

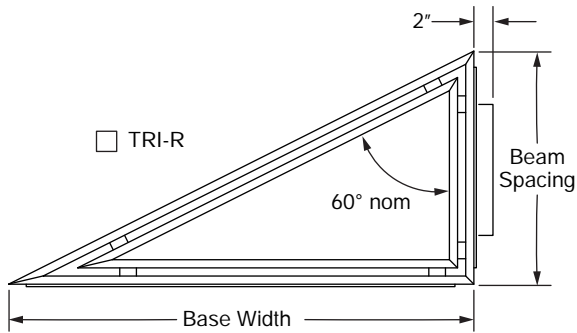


SIDE INLET

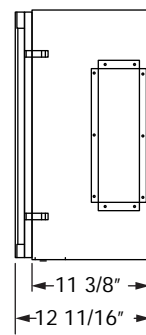


Shape	Beam Spacing	Base Width	Top Inlet				Side Inlet			
			6	8	10	12	4 X 7	4 X 13	6 X 13	6 X 19
TRI	24	24	✓	✓			✓	✓		
TRI	48	48			✓	✓			✓	✓
TRI	24	48		✓	✓			✓	✓	
TRI-R/L	24	24	✓	✓			✓	✓		

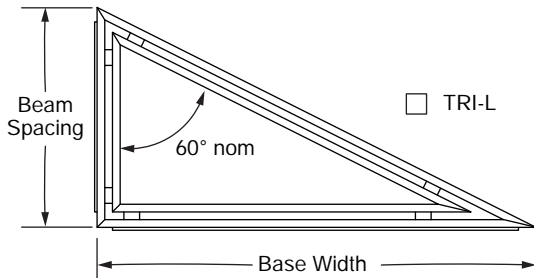
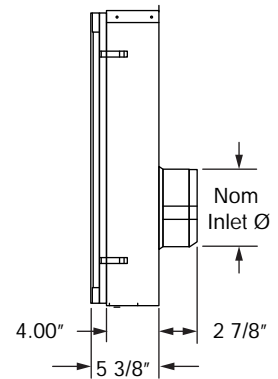
TRI-R



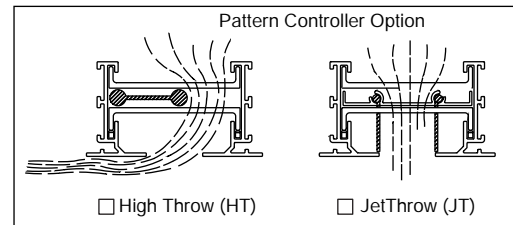
SIDE INLET



TOP INLET



TRI-L



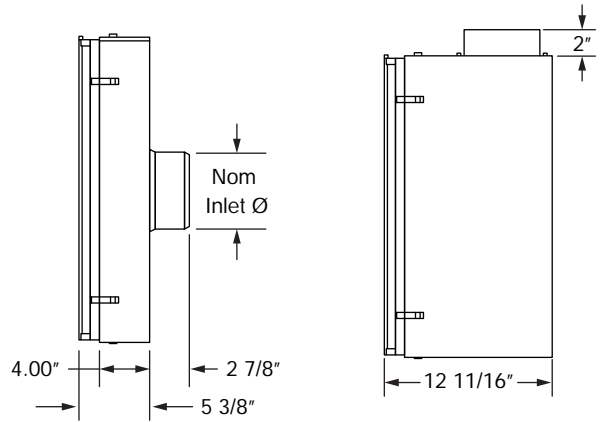
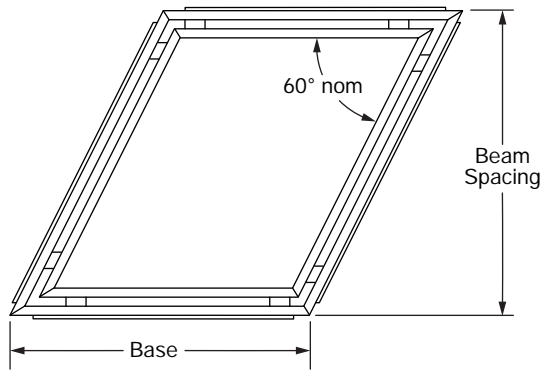
High Throw (HT)

JetThrow (JT)

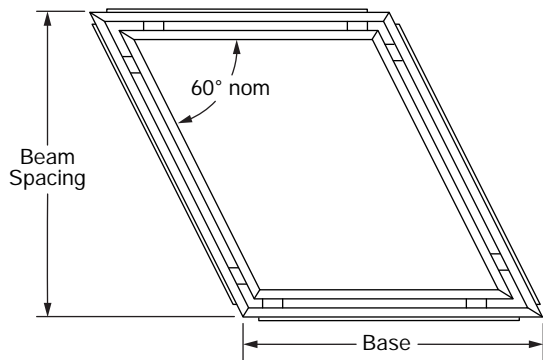
SIZE, SHAPE AND INLET AVAILABILITY

GFB-10 AND GFB1-10

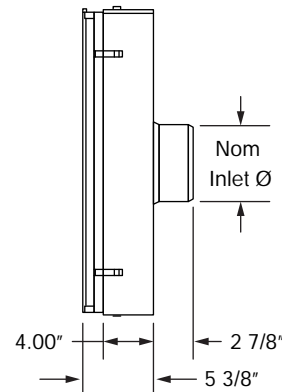
PRL-R



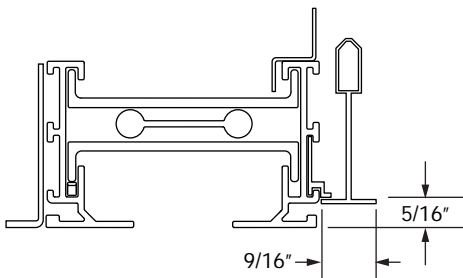
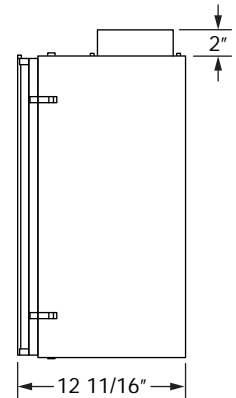
PRL-L



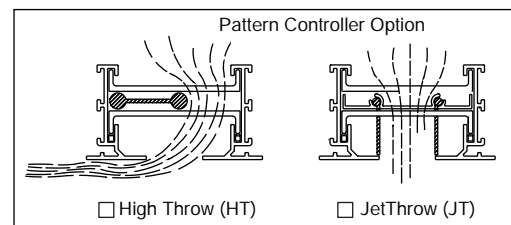
TOP INLET



SIDE INLET

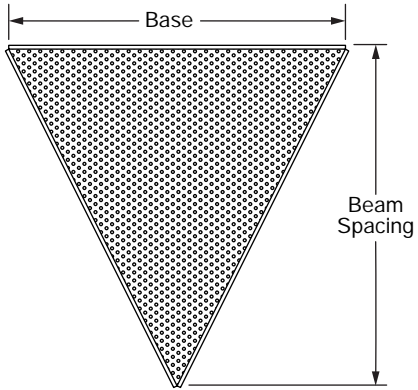


Shape	Beam Spacing	Base Width	Top Inlet		Side Inlet	
			6	8	4 X 7	4 X 13
PRL-R/L	24	24	✓	✓	✓	✓



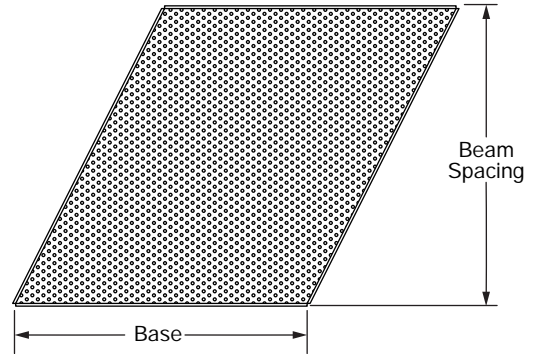
GFBR-10

□ TRI



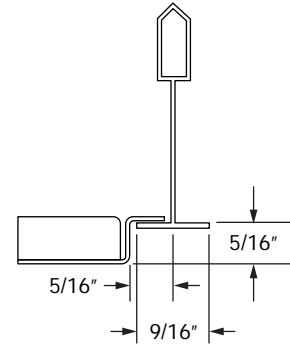
□ PRL-R (SHOWN)

□ PRL-L (OPPOSITE OF SHOWN)



Shape	Beam Spacing	Base Width
TRI	24	24
TRI	48	48
TRI	24	48
TRI-R	24	48
TRI-L	24	48

Shape	Beam Spacing	Base Width
PRL-L	24	24
PRL-R	24	24



PERFORMANCE DATA

GFB-10 TRI - 24" X 24" - ROUND (TOP INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	6" Dia Inlet	Airflow (cfm)	59	79	98	118	137	147	157	167	177
		Total Pressure	0.020	0.033	0.053	0.072	0.102	0.115	0.132	0.148	0.164
		NC (Noise Criteria)	-	11	17	23	27	29	31	33	34.9
		Throw (ft)	1-2-6	2-4-7	3-5-8	4-6-9	5-7-10	5-7-10	5-7-10	5-8-11	6-8-11
	8" Dia Inlet	Airflow (cfm)	105	140	175	209	244	262	279	297	314
		Total Pressure	0.036	0.061	0.097	0.134	0.189	0.213	0.243	0.274	0.304
		NC (Noise Criteria)	14	23	29	35	39	41	43	45	47
		Throw (ft)	3-5-8	5-7-10	6-8-11	7-8-12	7-9-13	8-9-13	8-10-14	8-10-14	8-10-15

GFB-10 TRI - 24" X 48" - ROUND (TOP INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	8" Dia Inlet	Airflow (cfm)	105	140	175	209	244	262	279	297	314
		Total Pressure	0.019	0.032	0.052	0.071	0.100	0.113	0.129	0.146	0.162
		NC (Noise Criteria)	-	15	22	27	32	34	36	37	39
		Throw (ft)	1-3-8	2-5-10	4-6-11	5-8-12	6-9-13	6-9-13	7-10-14	7-10-14	8-10-15
	10" Dia Inlet	Airflow (cfm)	164	218	273	327	382	409	436	464	491
		Total Pressure	0.042	0.070	0.112	0.154	0.218	0.246	0.281	0.316	0.351
		NC (Noise Criteria)	16	25	31	37	41	43	45	47	49
		Throw (ft)	3-6-11	5-8-12	7-10-14	8-11-15	9-11-16	10-12-17	10-12-17	10-13-18	11-13-18

GFB-10 TRI - 48" X 48" - ROUND (TOP INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	10" Dia Inlet	Airflow (cfm)	164	218	273	327	382	409	436	464	491
		Total Pressure	0.026	0.043	0.069	0.095	0.134	0.152	0.174	0.195	0.217
		NC (Noise Criteria)	12	21	27	33	37	39	41	43	45
		Throw (ft)	2-4-9	3-6-12	5-8-14	6-9-15	7-11-16	8-12-17	8-12-17	9-13-18	9-13-18
	12" Dia Inlet	Airflow (cfm)	236	314	393	471	550	589	628	668	707
		Total Pressure	0.041	0.068	0.108	0.149	0.210	0.237	0.271	0.304	0.338
		NC (Noise Criteria)	20	28	35	40	45	47	49	51	52
		Throw (ft)	3-7-13	6-9-15	8-11-16	9-13-18	11-14-19	11-14-20	12-15-21	12-15-21	13-16-22



GFB-10 PRL - 24" X 24" - ROUND (TOP INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	6" Dia Inlet	Airflow (cfm)	59	79	98	118	137	147	157	167	177
		Total Pressure	0.013	0.021	0.033	0.046	0.065	0.073	0.084	0.094	0.104
		NC (Noise Criteria)	-	-	10	16	20	22	24	26	28
		Throw (ft)	0-1-4	1-2-6	1-3-7	2-4-8	3-5-9	3-5-9	3-6-10	4-6-10	4-6-10
	8" Dia Inlet	Airflow (cfm)	105	140	175	209	244	262	279	297	314
		Total Pressure	0.025	0.042	0.068	0.093	0.131	0.148	0.170	0.191	0.212
		NC (Noise Criteria)	-	16	22	28	32	35	36	38	40
		Throw (ft)	2-3-8	3-5-9	4-6-10	5-7-11	6-8-12	6-9-12	7-9-13	7-9-13	7-10-14

GFB-10 TRI-90 - 24" X 48" - ROUND (TOP INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	8" Dia Inlet	Airflow (cfm)	105	140	175	209	244	262	279	297	314
		Total Pressure	0.019	0.032	0.052	0.071	0.100	0.113	0.129	0.146	0.162
		NC (Noise Criteria)	-	13	20	25	30	32	34	36	37
		Throw - Long Side (ft)	1-3-8	2-5-11	4-7-12	5-8-13	6-9-14	7-10-15	7-11-15	8-11-16	8-11-16
		Throw - Short Side (ft)	0-1-3	0-1-4	1-2-6	1-2-7	2-3-9	2-4-9	2-4-10	2-5-10	2-6-11
	10" Dia Inlet	Airflow (cfm)	164	218	273	327	382	409	436	464	491
		Total Pressure	0.045	0.075	0.120	0.165	0.233	0.263	0.300	0.338	0.375
		NC (Noise Criteria)	14	22	29	35	39	41	43	45	47
		Throw - Long Side (ft)	3-6-12	6-8-13	7-11-15	8-12-16	10-13-18	11-13-18	11-13-19	11-14-20	12-14-20
		Throw - Short Side (ft)	1-2-6	1-3-8	2-4-10	3-6-11	4-7-12	4-7-12	5-8-13	5-8-13	6-9-14

- Data obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006. Actual performance, with flexible duct inlet, may vary in the field. See the Engineering Guidelines section of this catalog for additional information.
- Throw values are given for terminal velocities of 150, 100 and 50 fpm and for isothermal conditions. See the section, Engineering Guidelines for catalog throw data information.
- NC values based on octave band 2 to 7 sound power levels minus a room absorption of 10 dB.
- Dash (-) in space denotes an NC value of less than 10.
- Each NC value represents the noise criteria curve which will not be exceeded by the sound pressure in any of the octave bands, 2 through 7, with a room absorption of 10 dB, re 10⁻¹² watts.
- All pressures are given in inches of water.
- To obtain static pressure, subtract the velocity pressure from the total pressure.

PERFORMANCE DATA

GFB-10 TRI - 24" X 24" - RECTANGULAR (SIDE INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	4" x 7" Inlet	Airflow (cfm)	53	70	88	105	123	132	141	149	158
		Total Pressure	0.011	0.018	0.028	0.039	0.054	0.061	0.070	0.079	0.088
		NC (Noise Criteria)	-	-	-	14	19	22	24	26	27
		Throw (ft)	1-2-5	2-3-7	2-4-8	3-5-8	4-6-9	4-7-10	5-7-10	5-7-10	5-7-10
	4" x 13" Inlet	Airflow (cfm)	100	133	166	199	232	249	266	282	299
		Total Pressure	0.024	0.041	0.065	0.089	0.126	0.142	0.162	0.182	0.203
		NC (Noise Criteria)	-	16	23	29	34	36	38	40	42
		Throw (ft)	3-5-8	4-7-10	5-8-11	7-8-12	7-9-13	8-9-13	8-10-13	8-10-14	8-10-14

GFB-10 TRI - 24" X 48" - RECTANGULAR (SIDE INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	4" x 13" Inlet	Airflow (cfm)	100	133	166	199	232	249	266	282	299
		Total Pressure	0.013	0.022	0.035	0.048	0.068	0.077	0.088	0.099	0.110
		NC (Noise Criteria)	-	-	13	19	24	26	28	30	32
		Throw (ft)	1-3-7	2-5-10	3-6-11	5-7-12	6-8-13	6-9-13	6-10-13	7-10-14	7-10-14
	6" x 13" Inlet	Airflow (cfm)	153	204	255	305	356	382	407	433	458
		Total Pressure	0.029	0.049	0.078	0.107	0.151	0.170	0.194	0.219	0.243
		NC (Noise Criteria)	-	16	23	29	33	36	38	40	41
		Throw (ft)	3-6-10	5-7-12	6-9-13	7-10-14	9-11-16	9-11-16	10-12-17	10-12-17	10-13-18

GFB-10 TRI - 48" X 48" - RECTANGULAR (SIDE INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	6" x 13" Inlet	Airflow (cfm)	153	204	255	305	356	382	407	433	458
		Total Pressure	0.016	0.027	0.044	0.060	0.085	0.096	0.109	0.123	0.137
		NC (Noise Criteria)	-	-	16	21	26	28	30	32	34
		Throw (ft)	1-3-9	3-6-12	4-7-13	6-9-14	7-10-16	7-11-16	8-12-17	8-12-17	9-13-18
	6" x 19" Inlet	Airflow (cfm)	225	299	374	449	524	562	599	636	674
		Total Pressure	0.027	0.046	0.073	0.101	0.142	0.160	0.183	0.206	0.229
		NC (Noise Criteria)	-	17	24	30	35	37	39	41	43
		Throw (ft)	3-6-12	5-9-14	7-11-16	9-12-18	10-13-19	11-14-20	11-14-20	12-15-21	12-15-21



PERFORMANCE DATA

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GFB-10 TRI-90 - 24" X 48" - RECTANGULAR (SIDE INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	4" x 13" Inlet	Airflow (cfm)	100	133	166	199	232	249	266	282	299
		Total Pressure	0.015	0.025	0.040	0.055	0.078	0.088	0.101	0.113	0.126
		NC (Noise Criteria)	-	-	-	14	19	21	23	25	27
		Throw - Long Side (ft)	1-3-8	2-5-10	3-6-12	5-8-13	6-9-14	6-10-14	7-10-15	7-11-15	8-11-16
		Throw - Short Side (ft)	0-1-2	0-1-4	1-2-6	1-2-7	1-3-8	2-4-9	2-4-9	2-5-10	2-5-10
		Airflow (cfm)	153	204	255	305	356	382	407	433	458
	6" x 13" Inlet	Total Pressure	0.031	0.052	0.083	0.114	0.160	0.181	0.207	0.232	0.258
		NC (Noise Criteria)	-	15	22	28	33	35	37	39	41
		Throw - Long Side (ft)	3-6-11	5-8-13	7-10-14	8-11-16	9-12-17	10-13-18	10-13-18	11-13-19	11-14-19
		Throw - Short Side (ft)	1-1-5	1-2-7	2-4-9	2-5-11	3-6-12	4-7-12	4-7-12	5-8-13	5-8-13

GFB-10 PRL - 24" X 24" - RECTANGULAR (SIDE INLET)

		Neck Velocity (fpm)	300	400	500	600	700	750	800	850	900
		Velocity Pressure	0.006	0.010	0.016	0.022	0.031	0.035	0.040	0.045	0.050
1" Slot Width	4" x 7" Inlet	Airflow (cfm)	53	70	88	105	123	132	141	149	158
		Total Pressure	0.012	0.019	0.031	0.042	0.059	0.067	0.077	0.086	0.096
		NC (Noise Criteria)	-	-	-	-	11	14	16	18	19
		Throw (ft)	0-1-3	1-2-5	1-2-6	2-3-8	2-4-8	2-5-9	3-5-9	3-5-9	3-6-10
	4" x 13" Inlet	Airflow (cfm)	100	133	166	199	232	249	266	282	299
		Total Pressure	0.016	0.027	0.042	0.058	0.082	0.093	0.106	0.119	0.133
		NC (Noise Criteria)	-	-	15	21	26	28	30	32	34
		Throw (ft)	1-3-7	2-5-9	4-6-10	5-7-11	6-8-12	6-9-12	6-9-12	7-9-13	7-9-13

- Data obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006. Actual performance, with flexible duct inlet, may vary in the field. See the Engineering Guidelines section of this catalog for additional information.
- Throw values are given for terminal velocities of 150, 100 and 50 fpm and for isothermal conditions. See the section, Engineering Guidelines for catalog throw data information.
- NC values based on octave band 2 to 7 sound power levels minus a room absorption of 10 dB.
- Dash (-) in space denotes an NC value of less than 10.
- Each NC value represents the noise criteria curve which will not be exceeded by the sound pressure in any of the octave bands, 2 through 7, with a room absorption of 10 dB, re 10⁻¹² watts.
- All pressures are given in inches of water.
- To obtain static pressure, subtract the velocity pressure from the total pressure.

PERFORMANCE DATA

GFBR-10

Model/Size	Core Velocity, (fpm)	100	150	200	250	300	350	400	450	500
	Velocity Pressure, (In. WG)	0.001	0.001	0.002	0.004	0.006	0.008	0.010	0.013	0.016
	Neg. Static Pressure, (In. WG)	0.023	0.052	0.092	0.143	0.207	0.281	0.367	0.465	0.574
GFBR-10 TRI - 48" x 48"	Airflow, cfm	800	1200	1600	2000	2400	2800	3200	3600	4000
	NC (Noise Criteria)	-	-	-	-	15	22	29	35	40
GFBR-10 TRI - 24" x 24"	Airflow, cfm	200	300	400	500	600	700	800	900	1000
	NC (Noise Criteria)	-	-	-	-	12	19	26	32	37
GFBR-10 TRI - 24" x 48"	Airflow, cfm	400	600	800	1000	1200	1400	1600	1800	2000
	NC (Noise Criteria)	-	-	-	-	13	21	27	33	38
GFBR-10 TRI-90 - 24" x 48"	Airflow, cfm	400	600	800	1000	1200	1400	1600	1800	2000
	NC (Noise Criteria)	-	-	-	-	13	21	27	33	38
GFBR-10 PRL - 24" x 24"	Airflow, cfm	200	300	400	500	600	700	800	900	1000
	NC (Noise Criteria)	-	-	-	-	12	19	26	32	37

- Data obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.
- NC values based on octave band 2 to 7 sound power levels minus a room absorption of 10 dB.
- Dash (-) in space denotes an NC value of less than 10.
- Each NC value represents the noise criteria curve which will not be exceeded by the sound pressure in any of the octave bands, 2 through 7, with a room absorption of 10 dB, re 10⁻¹² watts.
- All pressures are given in inches of water.