

XG-AFL FORMATIONS PERFORMANCE DATA
1 SLOT STANDARD BLADE HORIZONTAL THROW WITH PLENUM

One Slot — 1" Slot Width	Horizontal Throw	6" Round Inlet	2 ft.	CFM	55	65	80	95	105	120	130	145
				Ps	.044	.067	.096	.129	.168	.212	.261	.315
Pt	.049	.074	.106	.144	.186	.235	.288	.349				
NC	-	19	24	27	30	33	35	37				
Throw	5-7-11	6-9-12	7-9-13	8-10-14	9-11-15	9-11-16	10-12-17	10-13-18				
One Slot — 1" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">6" Round Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>135</td> <td>160</td> <td>185</td> <td>210</td> <td>240</td> <td>265</td> <td>290</td> </td></td>	Horizontal Throw <td rowspan="2">6" Round Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>135</td> <td>160</td> <td>185</td> <td>210</td> <td>240</td> <td>265</td> <td>290</td> </td>	6" Round Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>135</td> <td>160</td> <td>185</td> <td>210</td> <td>240</td> <td>265</td> <td>290</td>	4 ft.	CFM	110	135	160	185	210	240	265	290
				Ps	.048	.075	.106	.144	.187	.235	.290	.350
Pt	.068	.104	.148	.199	.258	.329	.403	.486				
NC	17	21	26	29	32	35	37	39				
Throw	6-10-15	8-12-17	10-13-19	11-14-20	12-15-21	13-16-23	14-17-24	14-18-25				
One Slot — 1" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">6" Round Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>170</td> <td>200</td> <td>235</td> <td>265</td> <td>300</td> <td>330</td> <td>365</td> </td></td>	Horizontal Throw <td rowspan="2">6" Round Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>170</td> <td>200</td> <td>235</td> <td>265</td> <td>300</td> <td>330</td> <td>365</td> </td>	6" Round Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>170</td> <td>200</td> <td>235</td> <td>265</td> <td>300</td> <td>330</td> <td>365</td>	5 ft.	CFM	135	170	200	235	265	300	330	365
				Ps	.053	.082	.117	.158	.205	.259	.319	.384
Pt	.083	.129	.182	.247	.319	.405	.495	.600				
NC	18	23	27	31	34	36	39	41				
Throw	9-13-17	11-16-19	13-18-21	15-19-22	17-20-24	18-22-25	19-23-27	19-24-28				
One Slot — 1" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">2 ft.</td> <td>CFM</td> <td>55</td> <td>65</td> <td>80</td> <td>95</td> <td>105</td> <td>120</td> <td>130</td> <td>145</td> </td></td>	Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">2 ft.</td> <td>CFM</td> <td>55</td> <td>65</td> <td>80</td> <td>95</td> <td>105</td> <td>120</td> <td>130</td> <td>145</td> </td>	8" Oval Inlet <td rowspan="2">2 ft.</td> <td>CFM</td> <td>55</td> <td>65</td> <td>80</td> <td>95</td> <td>105</td> <td>120</td> <td>130</td> <td>145</td>	2 ft.	CFM	55	65	80	95	105	120	130	145
				Ps	.043	.056	.094	.126	.164	.207	.255	.307
Pt	.044	.068	.097	.132	.171	.215	.265	.320				
NC		17	22	26	30	33	36	39				
Throw	5-7-11	6-9-12	7-9-13	8-10-14	9-11-15	9-11-16	10-12-17	10-13-18				
One Slot — 1" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>135</td> <td>160</td> <td>185</td> <td>210</td> <td>240</td> <td>265</td> <td>290</td> </td></td>	Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>135</td> <td>160</td> <td>185</td> <td>210</td> <td>240</td> <td>265</td> <td>290</td> </td>	8" Oval Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>135</td> <td>160</td> <td>185</td> <td>210</td> <td>240</td> <td>265</td> <td>290</td>	4 ft.	CFM	110	135	160	185	210	240	265	290
				Ps	.047	.073	.104	.141	.183	.230	.283	.342
Pt	.054	.084	.119	.160	.208	.264	.324	.391				
NC	-	19	24	28	32	35	38	41				
Throw	6-10-15	8-12-17	10-13-19	11-14-20	12-15-21	13-16-23	14-17-24	14-18-25				
One Slot — 1" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>170</td> <td>200</td> <td>235</td> <td>265</td> <td>300</td> <td>330</td> <td>365</td> </td></td>	Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>170</td> <td>200</td> <td>235</td> <td>265</td> <td>300</td> <td>330</td> <td>365</td> </td>	8" Oval Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>170</td> <td>200</td> <td>235</td> <td>265</td> <td>300</td> <td>330</td> <td>365</td>	5 ft.	CFM	135	170	200	235	265	300	330	365
				Ps	.052	.080	.114	.155	.201	.253	.311	.376
Pt	.063	.097	.138	.187	.242	.306	.375	.453				
NC	-	20	25	30	34	37	40	42				
Throw	9-13-17	11-16-19	13-18-21	15-19-22	17-20-24	18-22-25	19-23-27	19-24-28				

XG-AFL FORMATIONS PERFORMANCE DATA
1 SLOT STANDARD BLADE HORIZONTAL THROW WITH PLENUM

One Slot — 1.5" Slot Width	Horizontal Throw	6" Round Inlet	2 ft.	CFM	55	70	90	110	125	145	160	180
				Ps	.026	.047	.073	.105	.143	.187	.236	.292
Pt	.031	.055	.086	.125	.168	.221	.278	.344				
NC	-	18	23	27	31	34	37	39				
Throw	3-6-11	5-8-12	6-9-14	8-11-15	9-12-17	10-12-18	11-13-19	11-14-20				
One Slot — 1.5" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">6" Round Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>145</td> <td>180</td> <td>215</td> <td>250</td> <td>290</td> <td>325</td> <td>360</td> </td></td>	Horizontal Throw <td rowspan="2">6" Round Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>145</td> <td>180</td> <td>215</td> <td>250</td> <td>290</td> <td>325</td> <td>360</td> </td>	6" Round Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>145</td> <td>180</td> <td>215</td> <td>250</td> <td>290</td> <td>325</td> <td>360</td>	4 ft.	CFM	110	145	180	215	250	290	325	360
				Ps	.029	.052	.081	.117	.159	.207	.262	.324
Pt	.049	.086	.133	.191	.260	.343	.433	.534				
NC	-	20	25	29	33	36	39	41				
Throw	5-8-15	7-11-18	9-13-20	11-15-22	12-17-23	14-18-25	15-19-26	16-20-28				
One Slot — 1.5" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">6" Round Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>180</td> <td>225</td> <td>270</td> <td>315</td> <td>360</td> <td>405</td> <td>450</td> </td></td>	Horizontal Throw <td rowspan="2">6" Round Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>180</td> <td>225</td> <td>270</td> <td>315</td> <td>360</td> <td>405</td> <td>450</td> </td>	6" Round Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>180</td> <td>225</td> <td>270</td> <td>315</td> <td>360</td> <td>405</td> <td>450</td>	5 ft.	CFM	135	180	225	270	315	360	405	450
				Ps	.032	.057	.089	.128	.175	.228	.289	.356
Pt	.062	.109	.171	.246	.335	.438	.554	.684				
NC	15	21	27	31	34	37	40	43				
Throw	6-11-17	9-14-20	12-18-22	14-21-24	17-22-26	19-24-28	21-25-30	22-26-31				
One Slot — 1.5" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">2 ft.</td> <td>CFM</td> <td>55</td> <td>70</td> <td>90</td> <td>110</td> <td>125</td> <td>145</td> <td>160</td> <td>180</td> </td></td>	Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">2 ft.</td> <td>CFM</td> <td>55</td> <td>70</td> <td>90</td> <td>110</td> <td>125</td> <td>145</td> <td>160</td> <td>180</td> </td>	8" Oval Inlet <td rowspan="2">2 ft.</td> <td>CFM</td> <td>55</td> <td>70</td> <td>90</td> <td>110</td> <td>125</td> <td>145</td> <td>160</td> <td>180</td>	2 ft.	CFM	55	70	90	110	125	145	160	180
				Ps	.024	.042	.066	.094	.129	.168	.213	.262
Pt	.025	.045	.070	.102	.138	.180	.227	.281				
NC	-	-	19	24	29	33	36	39				
Throw	3-6-11	5-8-12	6-9-14	8-11-15	9-12-17	10-12-18	11-13-19	11-14-20				
One Slot — 1.5" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>145</td> <td>180</td> <td>215</td> <td>250</td> <td>290</td> <td>325</td> <td>360</td> </td></td>	Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>145</td> <td>180</td> <td>215</td> <td>250</td> <td>290</td> <td>325</td> <td>360</td> </td>	8" Oval Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>110</td> <td>145</td> <td>180</td> <td>215</td> <td>250</td> <td>290</td> <td>325</td> <td>360</td>	4 ft.	CFM	110	145	180	215	250	290	325	360
				Ps	.026	.047	.073	.105	.143	.187	.236	.292
Pt	.033	.059	.092	.132	.179	.236	.298	.367				
NC	-	-	21	26	31	35	38	41				
Throw	5-8-15	7-11-18	9-13-20	11-15-22	12-17-23	14-18-25	15-19-26	16-20-28				
One Slot — 1.5" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>180</td> <td>225</td> <td>270</td> <td>315</td> <td>360</td> <td>405</td> <td>450</td> </td></td>	Horizontal Throw <td rowspan="2">8" Oval Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>180</td> <td>225</td> <td>270</td> <td>315</td> <td>360</td> <td>405</td> <td>450</td> </td>	8" Oval Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>135</td> <td>180</td> <td>225</td> <td>270</td> <td>315</td> <td>360</td> <td>405</td> <td>450</td>	5 ft.	CFM	135	180	225	270	315	360	405	450
				Ps	.029	.051	.080	.115	.157	.205	.260	.321
Pt	.039	.070	.110	.158	.215	.281	.355	.439				
NC	-	16	22	28	32	36	39	42				
Throw	6-11-17	9-14-20	12-18-22	14-21-24	17-22-26	19-24-28	21-25-30	22-26-31				

XG-AFL FORMATIONS PERFORMANCE DATA
1 SLOT STANDARD BLADE HORIZONTAL THROW WITH PLENUM

One Slot — 2" Slot Width	Horizontal Throw	8" Oval Inlet	2 ft.	CFM	100	120	140	160	180	200	220	240			
				Ps	.044	.063	.086	.112	.142	.176	.212	.253			
				Pt	.050	.072	.097	.127	.161	.199	.241	.286			
				NC	-	18	23	27	30	33	36	38			
				Throw	6-9-15	7-11-16	8-12-17	10-13-19	11-14-20	12-15-21	13-15-22	13-16-23			
		12" Oval Inlet	4 ft.	CFM	200	240	280	320	360	400	440	480			
				Ps	.049	.070	.096	.125	.158	.195	.236	.281			
				Pt	.072	.104	.141	.184	.233	.288	.349	.415			
				NC	15	20	25	29	32	35	38	40			
					Throw	9-13-21	10-15-23	12-17-25	14-19-26	15-20-28	17-21-29	18-22-31	19-23-32		
				5 ft.	CFM	250	300	350	400	450	500	550	600		
			Ps		.054	.077	.105	.137	.174	.215	.260	.309			
			Pt		.090	.130	.176	.230	.292	.360	.436	.518			
			NC		17	22	26	30	34	37	39	42			
					Throw	11-17-23	14-21-25	16-23-28	18-25-29	21-26-31	23-28-33	24-29-34	25-31-36		
One Slot — 2" Slot Width	Horizontal Throw		12" Oval Inlet	2 ft.	CFM	100	120	140	160	180	200	220	240		
					Ps	.043	.062	.085	.111	.140	.173	.209	.249		
		Pt			.045	.065	.088	.115	.146	.180	.218	.259			
		NC			-	17	22	26	30	33	36	38			
							Throw	6-9-15	7-11-16	8-12-17	10-13-19	11-14-20	12-15-21	13-15-22	13-16-23
						4 ft.	CFM	200	240	280	320	360	400	440	480
					Ps		.048	.069	.094	.123	.156	.192	.232	.276	
					Pt		.055	.079	.108	.141	.179	.221	.267	.318	
					NC		-	19	24	28	32	35	38	40	
							Throw	9-13-21	10-15-23	12-17-25	14-19-26	15-20-28	17-21-29	18-22-31	19-23-32
						5 ft.	CFM	250	300	350	400	450	500	550	600
					Ps		.053	.076	.103	.135	.171	.211	.256	.304	
				Pt	.064		.092	.125	.164	.207	.256	.310	.369		
				NC	-		20	25	29	33	36	39	42		
						Throw	11-17-23	14-21-25	16-23-28	18-25-29	21-26-31	23-28-33	24-29-34	25-31-36	

XG-AFL FORMATIONS PERFORMANCE DATA
1 SLOT STANDARD BLADE HORIZONTAL THROW WITH PLENUM

One Slot — 2.5" Slot Width	Horizontal Throw	10" Oval Inlet	2 ft.	CFM	130	160	190	220	250	280	310	340
				Ps	.049	.075	.106	.142	.183	.229	.281	.338
Pt	.054	.082	.116	.156	.201	.253	.310	.372				
NC	-	16	22	27	31	34	37	39				
Throw	7-10-17	9-13-19	10-14-20	12-15-22	13-16-23	14-17-25	15-18-26	16-19-27				
One Slot — 2.5" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">10" Oval Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>260</td> <td>320</td> <td>380</td> <td>440</td> <td>500</td> <td>560</td> <td>620</td> <td>680</td> </td></td>	Horizontal Throw <td rowspan="2">10" Oval Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>260</td> <td>320</td> <td>380</td> <td>440</td> <td>500</td> <td>560</td> <td>620</td> <td>680</td> </td>	10" Oval Inlet <td rowspan="2">4 ft.</td> <td>CFM</td> <td>260</td> <td>320</td> <td>380</td> <td>440</td> <td>500</td> <td>560</td> <td>620</td> <td>680</td>	4 ft.	CFM	260	320	380	440	500	560	620	680
				Ps	.055	.083	.117	.157	.203	.255	.312	.376
Pt	.075	.114	.160	.215	.277	.348	.427	.513				
NC	-	18	24	29	33	36	39	41				
Throw	10-15-24	12-18-26	14-20-29	17-22-31	19-23-33	20-25-35	21-26-37	22-27-38				
One Slot — 2.5" Slot Width <td rowspan="2">Horizontal Throw <td rowspan="2">10" Oval Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>325</td> <td>400</td> <td>475</td> <td>550</td> <td>625</td> <td>700</td> <td>775</td> <td>850</td> </td></td>	Horizontal Throw <td rowspan="2">10" Oval Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>325</td> <td>400</td> <td>475</td> <td>550</td> <td>625</td> <td>700</td> <td>775</td> <td>850</td> </td>	10" Oval Inlet <td rowspan="2">5 ft.</td> <td>CFM</td> <td>325</td> <td>400</td> <td>475</td> <td>550</td> <td>625</td> <td>700</td> <td>775</td> <td>850</td>	5 ft.	CFM	325	400	475	550	625	700	775	850
				Ps	.060	.092	.129	.173	.223	.280	.344	.413
Pt	.092	.139	.196	.263	.339	.426	.522	.628				
NC	-	20	25	30	34	37	40	43				
Throw	13-20-27	16-25-29	19-27-32	22-29-34	25-31-37	27-33-39	28-35-41	30-36-43				
One Slot — 2.5" Slot Width	Horizontal Throw	12" Oval Inlet	2 ft.	CFM	130	160	190	220	250	280	310	340
				Ps	.044	.066	.093	.125	.162	.203	.249	.299
Pt	.047	.071	.100	.134	.173	.217	.266	.320				
NC	-	16	22	27	31	34	37	39				
Throw	7-10-17	9-13-19	10-14-20	12-15-22	13-16-23	14-17-25	15-18-26	16-19-27				
One Slot — 2.5" Slot Width	Horizontal Throw	12" Oval Inlet	4 ft.	CFM	260	320	380	440	500	560	620	680
				Ps	.049	.074	.104	.139	.180	.225	.276	.332
Pt	.061	.092	.130	.174	.225	.282	.345	.415				
NC	-	18	24	29	33	36	39	41				
Throw	10-15-24	12-18-26	14-20-29	17-22-31	19-23-33	20-25-35	21-26-37	22-27-38				
One Slot — 2.5" Slot Width	Horizontal Throw	12" Oval Inlet	5 ft.	CFM	325	400	475	550	625	700	775	850
				Ps	.053	.081	.114	.153	.198	.248	.304	.366
Pt	.072	.110	.155	.207	.268	.336	.412	.495				
NC	-	20	25	30	34	37	40	43				
Throw	13-20-27	16-25-29	19-27-32	22-29-34	25-31-37	27-33-39	28-35-41	30-36-43				

LINEAR DIFFUSERS AND GRILLES

FORMATIONS LINEAR DIFFUSERS

XG-AFL

XG-AFL FORMATIONS PERFORMANCE DATA
1 SLOT STANDARD BLADE HORIZONTAL THROW WITH PLENUM

One Slot — 3" Slot Width	Horizontal Throw	10" Oval Inlet	2 ft.	CFM	140	170	200	230	260	290	320	350				
				Ps	.053	.078	.108	.143	.183	.227	.276	.331				
				Pt	.059	.087	.120	.159	.203	.252	.307	.367				
				NC	-	16	21	25	29	33	35	38				
				Throw	7-10-17	8-13-19	10-15-21	11-16-22	13-17-24	14-18-25	15-19-26	16-19-28				
		12" Oval Inlet	4 ft.	CFM	280	340	400	460	520	580	640	700				
						Ps	.059	.087	.120	.159	.203	.252	.307	.368		
						Pt	.082	.121	.168	.222	.283	.352	.429	.513		
						NC	-	18	23	27	31	35	37	40		
						Throw	10-15-25	12-18-27	14-21-29	16-22-32	18-24-34	20-25-35	21-26-37	22-28-39		
				5 ft.	CFM	350	425	500	575	650	725	800	875			
						Ps	.065	.095	.132	.175	.223	.278	.338	.404		
						Pt	.101	.149	.206	.273	.349	.434	.528	.632		
						NC	-	19	24	29	33	36	39	41		
						Throw	13-20-28	16-24-30	19-28-33	21-30-35	24-32-37	27-34-40	29-35-42	30-37-44		
One Slot — 3" Slot Width	Horizontal Throw		12" Oval Inlet	2 ft.	CFM	140	170	200	230	260	290	320	350			
					Ps	.051	.075	.104	.137	.175	.218	.265	.317			
					Pt	.054	.080	.111	.146	.187	.233	.283	.339			
					NC	-	16	21	25	29	33	35	38			
					Throw	7-10-17	8-13-19	10-15-21	11-16-22	13-17-24	14-18-25	15-19-26	16-19-28			
						4 ft.	CFM	280	340	400	460	520	580	640	700	
								Ps	.056	.083	.115	.152	.194	.242	.294	.352
								Pt	.070	.104	.144	.190	.243	.302	.368	.440
								NC	-	18	23	27	31	35	37	40
								Throw	10-15-25	12-18-27	14-21-29	16-22-32	18-24-34	20-25-35	21-26-37	22-28-39
						5 ft.	CFM	350	425	500	575	650	725	800	875	
								Ps	.062	.091	.127	.167	.214	.266	.324	.387
								Pt	.084	.124	.171	.227	.290	.360	.439	.525
								NC	-	19	24	29	33	36	39	41
								Throw	13-20-28	16-24-30	19-28-33	21-30-35	24-32-37	27-34-40	29-35-42	30-37-44

PERFORMANCE NOTES FOR XG-AFL FORMATIONS SERIES

All data is tested in accordance with ANSI/ASHRAE 70-2006.

DEFINITION OF UNITS

CFM Cubic Feet per Minute (air)

CFM/LF Cubic Feet per Minute per Linear Foot (air)

Velocity Velocity of air stream in Feet per Minute

Ps Negative static pressure (inches of water column)

NC Noise criterion, sound pressure level NC ratings are based on sound power level (Lw) re: 10^{-12} watts minus a 10dB room attenuation in all octave bands

1. All pressures are given in inches of water.
2. Isothermal throws are given for velocities of 150, 100 and 50 FPM.
3. Throw values are based on a 1-way discharge from the slot with the controller set at 0 discharge. For 2-way discharges, throw is based upon the number and size of the slots throwing in each direction, with the total supply air flow split equally between all slots in the unit.
4. Data was collected in accordance to ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets"
5. Correction factor tables are only to be used with continuous pressurized ceiling plenum performance data.

Table 1. NC Correction For Length

Length (feet)	2	4	6	8	10
Supply	-2	+0	+2	+3	+5
Return	+0	+3	+5	+6	+8

Table 2. Throw Correction Multiplier For Length

Length (feet)	2	4	8	10	12
Throw Correction	0.72	0	1.5	1.7	1.8