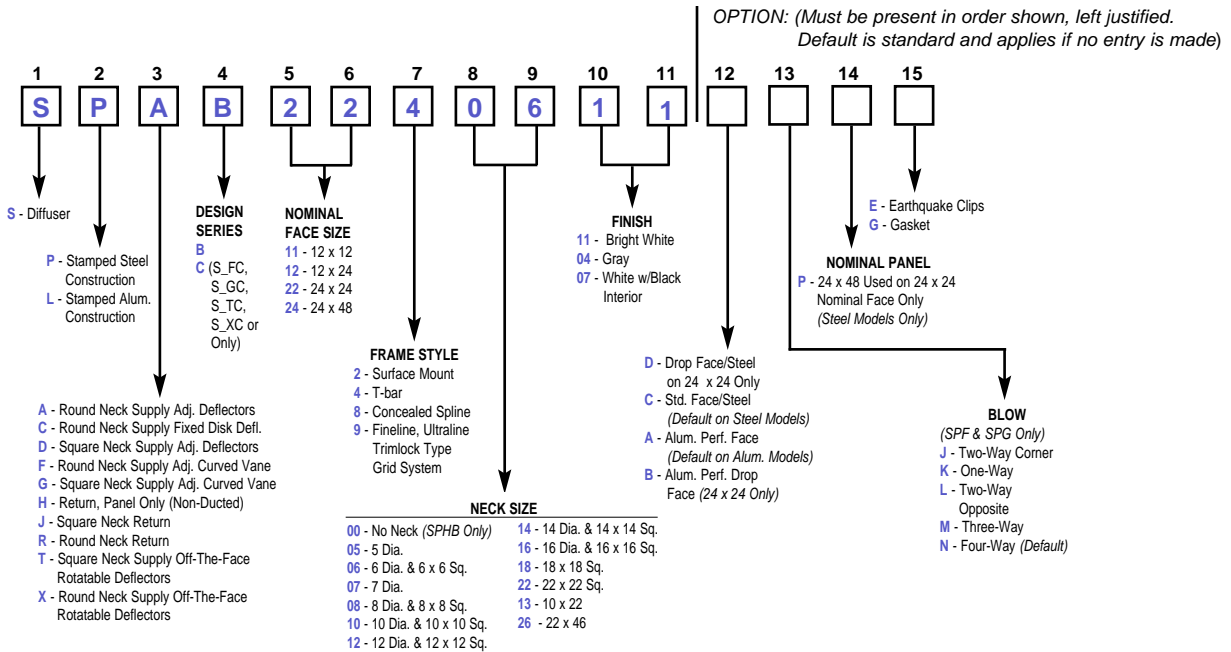


FEATURES

- Matching Supply and Return Units.
- Choice of Round or Square Inlets.
- Models for Plaster, T-bar, Spline, or Donn Fineline® Ceilings.
- Two Face Sizes Available.
- Choice of Flush or Drop Face Plate.
- Field Adjustable to any Blow Pattern.
- Choice of Steel or Aluminum Construction.
- Models Available with Adjustable Curved Vane Pattern Controls.
- Hinged Face Plate for Easy Access to Duct.
- 1-1/4" Deep Inlet Collar for Easy Duct Connection.
- Full Line of Easily Installed Duct Accessories.
- ADC Certified Performance Data.
- Carnes Bright White Electrocoat Paint Finish.

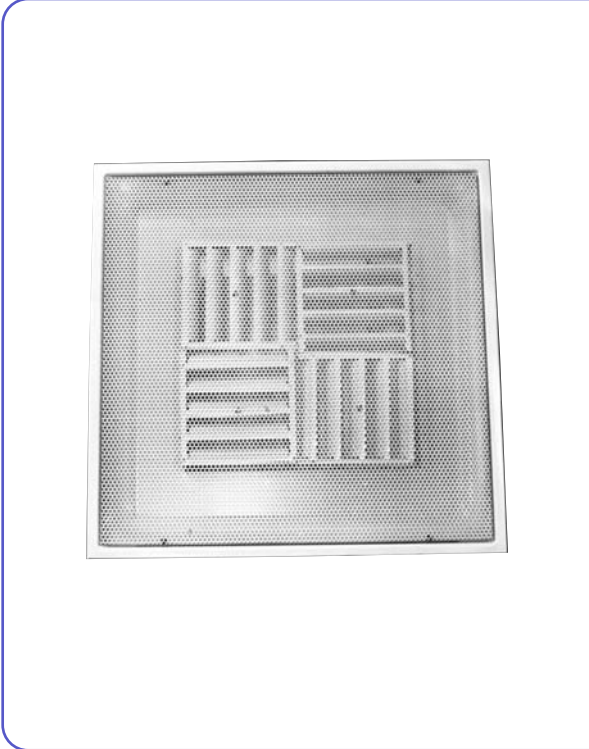
▼ MODEL NUMBERING SYSTEMS — Diffusers



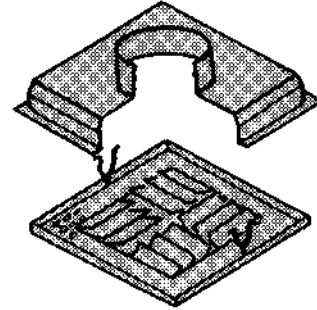
SURFACE MOUNT APPLICATIONS:

- Flex Duct - use lay in model (224) with auxilliary frame (KXFAA) is recommended.
- Hard Duct - surface mount frame (222) is recommended.

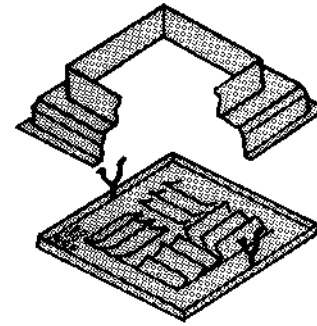
Perforated Diffusers w/Adjustable Air Pattern (SL/SPAB, SL/SPDB)



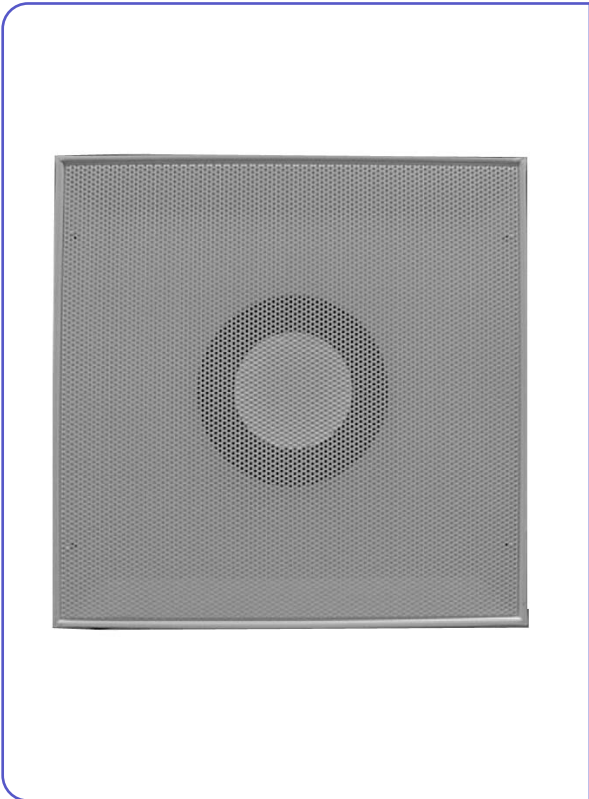
**SL/SPAB**  
Round Neck



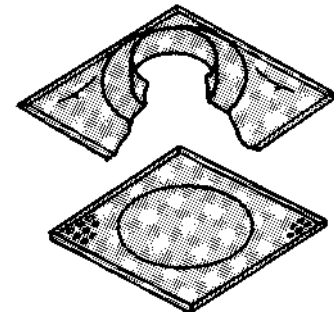
**SL/SPDB**  
Square Neck



Perforated Diffusers w/Fixed Air Pattern (SPCB)

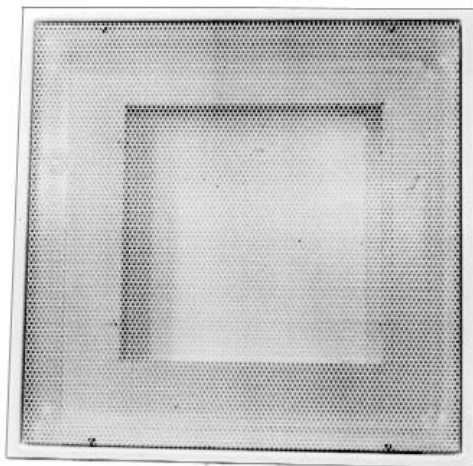


**SPCB**

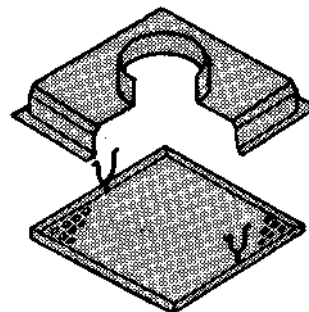


Perf. Face Sup. & Ret. Diffusers

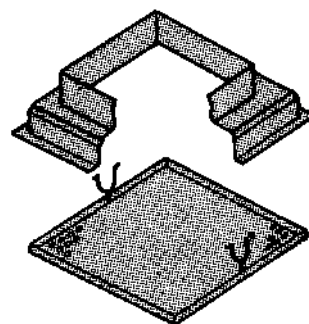
Perforated Diffusers (SL/SPRB, SL/SPJB)



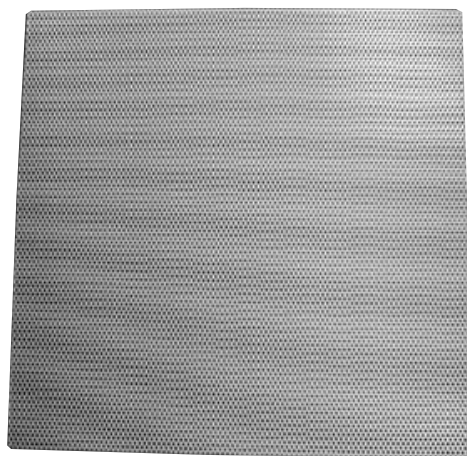
**SL/SPRB**  
Round Neck



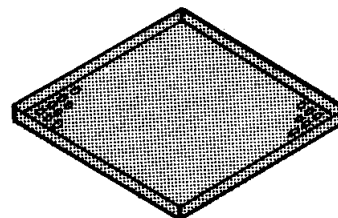
**SL/SPJB**  
Square Neck



Perforated Diffusers Non-Ducted (SL/SPHB)

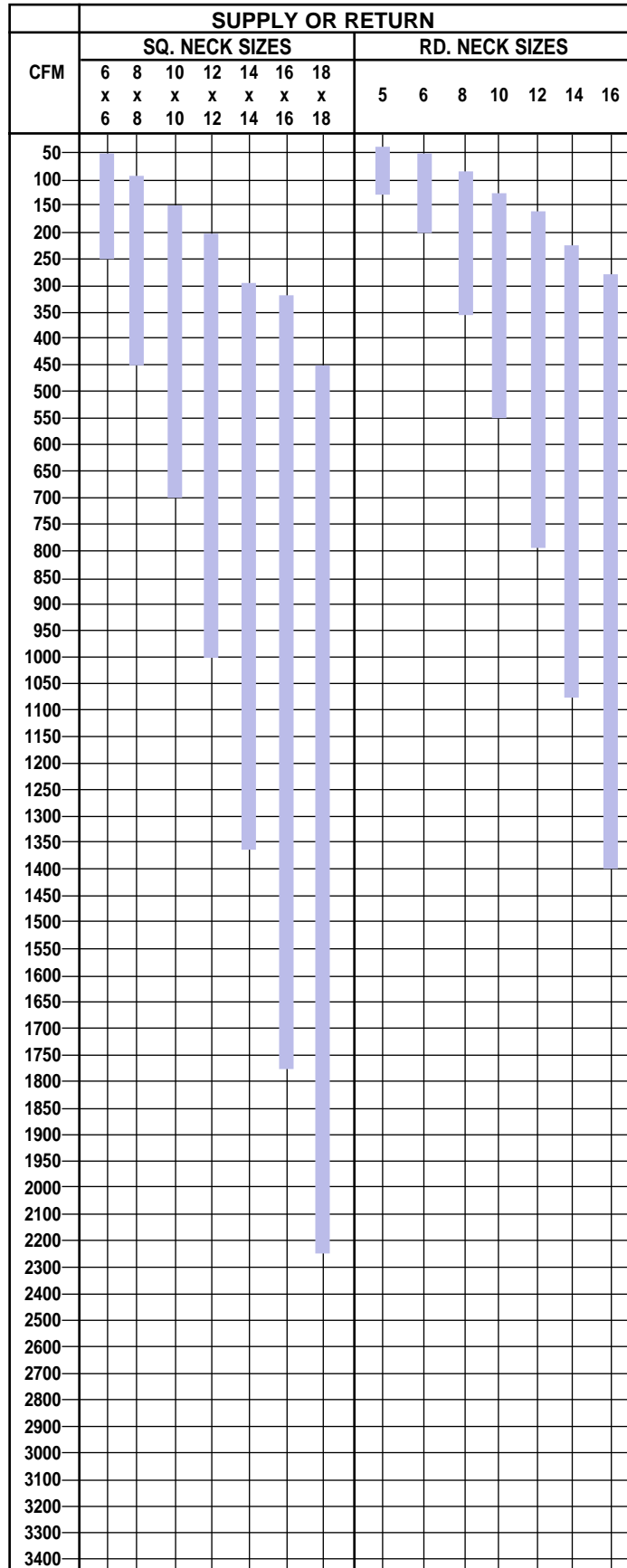


**SL/SPHB**



**QUICK  
SELECT  
CHART**

**NOMINAL RANGE COMPARISON**



Perf. Face Sup. & Ret. Diffusers

**PERFORMANCE DATA — One-Way Pattern Adjustment (SLAB/SPAB)**

• 12" x 12" Flush Face      • Round Neck

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
5	CFM	<b>27</b>	<b>40</b>	<b>54</b>	<b>68</b>	<b>81</b>	<b>95</b>	<b>109</b>	<b>122</b>	<b>136</b>
	PS	X	.01	.01	.02	.03	.05	.06	.08	.10
	PT	.01	.01	.02	.04	.05	.08	.10	.13	.16
	NC	L	L	L	L	L	L	21	26	29
	Throw - 150 FPM	—	—	—	—	1	1	1	2	2
	Throw - 100 FPM	—	—	1	1	2	3	4	5	6
	Throw - 50 FPM	1	2	4	6	8	9	11	12	14
6	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	.01	.02	.03	.05	.07	.09	.12	.14
	PT	.01	.02	.03	.05	.07	.10	.13	.17	.21
	NC	L	L	L	L	22	26	30	33	36
	Throw - 150 FPM	—	—	—	1	2	3	3	5	6
	Throw - 100 FPM	—	1	2	3	5	6	8	11	13
	Throw - 50 FPM	2	5	8	13	16	19	21	22	23
8	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	.01	.02	.03	.05	.07	.10	.13	.17	.21
	PT	.01	.02	.04	.07	.10	.13	.17	.22	.28
	NC	L	L	L	L	24	29	33	37	41
	Throw - 150 FPM	—	2	3	6	7	9	10	11	13
	Throw - 100 FPM	2	5	7	9	11	13	15	17	19
	Throw - 50 FPM	7	11	15	19	22	23	25	27	28

**PERFORMANCE DATA — Two-Way Pattern Adjustment (SLAB/SPAB)**

• 12" x 12" Flush Face      • Round Neck

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
5	CFM	<b>27</b>	<b>40</b>	<b>54</b>	<b>68</b>	<b>81</b>	<b>95</b>	<b>109</b>	<b>122</b>	<b>136</b>
	PS	X	.01	.01	.02	.03	.05	.06	.08	.10
	PT	.01	.01	.02	.04	.06	.08	.10	.13	.16
	NC	L	L	L	L	L	L	21	25	29
	Throw - 150 FPM	—	—	—	—	—	1	1	2	2
	Throw - 100 FPM	—	—	—	1	2	3	3	4	5
	Throw - 50 FPM	—	2	3	5	6	7	8	9	10
6	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	.01	.02	.03	.04	.06	.08	.10	.13
	PT	.01	.02	.03	.05	.07	.09	.12	.15	.19
	NC	L	L	L	L	L	24	28	32	35
	Throw - 150 FPM	—	—	—	1	1	2	2	3	4
	Throw - 100 FPM	—	—	1	2	3	4	5	6	6
	Throw - 50 FPM	1	3	5	6	8	9	10	12	13
8	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	.01	.02	.03	.05	.06	.08	.10	.13
	PT	.01	.02	.03	.05	.07	.09	.12	.15	.19
	NC	L	L	L	L	L	25	29	34	37
	Throw - 150 FPM	—	—	1	2	3	5	6	8	10
	Throw - 100 FPM	—	2	3	5	8	11	12	14	16
	Throw - 50 FPM	3	8	12	16	17	19	20	21	23

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.



**PERFORMANCE DATA — Three-Way Pattern Adjustment (SLAB/SPAB)**

• 12" x 12" Flush Face    • Round Neck

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
5	CFM	27	40	54	68	81	95	109	122	136
	PS	X	.01	.01	.02	.03	.04	.06	.07	.09
	PT	.01	.01	.02	.04	.05	.07	.10	.12	.15
	NC	L	L	L	L	L	L	21	25	29
	Throw - 150 FPM	—	—	—	1	1	2	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	4	5	5
	Throw - 50 FPM	1	3	4	5	7	8	9	10	11
6	CFM	39	58	78	98	117	137	157	176	196
	PS	X	.01	.02	.03	.04	.06	.08	.10	.12
	PT	.01	.02	.03	.04	.06	.09	.12	.15	.19
	NC	L	L	L	L	L	23	27	31	34
	Throw - 150 FPM	—	—	—	—	1	1	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	5	5	6
	Throw - 50 FPM	1	3	5	6	7	9	10	10	11
8	CFM	69	104	139	174	209	244	279	314	349
	PS	.01	.01	.03	.04	.06	.09	.12	.15	.19
	PT	.01	.02	.04	.06	.08	.12	.16	.20	.25
	NC	L	L	L	L	21	27	31	36	39
	Throw - 150 FPM	—	—	1	2	3	4	6	7	9
	Throw - 100 FPM	—	1	3	5	7	9	11	12	14
	Throw - 50 FPM	3	7	11	14	16	19	21	22	23

**PERFORMANCE DATA — Four-Way Pattern Adjustment (SLAB/SPAB)**

• 12" x 12" Flush Face    • Round Neck

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
5	CFM	27	40	54	68	81	95	109	122	136
	PS	X	.01	.01	.02	.03	.04	.05	.07	.09
	PT	.01	.01	.02	.04	.05	.07	.09	.12	.15
	NC	L	L	L	L	L	L	L	23	27
	Throw - 150 FPM	—	—	—	—	1	1	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	4	5	5
	Throw - 50 FPM	1	3	4	5	6	8	9	10	11
6	CFM	39	58	78	98	117	137	157	176	196
	PS	X	.01	.02	.03	.04	.06	.07	.10	.12
	PT	.01	.02	.03	.04	.06	.09	.11	.15	.18
	NC	L	L	L	L	L	22	26	30	33
	Throw - 150 FPM	—	—	—	—	1	1	2	2	3
	Throw - 100 FPM	—	—	1	1	2	3	4	5	6
	Throw - 50 FPM	1	2	4	6	7	8	10	11	12
8	CFM	69	104	139	174	209	244	279	314	349
	PS	.01	.01	.02	.04	.06	.08	.11	.14	17
	PT	.01	.02	.03	.05	.08	.11	.15	.19	.24
	NC	L	L	L	L	21	26	31	35	38
	Throw - 150 FPM	—	—	1	2	3	5	6	7	8
	Throw - 100 FPM	—	2	3	5	7	8	9	10	12
	Throw - 50 FPM	3	7	9	12	14	16	17	19	20

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA — One-Way Pattern Adjustment (SLAB/SPAB)**

• **24" x 24" Flush Face**      • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	.01	.01	.02	.03	.04	.05	.07	.09
	PT	.01	.01	.02	.04	.05	.07	.09	.12	.15
	NC	L	L	L	L	L	22	26	30	33
	Throw - 150 FPM	—	—	—	—	1	1	2	2	3
	Throw - 100 FPM	—	—	1	1	2	3	4	5	6
	Throw - 50 FPM	1	2	4	6	7	8	9	10	11
8	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	.01	.02	.03	.05	.07	.09	.11	.14
	PT	.01	.02	.03	.05	.07	.10	.13	.16	.20
	NC	L	L	L	L	20	25	30	34	38
	Throw - 150 FPM	—	1	2	4	6	8	10	11	12
	Throw - 100 FPM	1	3	6	9	11	13	15	16	18
	Throw - 50 FPM	6	11	15	18	21	23	25	26	28
10	CFM	<b>109</b>	<b>163</b>	<b>218</b>	<b>272</b>	<b>327</b>	<b>381</b>	<b>436</b>	<b>490</b>	<b>545</b>
	PS	.01	.01	.02	.04	.06	.08	.11	.14	.17
	PT	.01	.02	.03	.05	.08	.11	.15	.19	.24
	NC	L	L	L	L	24	30	34	38	42
	Throw - 150 FPM	1	2	4	7	9	11	13	14	16
	Throw - 100 FPM	2	5	9	12	14	16	17	18	19
	Throw - 50 FPM	9	14	17	19	21	23	25	26	28
12	CFM	<b>157</b>	<b>235</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>706</b>	<b>785</b>
	PS	.01	.02	.03	.05	.07	.10	.13	.17	.21
	PT	.01	.02	.04	.07	.10	.13	.17	.22	.27
	NC	L	L	L	21	28	33	38	42	45
	Throw - 150 FPM	2	5	9	12	13	14	15	16	17
	Throw - 100 FPM	5	11	13	14	16	17	18	20	21
	Throw - 50 FPM	13	16	18	21	23	24	26	28	29
14	CFM	<b>213</b>	<b>320</b>	<b>427</b>	<b>534</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>
	PS	.01	.02	.04	.05	.08	.10	.14	.17	.21
	PT	.01	.03	.05	.07	.10	.14	.18	.22	.27
	NC	L	L	L	23	30	35	40	44	48
	Throw - 150 FPM	3	8	14	18	21	23	24	26	27
	Throw - 100 FPM	8	16	21	23	26	28	30	32	33
	Throw - 50 FPM	21	26	30	33	36	39	42	45	47
16	CFM	<b>279</b>	<b>418</b>	<b>558</b>	<b>698</b>	<b>837</b>	<b>977</b>	<b>1117</b>	<b>1256</b>	<b>1396</b>
	PS	.01	.02	.04	.06	.08	.11	.15	.19	.24
	PT	.01	.03	.05	.07	.11	.15	.19	.24	.30
	NC	L	L	L	26	32	37	42	46	50
	Throw - 150 FPM	4	9	14	17	21	22	24	26	27
	Throw - 100 FPM	9	15	21	23	26	28	30	31	33
	Throw - 50 FPM	21	26	30	33	36	39	42	45	47

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA — Two-Way Pattern Adjustment (SLAB/SPAB)**

• **24" x 24" Flush Face**      • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
<b>6</b>	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	.01	.01	.02	.03	.04	.05	.06	.08
	PT	.01	.01	.02	.03	.05	.07	.09	.11	.14
	NC	L	L	L	L	L	21	25	29	32
	Throw - 150 FPM	—	—	—	—	1	1	2	2	3
	Throw - 100 FPM	—	—	1	1	2	3	4	4	5
	Throw - 50 FPM	1	2	4	6	6	7	8	9	9
<b>8</b>	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	.01	.02	.03	.05	.06	.08	.10	.13
	PT	.01	.02	.03	.05	.07	.09	.12	.15	.19
	NC	L	L	L	L	L	25	29	34	37
	Throw - 150 FPM	—	—	1	2	3	4	5	6	7
	Throw - 100 FPM	—	1	3	4	6	7	8	9	10
	Throw - 50 FPM	3	6	8	10	12	14	15	16	17
<b>10</b>	CFM	<b>109</b>	<b>163</b>	<b>218</b>	<b>272</b>	<b>327</b>	<b>381</b>	<b>436</b>	<b>490</b>	<b>545</b>
	PS	.01	.01	.03	.04	.06	.08	.10	.13	.16
	PT	.01	.02	.04	.06	.08	.11	.14	.18	.22
	NC	L	L	L	L	24	29	33	38	41
	Throw - 150 FPM	—	1	2	4	5	6	6	7	8
	Throw - 100 FPM	1	3	5	6	7	9	10	11	13
	Throw - 50 FPM	5	7	10	13	15	17	19	20	21
<b>12</b>	CFM	<b>157</b>	<b>235</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>706</b>	<b>785</b>
	PS	.01	.02	.03	.05	.07	.09	.12	.16	.19
	PT	.01	.02	.04	.06	.09	.12	.16	.21	.26
	NC	L	L	L	21	27	32	37	41	45
	Throw - 150 FPM	—	2	3	5	7	8	9	11	12
	Throw - 100 FPM	2	4	7	9	11	13	14	16	18
	Throw - 50 FPM	7	11	14	18	22	24	26	27	29
<b>14</b>	CFM	<b>213</b>	<b>320</b>	<b>427</b>	<b>534</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>
	PS	.01	.02	.04	.05	.08	.10	.14	.17	.21
	PT	.01	.03	.05	.07	.10	.14	.18	.22	.27
	NC	L	L	L	23	29	34	39	43	47
	Throw - 150 FPM	—	2	3	5	8	10	12	14	15
	Throw - 100 FPM	2	4	8	11	14	16	18	20	21
	Throw - 50 FPM	8	14	18	21	23	25	27	28	30
<b>16</b>	CFM	<b>279</b>	<b>418</b>	<b>558</b>	<b>698</b>	<b>837</b>	<b>977</b>	<b>1117</b>	<b>1256</b>	<b>1396</b>
	PS	.01	.02	.03	.05	.08	.11	.14	.18	.22
	PT	.01	.02	.04	.07	.10	.14	.18	.23	.29
	NC	L	L	L	26	32	37	42	46	50
	Throw - 150 FPM	1	4	7	11	13	16	18	20	21
	Throw - 100 FPM	4	10	13	17	20	22	24	25	26
	Throw - 50 FPM	13	20	24	26	29	31	34	36	38

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.



**PERFORMANCE DATA - Three-Way Pattern Adjustment (SLAB/SPAB)**

• 24" x 24" Flush Face    • Round Neck

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	.01	.01	.02	.02	.03	.04	.05	.07
	PT	X	.01	.02	.03	.05	.06	.08	.10	.13
	NC	L	L	L	L	L	L	23	27	30
	Throw - 150 FPM	—	—	—	—	1	1	2	2	3
	Throw - 100 FPM	—	—	1	2	2	4	5	5	6
	Throw - 50 FPM	1	2	5	6	7	8	10	10	11
8	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	.01	.02	.03	.04	.06	.08	.10	.12
	PT	.01	.02	.03	.04	.06	.09	.12	.15	.18
	NC	L	L	L	L	L	24	29	33	36
	Throw - 150 FPM	—	1	2	3	3	4	5	5	6
	Throw - 100 FPM	1	2	3	4	5	6	7	8	9
	Throw - 50 FPM	3	5	7	9	11	13	15	16	17
10	CFM	<b>109</b>	<b>163</b>	<b>218</b>	<b>272</b>	<b>327</b>	<b>381</b>	<b>436</b>	<b>490</b>	<b>545</b>
	PS	.01	.01	.02	.04	.06	.08	.10	.13	.16
	PT	.01	.02	.03	.05	.08	.11	.14	.18	.22
	NC	L	L	L	L	24	29	33	37	41
	Throw - 150 FPM	1	2	4	6	9	10	12	14	15
	Throw - 100 FPM	2	5	9	11	14	16	17	18	19
	Throw - 50 FPM	9	14	17	19	21	23	25	26	28
12	CFM	<b>157</b>	<b>235</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>706</b>	<b>785</b>
	PS	.01	.02	.03	.04	.06	.09	.12	.15	.18
	PT	.01	.02	.04	.06	.09	.12	.16	.20	.25
	NC	L	L	L	L	26	32	37	41	45
	Throw - 150 FPM	—	1	2	4	5	7	9	11	12
	Throw - 100 FPM	1	3	5	9	11	13	14	16	18
	Throw - 50 FPM	5	11	14	18	22	26	29	33	37
14	CFM	<b>213</b>	<b>320</b>	<b>427</b>	<b>534</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>
	PS	.01	.02	.03	.04	.07	.09	.12	.15	.19
	PT	.01	.02	.04	.06	.09	.12	.16	.21	.26
	NC	L	L	L	22	28	34	39	43	47
	Throw - 150 FPM	1	3	5	8	9	11	12	14	16
	Throw - 100 FPM	3	7	9	12	14	16	19	21	23
	Throw - 50 FPM	9	14	19	23	25	27	29	31	32
16	CFM	<b>279</b>	<b>418</b>	<b>558</b>	<b>698</b>	<b>837</b>	<b>977</b>	<b>1117</b>	<b>1256</b>	<b>1396</b>
	PS	.01	.02	.03	.05	.07	.10	.13	.17	.22
	PT	.01	.02	.04	.06	.09	.13	.17	.22	.28
	NC	L	L	L	24	30	36	41	45	49
	Throw - 150 FPM	1	3	6	7	9	10	12	13	15
	Throw - 100 FPM	3	6	9	11	13	16	18	20	23
	Throw - 50 FPM	9	13	18	23	27	31	33	35	37

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Four-Way Pattern Adjustment (SLAB/SPAB)**

• **24" x 24" Flush Face**      • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	.01	.01	.02	.02	.03	.04	.05	.07
	PT	X	.01	.02	.03	.05	.06	.08	.10	.13
	NC	L	L	L	L	L	L	23	27	30
	Throw - 150 FPM	—	—	—	—	1	1	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	4	5	6
	Throw - 50 FPM	1	3	4	6	7	8	9	9	10
8	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	.01	.02	.03	.04	.06	.07	.09	.11
	PT	.01	.02	.03	.04	.06	.09	.11	.14	.18
	NC	L	L	L	L	L	23	28	32	36
	Throw - 150 FPM	—	—	—	1	1	2	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	4	5	5
	Throw - 50 FPM	1	3	4	5	6	7	8	8	9
10	CFM	<b>109</b>	<b>163</b>	<b>218</b>	<b>272</b>	<b>327</b>	<b>381</b>	<b>436</b>	<b>490</b>	<b>545</b>
	PS	.01	.01	.02	.04	.05	.07	.09	.12	.14
	PT	.01	.02	.03	.05	.08	.10	.13	.17	.21
	NC	L	L	L	L	21	27	32	36	40
	Throw - 150 FPM	—	—	—	1	2	2	3	4	5
	Throw - 100 FPM	—	1	2	3	4	6	8	10	11
	Throw - 50 FPM	2	4	8	11	14	16	18	19	20
12	CFM	<b>157</b>	<b>235</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>706</b>	<b>785</b>
	PS	.01	.01	.03	.04	.06	.08	.11	.14	.17
	PT	.01	.02	.04	.06	.08	.11	.15	.19	.24
	NC	L	L	L	L	26	31	36	40	44
	Throw - 150 FPM	—	2	3	5	8	9	11	12	13
	Throw - 100 FPM	2	4	8	10	12	14	15	16	17
	Throw - 50 FPM	8	12	15	17	18	20	21	22	24
14	CFM	<b>213</b>	<b>320</b>	<b>427</b>	<b>534</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>
	PS	.01	.01	.03	.04	.06	.09	.12	.16	.20
	PT	.01	.02	.04	.06	.09	.12	.16	.21	.26
	NC	L	L	L	22	29	34	39	43	47
	Throw - 150 FPM	1	2	4	6	7	8	10	11	12
	Throw - 100 FPM	2	5	7	9	11	13	15	16	17
	Throw - 50 FPM	7	11	15	17	18	20	21	23	24
16	CFM	<b>279</b>	<b>418</b>	<b>558</b>	<b>698</b>	<b>837</b>	<b>977</b>	<b>1117</b>	<b>1256</b>	<b>1396</b>
	PS	.01	.02	.03	.05	.07	.10	.14	.17	.21
	PT	.01	.02	.04	.07	.10	.13	.18	.22	.28
	NC	L	L	L	24	31	36	41	46	50
	Throw - 150 FPM	1	2	4	7	8	10	11	13	14
	Throw - 100 FPM	2	6	8	10	13	15	17	19	20
	Throw - 50 FPM	8	13	17	20	21	23	25	26	28

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - One-Way Pattern Adjustment (SLAB/SPAB)**

• **24" x 24" Drop Face**    • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	X	.01	.01	.01	.02	.03	.04	.05
	PT	X	.01	.02	.03	.04	.05	.07	.09	.11
	NC	L	L	L	L	L	L	23	27	30
	Throw - 150 FPM	—	—	—	1	1	2	2	3	4
	Throw - 100 FPM	—	—	1	2	3	4	5	6	7
	Throw - 50 FPM	1	3	5	7	8	9	11	12	13
8	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	.01	.01	.02	.03	.04	.06	.07	.09
	PT	.01	.01	.02	.04	.05	.07	.10	.12	.15
	NC	L	L	L	L	L	23	27	31	35
	Throw - 150 FPM	—	—	1	2	3	4	6	7	9
	Throw - 100 FPM	—	1	3	5	7	9	11	12	13
	Throw - 50 FPM	3	7	11	13	16	19	20	21	22
10	CFM	<b>109</b>	<b>163</b>	<b>218</b>	<b>272</b>	<b>327</b>	<b>381</b>	<b>436</b>	<b>490</b>	<b>545</b>
	PS	X	.01	.02	.03	.04	.05	.07	.09	.12
	PT	.01	.01	.03	.04	.06	.09	.11	.14	.18
	NC	L	L	L	L	23	28	32	36	40
	Throw - 150 FPM	—	1	3	5	7	9	11	12	13
	Throw - 100 FPM	1	4	7	10	12	14	16	18	19
	Throw - 50 FPM	7	12	16	19	21	22	24	26	27
12	CFM	<b>157</b>	<b>235</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>706</b>	<b>785</b>
	PS	.01	.01	.02	.04	.05	.07	.10	.12	.15
	PT	.01	.02	.03	.05	.08	.10	.14	.17	.22
	NC	L	L	L	L	25	31	35	40	43
	Throw - 150 FPM	2	4	8	12	15	17	20	21	22
	Throw - 100 FPM	4	10	15	18	21	22	24	26	27
	Throw - 50 FPM	15	21	24	27	30	32	34	36	38
14	CFM	<b>213</b>	<b>320</b>	<b>427</b>	<b>534</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>
	PS	.01	.01	.03	.04	.06	.08	.11	.14	.17
	PT	.01	.02	.04	.06	.08	.11	.15	.19	.23
	NC	L	L	L	23	29	35	39	43	47
	Throw - 150 FPM	3	6	9	12	14	17	19	21	23
	Throw - 100 FPM	6	11	14	18	21	23	25	26	28
	Throw - 50 FPM	14	21	25	28	31	33	35	38	40
16	CFM	<b>279</b>	<b>418</b>	<b>558</b>	<b>698</b>	<b>837</b>	<b>977</b>	<b>1117</b>	<b>1256</b>	<b>1396</b>
	PS	.01	.01	.03	.04	.07	.09	.12	.16	.19
	PT	.01	.02	.04	.06	.09	.12	.16	.21	.26
	NC	L	L	L	24	31	37	42	46	50
	Throw - 150 FPM	4	9	14	17	21	22	24	26	27
	Throw - 100 FPM	9	15	21	23	26	28	30	31	33
	Throw - 50 FPM	21	26	30	33	36	39	42	45	47

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Two-Way Pattern Adjustment (SLAB/SPAB)**

• **24" x 24" Drop Face**    • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	X	.01	.01	.02	.02	.03	.04	.05
	PT	X	.01	.02	.03	.04	.05	.07	.09	.11
	NC	L	L	L	L	L	L	23	27	30
	Throw - 150 FPM	—	—	—	—	1	1	2	2	3
	Throw - 100 FPM	—	—	1	2	2	3	3	4	4
	Throw - 50 FPM	1	2	3	4	5	6	7	8	9
8	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	.01	.01	.02	.03	.04	.05	.06	.08
	PT	.01	.01	.02	.03	.05	.07	.09	.12	.14
	NC	L	L	L	L	L	24	28	32	36
	Throw - 150 FPM	—	—	1	2	3	5	5	6	7
	Throw - 100 FPM	—	2	3	5	6	7	8	9	10
	Throw - 50 FPM	3	6	8	10	13	15	16	17	18
10	CFM	<b>109</b>	<b>163</b>	<b>218</b>	<b>272</b>	<b>327</b>	<b>381</b>	<b>436</b>	<b>490</b>	<b>545</b>
	PS	X	.01	.02	.03	.04	.05	.07	.09	.12
	PT	.01	.01	.03	.04	.06	.09	.11	.14	.18
	NC	L	L	L	L	23	28	32	36	40
	Throw - 150 FPM	—	—	1	2	3	4	5	6	7
	Throw - 100 FPM	—	1	3	5	6	7	8	9	10
	Throw - 50 FPM	3	6	8	10	12	15	16	17	18
12	CFM	<b>157</b>	<b>235</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>706</b>	<b>785</b>
	PS	X	.01	.02	.03	.05	.07	.09	.12	.15
	PT	.01	.02	.03	.05	.07	.10	.13	.17	.21
	NC	L	L	L	L	25	30	35	39	43
	Throw - 150 FPM	—	1	1	3	4	5	7	9	12
	Throw - 100 FPM	1	2	4	6	9	12	14	16	18
	Throw - 50 FPM	4	9	14	18	21	23	24	26	27
14	CFM	<b>213</b>	<b>320</b>	<b>427</b>	<b>534</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>
	PS	.01	.01	.02	.04	.05	.08	.10	.13	.16
	PT	.01	.02	.03	.05	.08	.11	.14	.18	.22
	NC	L	L	L	21	28	33	38	42	46
	Throw - 150 FPM	—	2	3	5	6	7	8	9	11
	Throw - 100 FPM	2	4	6	8	9	11	13	14	16
	Throw - 50 FPM	6	9	13	16	19	23	26	28	29
16	CFM	<b>279</b>	<b>418</b>	<b>558</b>	<b>698</b>	<b>837</b>	<b>977</b>	<b>1117</b>	<b>1256</b>	<b>1396</b>
	PS	.01	.01	.02	.04	.06	.08	.11	.14	.17
	PT	.01	.02	.03	.06	.08	.11	.15	.19	.24
	NC	L	L	L	23	30	36	41	45	49
	Throw - 150 FPM	1	4	7	11	13	16	18	20	21
	Throw - 100 FPM	4	10	13	17	20	22	24	25	26
	Throw - 50 FPM	13	20	24	26	29	31	34	36	38

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Three-Way Pattern Adjustment (SLAB/SPAB)**

• **24" x 24" Drop Face**    • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	X	.01	.01	.02	.02	.03	.04	.05
	PT	X	.01	.02	.03	.04	.05	.07	.09	.11
	NC	L	L	L	L	L	L	23	27	30
	Throw - 150 FPM	—	—	—	—	1	1	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	5	6	6
	Throw - 50 FPM	1	3	5	6	8	9	10	12	13
8	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	X	.01	.01	.02	.03	.04	.05	.07
	PT	X	.01	.02	.03	.04	.06	.08	.10	.13
	NC	L	L	L	L	L	22	27	31	35
	Throw - 150 FPM	—	—	—	1	1	2	3	3	4
	Throw - 100 FPM	—	—	1	2	3	5	6	7	8
	Throw - 50 FPM	1	3	6	8	10	12	13	14	15
10	CFM	<b>109</b>	<b>163</b>	<b>218</b>	<b>272</b>	<b>327</b>	<b>381</b>	<b>436</b>	<b>490</b>	<b>545</b>
	PS	X	.01	.01	.02	.03	.04	.06	.08	.10
	PT	X	.01	.02	.04	.05	.08	.10	.13	.16
	NC	L	L	L	L	22	27	32	36	40
	Throw - 150 FPM	—	—	1	2	3	4	6	6	7
	Throw - 100 FPM	—	1	3	5	6	8	9	10	11
	Throw - 50 FPM	3	6	9	11	13	16	17	18	19
12	CFM	<b>157</b>	<b>235</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>706</b>	<b>785</b>
	PS	X	.01	.02	.03	.05	.07	.09	.11	.14
	PT	.01	.02	.03	.05	.07	.10	.13	.16	.20
	NC	L	L	L	L	26	31	36	40	44
	Throw - 150 FPM	—	1	2	3	4	6	8	10	12
	Throw - 100 FPM	1	2	4	7	10	12	14	16	18
	Throw - 50 FPM	4	10	14	18	21	22	24	25	27
14	CFM	<b>213</b>	<b>320</b>	<b>427</b>	<b>534</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>
	PS	.01	.01	.03	.04	.06	.08	.10	.12	.15
	PT	.01	.02	.04	.05	.08	.11	.14	.17	.21
	NC	L	L	L	21	28	34	39	43	47
	Throw - 150 FPM	—	2	3	6	7	8	10	11	12
	Throw - 100 FPM	2	4	7	9	11	13	15	17	19
	Throw - 50 FPM	7	11	15	19	22	24	25	27	28
16	CFM	<b>279</b>	<b>418</b>	<b>558</b>	<b>698</b>	<b>837</b>	<b>977</b>	<b>1117</b>	<b>1256</b>	<b>1396</b>
	PS	.01	.01	.02	.04	.06	.08	.11	.14	.17
	PT	.01	.02	.03	.05	.08	.11	.15	.19	.24
	NC	L	L	L	22	29	35	41	45	49
	Throw - 150 FPM	1	3	6	10	12	14	16	18	20
	Throw - 100 FPM	3	8	12	15	18	21	23	24	26
	Throw - 50 FPM	12	18	23	26	28	31	33	35	37

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Three-Way Pattern Adjustment (SLAB/SPAB)**

**• 24" x 24" Drop Face    • Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	<b>39</b>	<b>58</b>	<b>78</b>	<b>98</b>	<b>117</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	X	.01	.01	.02	.02	.03	.04	.05
	PT	X	.01	.02	.03	.04	.05	.07	.09	.11
	NC	L	L	L	L	L	L	23	27	30
	Throw - 150 FPM	—	—	—	—	1	1	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	5	6	6
	Throw - 50 FPM	1	3	5	6	8	9	10	12	13
8	CFM	<b>69</b>	<b>104</b>	<b>139</b>	<b>174</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	X	.01	.01	.02	.03	.04	.05	.07
	PT	X	.01	.02	.03	.04	.06	.08	.10	.13
	NC	L	L	L	L	L	22	27	31	35
	Throw - 150 FPM	—	—	—	1	1	2	3	3	4
	Throw - 100 FPM	—	—	1	2	3	5	6	7	8
	Throw - 50 FPM	1	3	6	8	10	12	13	14	15
10	CFM	<b>109</b>	<b>163</b>	<b>218</b>	<b>272</b>	<b>327</b>	<b>381</b>	<b>436</b>	<b>490</b>	<b>545</b>
	PS	X	.01	.01	.02	.03	.04	.06	.08	.10
	PT	X	.01	.02	.04	.05	.08	.10	.13	.16
	NC	L	L	L	L	22	27	32	36	40
	Throw - 150 FPM	—	—	1	2	3	4	6	6	7
	Throw - 100 FPM	—	1	3	5	6	8	9	10	11
	Throw - 50 FPM	3	6	9	11	13	16	17	18	19
12	CFM	<b>157</b>	<b>235</b>	<b>314</b>	<b>392</b>	<b>471</b>	<b>549</b>	<b>628</b>	<b>706</b>	<b>785</b>
	PS	X	.01	.02	.03	.05	.07	.09	.11	.14
	PT	.01	.02	.03	.05	.07	.10	.13	.16	.20
	NC	L	L	L	L	26	31	36	40	44
	Throw - 150 FPM	—	1	2	3	4	6	8	10	12
	Throw - 100 FPM	1	2	4	7	10	12	14	16	18
	Throw - 50 FPM	4	10	14	18	21	22	24	25	27
14	CFM	<b>213</b>	<b>320</b>	<b>427</b>	<b>534</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>
	PS	.01	.01	.03	.04	.06	.08	.10	.12	.15
	PT	.01	.02	.04	.05	.08	.11	.14	.17	.21
	NC	L	L	L	21	28	34	39	43	47
	Throw - 150 FPM	—	2	3	6	7	8	10	11	12
	Throw - 100 FPM	2	4	7	9	11	13	15	17	19
	Throw - 50 FPM	7	11	15	19	22	24	25	27	28
16	CFM	<b>279</b>	<b>418</b>	<b>558</b>	<b>698</b>	<b>837</b>	<b>977</b>	<b>1117</b>	<b>1256</b>	<b>1396</b>
	PS	.01	.01	.02	.04	.06	.08	.11	.14	.17
	PT	.01	.02	.03	.05	.08	.11	.15	.19	.24
	NC	L	L	L	22	29	35	41	45	49
	Throw - 150 FPM	1	3	6	10	12	14	16	18	20
	Throw - 100 FPM	3	8	12	15	18	21	23	24	26
	Throw - 50 FPM	12	18	23	26	28	31	33	35	37

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

Perf. Face Sup. & Ret. Diffusers



**PERFORMANCE DATA - One-Way Pattern Adjustment (SLDB/SPDB)**

• **12" x 12" Flush Face**      • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	.01	.02	.03	.04	.06	.08	.10	.13
	PT	.01	.02	.03	.05	.07	.09	.12	.15	.19
	NC	L	L	L	L	L	22	26	30	34
	Throw - 150 FPM	—	—	1	1	2	3	4	6	6
	Throw - 100 FPM	—	1	2	4	6	7	8	9	10
	Throw - 50 FPM	2	6	8	10	12	14	16	18	19
8x8	CFM	<b>88</b>	<b>133</b>	<b>177</b>	<b>222</b>	<b>266</b>	<b>311</b>	<b>355</b>	<b>400</b>	<b>444</b>
	PS	.01	.02	.03	.05	.07	.09	.12	.16	.19
	PT	.01	.02	.04	.06	.09	.12	.16	.21	.26
	NC	L	L	L	L	24	29	33	37	40
	Throw - 150 FPM	1	3	5	8	9	11	13	14	16
	Throw - 100 FPM	3	6	9	12	14	17	19	21	22
	Throw - 50 FPM	9	14	19	22	24	26	27	29	31

**PERFORMANCE DATA - Two-Way Pattern Adjustment (SLDB/SPDB)**

• **12" x 12" Flush Face**      • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	.01	.02	.03	.04	.06	.07	.09	.12
	PT	.01	.02	.03	.04	.06	.09	.11	.15	.18
	NC	L	L	L	L	L	21	25	29	33
	Throw - 150 FPM	—	—	—	—	1	1	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	5	7	8
	Throw - 50 FPM	1	3	5	8	11	13	15	16	18
8x8	CFM	<b>88</b>	<b>133</b>	<b>177</b>	<b>222</b>	<b>266</b>	<b>311</b>	<b>355</b>	<b>400</b>	<b>444</b>
	PS	.01	.01	.03	.04	.06	.08	.11	.14	.18
	PT	.01	.02	.04	.06	.08	.11	.15	.19	.24
	NC	L	L	L	L	20	26	30	35	39
	Throw - 150 FPM	—	1	2	3	4	4	5	6	6
	Throw - 100 FPM	1	2	4	5	6	7	8	9	10
	Throw - 50 FPM	4	6	8	10	12	14	15	16	17

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Three-Way Pattern Adjustment (SLDB/SPDB)**

• **12" x 12" Flush Face**      • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	.01	.02	.03	.04	.05	.07	.09	.11
	PT	.01	.01	.03	.04	.06	.08	.11	.14	.17
	NC	L	L	L	L	L	L	25	29	32
	Throw - 150 FPM	—	—	—	—	1	1	2	2	3
	Throw - 100 FPM	—	—	1	1	2	3	5	6	7
	Throw - 50 FPM	1	2	5	7	10	12	13	15	17
8x8	CFM	<b>88</b>	<b>133</b>	<b>177</b>	<b>222</b>	<b>266</b>	<b>311</b>	<b>355</b>	<b>400</b>	<b>444</b>
	PS	.01	.01	.02	.04	.06	.08	.10	.13	.17
	PT	.01	.02	.03	.06	.08	.11	.14	.18	.23
	NC	L	L	L	L	20	26	30	35	38
	Throw - 150 FPM	—	1	2	3	3	4	4	5	6
	Throw - 100 FPM	1	2	3	4	5	6	7	8	9
	Throw - 50 FPM	3	5	7	9	11	13	14	16	18

**PERFORMANCE DATA - Four-Way Pattern Adjustment (SLDB/SPDB)**

• **12" x 12" Flush Face**      • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	.01	.02	.03	.04	.05	.07	.08	.10
	PT	.01	.01	.03	.04	.06	.08	.11	.13	.17
	NC	L	L	L	L	L	L	24	28	32
	Throw - 150 FPM	—	—	1	1	2	3	4	5	6
	Throw - 100 FPM	—	1	2	3	5	6	8	9	10
	Throw - 50 FPM	2	5	8	10	12	14	15	16	17
8x8	CFM	<b>88</b>	<b>133</b>	<b>177</b>	<b>222</b>	<b>266</b>	<b>311</b>	<b>355</b>	<b>400</b>	<b>444</b>
	PS	.01	.01	.03	.04	.06	.08	.10	.13	.16
	PT	.01	.02	.04	.06	.08	.11	.14	.18	.22
	NC	L	L	L	L	L	25	30	34	37
	Throw - 150 FPM	—	1	2	4	5	6	7	8	9
	Throw - 100 FPM	1	3	5	7	8	10	11	12	14
	Throw - 50 FPM	5	8	11	14	17	19	20	21	22

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

Perf. Face Sup. & Ret. Diffusers

**PERFORMANCE DATA - One-Way Pattern Adjustment (SLDB/SPDB)**

• **24" x 24" Flush Face**      • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	.01	.01	.02	.02	.03	.04	.05	.06
	PT	X	.01	.02	.03	.04	.06	.08	.10	.13
	NC	L	L	L	L	L	L	24	28	32
	Throw - 150 FPM	—	—	—	1	1	2	3	3	4
	Throw - 100 FPM	—	—	1	2	3	5	6	7	7
	Throw - 50 FPM	1	3	6	7	9	10	12	14	15
8x8	CFM	<b>88</b>	<b>133</b>	<b>177</b>	<b>222</b>	<b>266</b>	<b>311</b>	<b>355</b>	<b>400</b>	<b>444</b>
	PS	X	.01	.01	.02	.03	.05	.06	.08	.10
	PT	.01	.01	.02	.04	.06	.08	.10	.13	.16
	NC	L	L	L	L	L	25	29	34	37
	Throw - 150 FPM	1	2	4	6	8	10	11	13	14
	Throw - 100 FPM	2	5	8	11	13	15	17	20	22
	Throw - 50 FPM	8	13	17	22	24	26	28	29	31
10x10	CFM	<b>138</b>	<b>208</b>	<b>277</b>	<b>347</b>	<b>416</b>	<b>486</b>	<b>555</b>	<b>625</b>	<b>694</b>
	PS	X	.01	.02	.03	.04	.06	.08	.11	.14
	PT	.01	.01	.03	.04	.07	.09	.12	.16	.20
	NC	L	L	L	21	26	31	35	39	42
	Throw - 150 FPM	1	2	4	6	9	10	12	14	15
	Throw - 100 FPM	2	5	9	11	14	16	18	21	23
	Throw - 50 FPM	9	14	18	23	25	27	29	31	32
12x12	CFM	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>1000</b>
	PS	.01	.01	.03	.04	.06	.08	.11	.14	.18
	PT	.01	.02	.04	.06	.08	.11	.15	.19	.24
	NC	L	L	L	24	30	35	39	42	46
	Throw - 150 FPM	1	3	6	10	14	16	19	21	24
	Throw - 100 FPM	3	8	14	18	21	24	26	27	29
	Throw - 50 FPM	14	21	26	29	32	34	37	39	41
14x14	CFM	<b>272</b>	<b>408</b>	<b>544</b>	<b>680</b>	<b>816</b>	<b>952</b>	<b>1088</b>	<b>1225</b>	<b>1361</b>
	PS	.01	.02	.03	.05	.08	.10	.13	.17	.21
	PT	.01	.02	.04	.07	.10	.13	.17	.22	.27
	NC	L	L	L	25	31	37	41	45	49
	Throw - 150 FPM	4	9	15	19	23	24	26	28	29
	Throw - 100 FPM	9	17	23	25	28	30	32	34	36
	Throw - 50 FPM	23	28	32	36	40	43	46	49	51
16x16	CFM	<b>355</b>	<b>533</b>	<b>711</b>	<b>888</b>	<b>1066</b>	<b>1244</b>	<b>1422</b>	<b>1600</b>	<b>1777</b>
	PS	.01	.02	.04	.06	.09	.12	.16	.20	.25
	PT	.01	.03	.05	.08	.11	.15	.20	.25	.31
	NC	L	L	L	26	32	38	42	46	50
	Throw - 150 FPM	3	7	13	17	20	24	26	27	29
	Throw - 100 FPM	7	15	20	25	27	30	32	34	35
	Throw - 50 FPM	20	27	32	35	39	42	45	48	50
18x18	CFM	<b>450</b>	<b>675</b>	<b>900</b>	<b>1125</b>	<b>1350</b>	<b>1575</b>	<b>1800</b>	<b>2025</b>	<b>2250</b>
	PS	.01	.03	.05	.08	.12	.16	.21	.26	.33
	PT	.02	.03	.06	.10	.14	.19	.25	.32	.39
	NC	L	L	21	29	35	40	45	49	52
	Throw - 150 FPM	2	6	11	15	18	21	22	23	25
	Throw - 100 FPM	6	13	18	21	23	25	27	29	30
	Throw - 50 FPM	18	23	27	30	33	36	39	41	43

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Two-Way Pattern Adjustment (SLDB/SPDB)**

**• 24" x 24" Flush Face    • Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	X	.01	.01	.02	.03	.04	.05	.06
	PT	X	.01	.02	.03	.04	.06	.08	.10	.12
	NC	L	L	L	L	L	L	22	26	30
	Throw - 150 FPM	—	—	—	1	1	2	2	3	4
	Throw - 100 FPM	—	—	1	2	3	4	5	5	6
	Throw - 50 FPM	1	3	5	6	7	9	10	11	12
8x8	CFM	<b>88</b>	<b>133</b>	<b>177</b>	<b>222</b>	<b>266</b>	<b>311</b>	<b>355</b>	<b>400</b>	<b>444</b>
	PS	X	.01	.01	.02	.03	.04	.06	.07	.09
	PT	.01	.01	.02	.04	.05	.07	.10	.12	.15
	NC	L	L	L	L	L	24	28	33	36
	Throw - 150 FPM	—	—	1	1	2	3	4	4	5
	Throw - 100 FPM	—	1	2	4	4	5	6	7	8
	Throw - 50 FPM	2	4	6	8	9	11	13	14	16
10x10	CFM	<b>138</b>	<b>208</b>	<b>277</b>	<b>347</b>	<b>416</b>	<b>486</b>	<b>555</b>	<b>625</b>	<b>694</b>
	PS	X	.01	.02	.03	.04	.06	.08	.10	.13
	PT	.01	.02	.03	.04	.07	.09	.12	.15	.19
	NC	L	L	L	L	24	29	34	38	41
	Throw - 150 FPM	—	1	2	4	6	8	9	10	11
	Throw - 100 FPM	1	3	6	8	10	12	13	15	17
	Throw - 50 FPM	6	10	13	17	20	24	25	27	28
12x12	CFM	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>1000</b>
	PS	.01	.01	.02	.04	.06	.08	.10	.13	.16
	PT	.01	.02	.03	.05	.08	.11	.14	.18	.22
	NC	L	L	L	22	28	34	38	42	46
	Throw - 150 FPM	1	3	6	9	11	13	15	17	19
	Throw - 100 FPM	3	8	11	14	17	20	22	23	25
	Throw - 50 FPM	11	17	22	25	27	29	31	33	35
14x14	CFM	<b>272</b>	<b>408</b>	<b>544</b>	<b>680</b>	<b>816</b>	<b>952</b>	<b>1088</b>	<b>1225</b>	<b>1361</b>
	PS	.01	.02	.03	.05	.07	.09	.12	.15	.19
	PT	.01	.02	.04	.06	.09	.12	.16	.20	.25
	NC	L	L	L	24	30	36	40	45	48
	Throw - 150 FPM	2	5	9	13	16	18	21	23	24
	Throw - 100 FPM	5	11	16	20	23	24	26	28	29
	Throw - 50 FPM	16	23	26	29	32	35	37	39	42
16x16	CFM	<b>355</b>	<b>533</b>	<b>711</b>	<b>888</b>	<b>1066</b>	<b>1244</b>	<b>1422</b>	<b>1600</b>	<b>1777</b>
	PS	.01	.02	.04	.06	.08	.11	.15	.19	.23
	PT	.01	.03	.05	.07	.11	.14	.19	.24	.29
	NC	L	L	L	24	31	37	42	46	50
	Throw - 150 FPM	2	6	11	15	18	21	24	25	26
	Throw - 100 FPM	6	13	18	22	25	27	29	31	32
	Throw - 50 FPM	18	25	29	32	36	38	41	44	46
18x18	CFM	<b>450</b>	<b>675</b>	<b>900</b>	<b>1125</b>	<b>1350</b>	<b>1575</b>	<b>1800</b>	<b>2025</b>	<b>2250</b>
	PS	.01	.03	.05	.07	.11	.14	.18	.23	.28
	PT	.02	.03	.06	.09	.13	.17	.22	.28	.34
	NC	L	L	24	30	36	40	44	48	51
	Throw - 150 FPM	2	4	8	13	18	20	21	22	24
	Throw - 100 FPM	4	11	18	20	22	24	26	27	29
	Throw - 50 FPM	18	22	26	29	32	34	37	39	41

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Three-Way Pattern Adjustment (SLDB/SPDB)**

• **24" x 24" Flush Face**      • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	X	.01	.01	.02	.03	.04	.05	.06
	PT	X	.01	.02	.03	.04	.06	.08	.10	.12
	NC	L	L	L	L	L	L	22	26	30
	Throw - 150 FPM	—	—	—	1	1	2	2	3	4
	Throw - 100 FPM	—	—	1	2	3	4	5	5	6
	Throw - 50 FPM	1	3	5	6	7	9	10	11	12
8x8	CFM	<b>88</b>	<b>133</b>	<b>177</b>	<b>222</b>	<b>266</b>	<b>311</b>	<b>355</b>	<b>400</b>	<b>444</b>
	PS	X	.01	.01	.02	.03	.04	.05	.07	.09
	PT	.01	.01	.02	.04	.05	.07	.09	.12	.15
	NC	L	L	L	L	L	23	28	32	36
	Throw - 150 FPM	—	1	1	2	3	3	4	5	5
	Throw - 100 FPM	1	2	3	4	5	5	6	7	8
	Throw - 50 FPM	3	5	6	8	10	11	13	15	17
10x10	CFM	<b>138</b>	<b>208</b>	<b>277</b>	<b>347</b>	<b>416</b>	<b>486</b>	<b>555</b>	<b>625</b>	<b>694</b>
	PS	X	.01	.02	.03	.04	.06	.08	.10	.12
	PT	.01	.02	.03	.04	.06	.09	.12	.15	.19
	NC	L	L	L	L	24	29	34	38	42
	Throw - 150 FPM	—	1	2	4	6	8	9	10	11
	Throw - 100 FPM	1	3	6	8	10	12	13	15	17
	Throw - 50 FPM	6	10	13	17	20	23	25	26	28
12x12	CFM	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>1000</b>
	PS	.01	.01	.02	.04	.05	.07	.10	.13	.16
	PT	.01	.02	.03	.05	.08	.10	.14	.18	.22
	NC	L	L	L	21	27	33	37	42	45
	Throw - 150 FPM	1	3	6	10	12	14	16	18	21
	Throw - 100 FPM	3	8	12	15	18	22	23	24	26
	Throw - 50 FPM	12	18	23	26	28	31	33	35	37
14x14	CFM	<b>272</b>	<b>408</b>	<b>544</b>	<b>680</b>	<b>816</b>	<b>952</b>	<b>1088</b>	<b>1225</b>	<b>1361</b>
	PS	.01	.02	.03	.05	.07	.09	.12	.15	.18
	PT	.01	.02	.04	.06	.09	.12	.16	.20	.25
	NC	L	L	L	25	31	36	40	44	48
	Throw - 150 FPM	1	4	7	12	16	18	20	21	22
	Throw - 100 FPM	4	10	16	19	21	23	25	26	28
	Throw - 50 FPM	16	21	25	28	30	33	35	37	39
16x16	CFM	<b>355</b>	<b>533</b>	<b>711</b>	<b>888</b>	<b>1066</b>	<b>1244</b>	<b>1422</b>	<b>1600</b>	<b>1777</b>
	PS	.01	.02	.03	.05	.08	.11	.14	.18	.22
	PT	.01	.03	.04	.07	.10	.14	.18	.23	.28
	NC	L	L	L	24	30	36	41	45	49
	Throw - 150 FPM	2	4	8	11	14	16	18	20	21
	Throw - 100 FPM	4	10	14	17	20	21	23	24	26
	Throw - 50 FPM	14	20	23	26	28	31	33	35	37
18x18	CFM	<b>450</b>	<b>675</b>	<b>900</b>	<b>1125</b>	<b>1350</b>	<b>1575</b>	<b>1800</b>	<b>2025</b>	<b>2250</b>
	PS	.01	.03	.05	.07	.10	.14	.17	.22	.27
	PT	.02	.03	.06	.09	.12	.17	.21	.27	.33
	NC	L	L	20	28	34	39	43	47	51
	Throw - 150 FPM	1	3	6	7	9	11	12	14	15
	Throw - 100 FPM	3	7	9	11	14	16	18	19	20
	Throw - 50 FPM	9	14	18	20	22	23	25	27	28

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Four-Way Pattern Adjustment (SLDB/SPDB)**

• **24" x 24" Flush Face**    • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	X	.01	.01	.02	.02	.03	.04	.05
	PT	X	.01	.02	.03	.04	.06	.07	.09	.11
	NC	L	L	L	L	L	L	21	26	30
	Throw - 150 FPM	—	—	—	1	1	2	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	4	5	5
	Throw - 50 FPM	1	3	4	5	7	8	9	10	11
8x8	CFM	<b>88</b>	<b>133</b>	<b>177</b>	<b>222</b>	<b>266</b>	<b>311</b>	<b>355</b>	<b>400</b>	<b>444</b>
	PS	X	.01	.01	.02	.03	.04	.05	.07	.08
	PT	.01	.01	.02	.04	.05	.07	.09	.12	.14
	NC	L	L	L	L	L	22	27	32	36
	Throw - 150 FPM	—	1	1	3	4	5	6	7	8
	Throw - 100 FPM	1	2	4	6	7	9	10	11	13
	Throw - 50 FPM	4	7	10	13	15	18	20	21	22
10x10	CFM	<b>138</b>	<b>208</b>	<b>277</b>	<b>347</b>	<b>416</b>	<b>486</b>	<b>555</b>	<b>625</b>	<b>694</b>
	PS	X	.01	.02	.03	.04	.06	.07	.09	.12
	PT	.01	.02	.03	.04	.06	.09	.11	.14	.18
	NC	L	L	L	L	23	28	33	37	41
	Throw - 150 FPM	—	1	2	3	4	6	7	8	9
	Throw - 100 FPM	1	2	4	7	8	10	11	13	14
	Throw - 50 FPM	4	8	11	14	17	18	20	21	22
12x12	CFM	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>1000</b>
	PS	.01	.01	.02	.04	.05	.07	.09	.12	.15
	PT	.01	.02	.03	.05	.08	.10	.13	.17	.21
	NC	L	L	L	21	27	33	37	41	45
	Throw - 150 FPM	1	3	5	6	8	9	10	12	13
	Throw - 100 FPM	3	6	8	10	12	14	16	18	20
	Throw - 50 FPM	8	12	16	20	24	26	27	29	31
14x14	CFM	<b>272</b>	<b>408</b>	<b>544</b>	<b>680</b>	<b>816</b>	<b>952</b>	<b>1088</b>	<b>1225</b>	<b>1361</b>
	PS	.01	.02	.03	.05	.07	.09	.12	.15	.18
	PT	.01	.02	.04	.06	.09	.12	.16	.20	.24
	NC	L	L	L	24	31	36	40	44	48
	Throw - 150 FPM	2	4	8	12	14	17	19	20	21
	Throw - 100 FPM	4	10	14	18	20	22	24	25	26
	Throw - 50 FPM	14	20	24	26	29	31	34	36	38
16x16	CFM	<b>355</b>	<b>533</b>	<b>711</b>	<b>888</b>	<b>1066</b>	<b>1244</b>	<b>1422</b>	<b>1600</b>	<b>1777</b>
	PS	.01	.02	.03	.05	.07	.10	.13	.17	.21
	PT	.01	.02	.04	.06	.09	.13	.17	.22	.28
	NC	L	L	L	24	31	36	41	45	49
	Throw - 150 FPM	1	2	4	6	8	9	10	12	13
	Throw - 100 FPM	2	5	8	10	12	14	16	16	17
	Throw - 50 FPM	8	12	16	17	19	21	22	24	25
18x18	CFM	<b>450</b>	<b>675</b>	<b>900</b>	<b>1125</b>	<b>1350</b>	<b>1575</b>	<b>1800</b>	<b>2025</b>	<b>2250</b>
	PS	.01	.03	.04	.07	.10	.13	.17	.21	.26
	PT	.01	.03	.05	.08	.12	.16	.21	.26	.32
	NC	L	L	L	26	33	38	43	47	50
	Throw - 150 FPM	1	2	4	7	10	11	13	14	15
	Throw - 100 FPM	2	6	10	12	14	15	16	18	18
	Throw - 50 FPM	10	14	16	18	20	22	24	25	26

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.



**PERFORMANCE DATA - One-Way Pattern Adjustment (SLDB/SPDB)**

• **24" x 24" Drop Face**    • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	X	.01	.01	.01	.02	.02	.03	.04
	PT	X	.01	.02	.02	.04	.05	.06	.08	.10
	NC	L	L	L	L	L	L	L	24	27
	Throw - 150 FPM	—	—	—	—	1	1	2	3	3
	Throw - 100 FPM	—	—	1	2	3	3	4	4	5
	Throw - 50 FPM	1	3	4	5	6	7	8	9	10
8x8	CFM	<b>88</b>	<b>133</b>	<b>177</b>	<b>222</b>	<b>266</b>	<b>311</b>	<b>355</b>	<b>400</b>	<b>444</b>
	PS	X	X	.01	.01	.02	.03	.04	.05	.06
	PT	X	.01	.02	.03	.04	.06	.08	.10	.13
	NC	L	L	L	L	L	L	25	29	33
	Throw - 150 FPM	—	—	1	1	2	3	4	5	6
	Throw - 100 FPM	—	1	2	3	5	7	9	11	14
	Throw - 50 FPM	2	5	9	14	19	20	22	23	25
10x10	CFM	<b>138</b>	<b>208</b>	<b>277</b>	<b>347</b>	<b>416</b>	<b>486</b>	<b>555</b>	<b>625</b>	<b>694</b>
	PS	X	.01	.01	.02	.03	.05	.06	.08	.10
	PT	.01	.01	.02	.04	.05	.08	.10	.13	.16
	NC	L	L	L	L	L	26	31	35	39
	Throw - 150 FPM	—	1	2	3	4	6	8	10	13
	Throw - 100 FPM	1	2	4	7	10	14	18	20	21
	Throw - 50 FPM	4	10	18	21	23	25	27	29	30
12x12	CFM	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>1000</b>
	PS	X	.01	.02	.03	.05	.06	.08	.10	.13
	PT	.01	.02	.03	.05	.07	.09	.12	.16	.19
	NC	L	L	L	L	26	31	36	40	43
	Throw - 150 FPM	3	6	12	15	18	21	23	24	26
	Throw - 100 FPM	6	13	18	22	24	26	28	30	32
	Throw - 50 FPM	18	24	28	32	35	38	40	43	45
14x14	CFM	<b>272</b>	<b>408</b>	<b>544</b>	<b>680</b>	<b>816</b>	<b>952</b>	<b>1088</b>	<b>1225</b>	<b>1361</b>
	PS	.01	.01	.02	.04	.06	.08	.10	.13	.16
	PT	.01	.02	.03	.05	.08	.11	.14	.18	.22
	NC	L	L	L	25	31	36	40	44	48
	Throw - 150 FPM	3	6	10	13	16	19	20	22	23
	Throw - 100 FPM	6	12	16	20	22	23	25	27	28
	Throw - 50 FPM	16	22	25	28	31	33	36	38	40
16x16	CFM	<b>355</b>	<b>533</b>	<b>711</b>	<b>888</b>	<b>1066</b>	<b>1244</b>	<b>1422</b>	<b>1600</b>	<b>1777</b>
	PS	.01	.02	.04	.06	.08	.11	.13	.16	.20
	PT	.01	.03	.05	.08	.10	.14	.17	.22	.26
	NC	L	L	L	25	32	37	42	46	50
	Throw - 150 FPM	2	4	8	12	15	17	20	21	22
	Throw - 100 FPM	4	10	15	18	21	23	24	26	27
	Throw - 50 FPM	15	21	24	27	30	32	35	37	39
18x18	CFM	<b>450</b>	<b>675</b>	<b>900</b>	<b>1125</b>	<b>1350</b>	<b>1575</b>	<b>1800</b>	<b>2025</b>	<b>2250</b>
	PS	.01	.02	.04	.06	.09	.12	.16	.20	.25
	PT	.01	.03	.05	.08	.11	.15	.20	.25	.31
	NC	L	L	20	28	34	39	43	47	50
	Throw - 150 FPM	3	7	12	15	18	21	24	26	27
	Throw - 100 FPM	7	14	18	23	26	28	30	32	33
	Throw - 50 FPM	18	26	30	33	37	40	42	45	47

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Two-Way Pattern Adjustment (SLDB/SPDB)**

• **24" x 24" Drop Face**    • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	50	75	100	125	150	175	200	225	250
	PS	X	X	.01	.01	.01	.02	.02	.03	.04
	PT	X	.01	.02	.02	.04	.05	.06	.08	.10
	NC	L	L	L	L	L	L	L	24	27
	Throw - 150 FPM	—	—	—	—	—	1	1	1	2
	Throw - 100 FPM	—	—	—	1	1	2	3	4	5
	Throw - 50 FPM	—	1	3	5	6	7	8	9	10
8x8	CFM	88	133	177	222	266	311	355	400	444
	PS	X	X	.01	.01	.02	.03	.04	.05	.06
	PT	X	.01	.02	.03	.04	.06	.08	.10	.12
	NC	L	L	L	L	L	L	24	29	32
	Throw - 150 FPM	—	—	—	—	1	1	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	5	6	8
	Throw - 50 FPM	1	3	5	8	12	15	17	18	19
10x10	CFM	138	208	277	347	416	486	555	625	694
	PS	X	.01	.01	.02	.03	.04	.06	.07	.09
	PT	.01	.01	.02	.04	.05	.07	.10	.12	.15
	NC	L	L	L	L	L	25	30	35	39
	Throw - 150 FPM	—	1	2	3	5	6	7	8	9
	Throw - 100 FPM	1	2	5	7	8	10	11	13	14
	Throw - 50 FPM	5	8	11	14	17	19	21	22	23
12x12	CFM	200	300	400	500	600	700	800	900	1000
	PS	X	.01	.02	.03	.04	.06	.07	.09	.12
	PT	.01	.02	.03	.04	.06	.09	.11	.15	.18
	NC	L	L	L	L	26	31	36	40	44
	Throw - 150 FPM	1	4	7	11	14	16	19	20	21
	Throw - 100 FPM	4	9	14	17	20	22	23	25	26
	Throw - 50 FPM	14	20	23	26	28	31	33	35	37
14x14	CFM	272	408	544	680	816	952	1088	1225	1361
	PS	.01	.01	.02	.04	.05	.07	.09	.12	.14
	PT	.01	.02	.03	.05	.07	.10	.13	.17	.21
	NC	L	L	L	24	30	35	40	44	47
	Throw - 150 FPM	2	5	9	11	13	15	18	20	22
	Throw - 100 FPM	5	10	13	17	20	22	24	25	27
	Throw - 50 FPM	13	20	24	27	29	32	34	36	38
16x16	CFM	355	533	711	888	1066	1244	1422	1600	1777
	PS	.01	.02	.03	.05	.07	.09	.12	.15	.19
	PT	.01	.02	.04	.06	.09	.12	.16	.20	.25
	NC	L	L	L	23	30	35	40	44	48
	Throw - 150 FPM	2	4	8	12	15	17	19	21	22
	Throw - 100 FPM	4	10	15	19	21	22	24	25	27
	Throw - 50 FPM	15	21	24	27	29	32	34	36	38
18x18	CFM	450	675	900	1125	1350	1575	1800	2025	2250
	PS	.01	.02	.04	.06	.08	.11	.14	.17	.21
	PT	.01	.03	.05	.08	.11	.14	.18	.22	.27
	NC	L	L	L	26	32	37	42	46	49
	Throw - 150 FPM	2	6	10	13	16	19	20	22	23
	Throw - 100 FPM	6	12	16	20	22	23	25	27	28
	Throw - 50 FPM	16	22	25	28	31	33	36	38	40

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Three-Way Pattern Adjustment (SLDB/SPDB)**

• **24" x 24" Flush Face**      • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	50	75	100	125	150	175	200	225	250
	PS	X	X	.01	.01	.01	.02	.02	.03	.03
	PT	X	.01	.02	.02	.03	.05	.06	.08	.10
	NC	L	L	L	L	L	L	L	24	28
	Throw - 150 FPM	—	—	—	—	—	—	1	1	2
	Throw - 100 FPM	—	—	—	1	1	2	2	3	4
	Throw - 50 FPM	—	1	2	4	5	6	7	8	9
8x8	CFM	88	133	177	222	266	311	355	400	444
	PS	X	.01	.01	.02	.02	.03	.04	.05	.06
	PT	.01	.01	.02	.03	.04	.06	.08	.10	.12
	NC	L	L	L	L	L	L	25	29	32
	Throw - 150 FPM	—	—	—	—	1	1	2	3	3
	Throw - 100 FPM	—	—	1	2	3	4	5	7	8
	Throw - 50 FPM	1	3	5	8	12	17	17	18	19
10x10	CFM	138	208	277	347	416	486	555	625	694
	PS	X	.01	.01	.02	.03	.04	.06	.07	.09
	PT	.01	.01	.02	.04	.05	.07	.10	.12	.15
	NC	L	L	L	L	L	25	30	35	38
	Throw - 150 FPM	—	2	3	5	8	9	11	12	13
	Throw - 100 FPM	2	4	8	10	12	14	16	17	18
	Throw - 50 FPM	8	12	16	18	20	21	23	24	26
12x12	CFM	200	300	400	500	600	700	800	900	1000
	PS	X	.01	.02	.03	.04	.06	.07	.09	.11
	PT	.01	.02	.03	.04	.06	.09	.11	.14	.18
	NC	L	L	L	L	25	31	35	40	43
	Throw - 150 FPM	1	3	5	8	11	13	15	17	19
	Throw - 100 FPM	3	7	11	14	17	20	21	22	24
	Throw - 50 FPM	11	17	21	24	26	28	30	32	34
14x14	CFM	272	408	544	680	816	952	1088	1225	1361
	PS	.01	.01	.02	.03	.05	.07	.09	.11	.14
	PT	.01	.02	.03	.05	.07	.10	.13	.16	.20
	NC	L	L	L	23	29	35	39	43	46
	Throw - 150 FPM	2	5	9	11	14	16	19	21	22
	Throw - 100 FPM	5	10	14	17	21	23	24	26	27
	Throw - 50 FPM	14	21	24	27	30	32	34	36	38
16x16	CFM	355	533	711	888	1066	1244	1422	1600	1777
	PS	.01	.02	.03	.04	.06	.08	.11	.14	.17
	PT	.01	.02	.04	.06	.08	.11	.15	.19	.23
	NC	L	L	L	21	28	33	38	43	47
	Throw - 150 FPM	1	3	5	9	13	15	17	19	21
	Throw - 100 FPM	3	7	13	16	19	22	23	24	26
	Throw - 50 FPM	13	19	23	26	28	31	33	35	37
18x18	CFM	450	675	900	1125	1350	1575	1800	2025	2250
	PS	.01	.02	.04	.06	.08	.11	.14	.17	.20
	PT	.01	.03	.05	.07	.10	.14	.18	.22	.26
	NC	L	L	L	25	31	36	41	45	48
	Throw - 150 FPM	1	3	6	9	11	12	14	14	15
	Throw - 100 FPM	3	8	11	13	14	16	17	18	19
	Throw - 50 FPM	11	14	17	19	21	22	24	25	27

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Four-Way Pattern Adjustment (SLDB/SPDB)**

• **24" x 24" Flush Face**      • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	50	75	100	125	150	175	200	225	250
	PS	X	X	.01	.01	.01	.02	.02	.03	.03
	PT	X	.01	.02	.02	.03	.05	.06	.08	.10
	NC	L	L	L	L	L	L	L	23	27
	Throw - 150 FPM	—	—	—	—	—	1	1	1	2
	Throw - 100 FPM	—	—	—	1	1	2	3	4	4
	Throw - 50 FPM	—	1	3	4	5	6	7	8	9
8x8	CFM	88	133	177	222	266	311	355	400	444
	PS	X	.01	.01	.01	.02	.03	.04	.05	.06
	PT	.01	.01	.02	.03	.04	.06	.08	.10	.12
	NC	L	L	L	L	L	L	25	29	32
	Throw - 150 FPM	—	—	—	1	1	2	3	4	5
	Throw - 100 FPM	—	1	1	3	4	6	7	10	11
	Throw - 50 FPM	1	4	7	11	14	16	17	18	19
10x10	CFM	138	208	277	347	416	486	555	625	694
	PS	X	.01	.01	.02	.03	.04	.06	.07	.09
	PT	.01	.01	.02	.04	.05	.07	.10	.12	.15
	NC	L	L	L	L	L	25	30	35	38
	Throw - 150 FPM	—	1	2	3	5	6	7	8	9
	Throw - 100 FPM	1	3	5	7	8	10	11	12	14
	Throw - 50 FPM	5	8	11	14	17	18	20	21	22
12x12	CFM	200	300	400	500	600	700	800	900	1000
	PS	X	.01	.02	.03	.04	.05	.07	.09	.11
	PT	.01	.02	.03	.04	.06	.08	.11	.14	.17
	NC	L	L	L	L	25	31	35	39	43
	Throw - 150 FPM	1	4	7	10	12	14	16	19	21
	Throw - 100 FPM	4	9	12	15	19	22	23	25	26
	Throw - 50 FPM	12	19	23	26	28	31	33	35	37
14x14	CFM	272	408	544	680	816	952	1088	1225	1361
	PS	.01	.01	.02	.03	.05	.07	.09	.11	.14
	PT	.01	.02	.03	.05	.07	.10	.13	.16	.20
	NC	L	L	L	23	29	34	39	43	46
	Throw - 150 FPM	2	4	8	11	13	15	17	19	22
	Throw - 100 FPM	4	9	13	16	19	22	24	25	27
	Throw - 50 FPM	13	19	24	27	29	32	34	36	38
16x16	CFM	355	533	711	888	1066	1244	1422	1600	1777
	PS	.01	.02	.03	.04	.06	.08	.10	.13	.16
	PT	.01	.02	.04	.06	.08	.11	.14	.18	.22
	NC	L	L	L	21	28	33	38	43	47
	Throw - 150 FPM	—	1	2	4	6	7	8	9	10
	Throw - 100 FPM	1	3	6	7	9	10	12	13	14
	Throw - 50 FPM	6	9	12	14	16	17	18	19	20
18x18	CFM	450	675	900	1125	1350	1575	1800	2025	2250
	PS	.01	.02	.04	.06	.08	.11	.13	.16	.20
	PT	.01	.03	.05	.07	.10	.14	.17	.21	.26
	NC	L	L	L	24	31	36	41	45	49
	Throw - 150 FPM	1	2	5	6	8	9	10	12	12
	Throw - 100 FPM	2	6	8	10	12	13	14	14	15
	Throw - 50 FPM	8	12	14	15	17	18	19	21	22

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Four-Way Pattern Adjustment (SLFC/SPFC)**

• **24" x 24" Flush Face**      • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
<b>6</b> <b>A<sub>k</sub> .255</b>	CFM	<b>39</b>	<b>59</b>	<b>78</b>	<b>98</b>	<b>118</b>	<b>137</b>	<b>157</b>	<b>176</b>	<b>196</b>
	PS	X	.01	.03	.04	.06	.09	.12	.16	.20
	PT	X	.01	.03	.06	.09	.12	.16	.21	.26
	NC	L	L	L	L	22	28	32	37	41
	Throw - 150 FPM	1	2	3	4	5	6	7	8	9
	Throw - 100 FPM	2	4	5	6	8	9	10	11	13
	Throw - 50 FPM	5	8	10	13	15	16	17	18	19
<b>8</b> <b>A<sub>k</sub> .340</b>	CFM	<b>70</b>	<b>105</b>	<b>140</b>	<b>175</b>	<b>209</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	PS	X	.01	.03	.04	.07	.09	.12	.16	.21
	PT	X	.01	.04	.06	.09	.12	.16	.21	.27
	NC	L	L	L	L	23	29	34	39	43
	Throw - 150 FPM	1	2	4	5	6	7	8	9	10
	Throw - 100 FPM	2	4	6	8	9	11	12	13	15
	Throw - 50 FPM	6	9	12	15	18	20	21	22	24
<b>10</b> <b>A<sub>k</sub> .480</b>	CFM	<b>109</b>	<b>164</b>	<b>218</b>	<b>273</b>	<b>327</b>	<b>382</b>	<b>436</b>	<b>491</b>	<b>545</b>
	PS	X	.01	.03	.05	.08	.11	.15	.20	.25
	PT	X	.02	.04	.07	.10	.14	.19	.25	.31
	NC	L	L	L	20	25	31	37	42	46
	Throw - 150 FPM	1	2	4	5	6	7	8	9	10
	Throw - 100 FPM	2	5	6	8	9	11	12	13	15
	Throw - 50 FPM	6	9	12	15	18	20	21	23	24
<b>12</b> <b>A<sub>k</sub> .616</b>	CFM	<b>157</b>	<b>236</b>	<b>314</b>	<b>393</b>	<b>471</b>	<b>550</b>	<b>628</b>	<b>707</b>	<b>785</b>
	PS	X	.01	.02	.04	.06	.08	.11	.14	.18
	PT	X	.01	.03	.05	.08	.11	.15	.19	.24
	NC	L	L	L	L	23	29	33	37	42
	Throw - 150 FPM	2	4	5	6	7	8	10	11	12
	Throw - 100 FPM	4	5	7	9	11	13	15	16	18
	Throw - 50 FPM	7	11	15	18	20	21	23	24	26
<b>14</b> <b>A<sub>k</sub> .824</b>	CFM	<b>214</b>	<b>321</b>	<b>428</b>	<b>535</b>	<b>641</b>	<b>748</b>	<b>855</b>	<b>962</b>	<b>1069</b>
	PS	X	.01	.03	.05	.07	.10	.14	.18	.23
	PT	X	.02	.04	.06	.10	.13	.18	.23	.29
	NC	L	L	L	25	30	34	39	44	47
	Throw - 150 FPM	2	4	5	6	8	9	10	11	12
	Throw - 100 FPM	4	6	8	9	11	13	15	17	19
	Throw - 50 FPM	8	11	15	19	20	22	24	25	26
<b>16</b> <b>A<sub>k</sub> 1.150</b>	CFM	<b>279</b>	<b>419</b>	<b>558</b>	<b>698</b>	<b>838</b>	<b>977</b>	<b>1117</b>	<b>1256</b>	<b>1396</b>
	PS	X	.01	.03	.05	.07	.09	.12	.16	.19
	PT	X	.02	.04	.06	.09	.12	.16	.21	.26
	NC	L	L	20	25	30	34	39	43	47
	Throw - 150 FPM	2	4	5	7	8	9	11	12	13
	Throw - 100 FPM	4	6	8	10	12	14	16	17	19
	Throw - 50 FPM	8	12	16	19	22	24	25	27	28

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Four-Way Pattern Adjustment (SLGC/SPGC)**

• **24" x 24" Flush Face**      • **Square Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
<b>6x6</b> <b>A<sub>k</sub> .415</b>	CFM	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>
	PS	X	.02	.03	.05	.07	.10	.13	.17	.21
	PT	X	.02	.04	.06	.09	.13	.17	.22	.28
	NC	L	L	L	L	23	29	33	38	41
	Throw - 150 FPM	—	1	3	4	4	5	6	6	7
	Throw - 100 FPM	1	3	4	5	6	7	9	10	11
	Throw - 50 FPM	4	6	9	11	13	15	16	16	17
<b>8x8</b> <b>A<sub>k</sub> .530</b>	CFM	<b>89</b>	<b>133</b>	<b>178</b>	<b>222</b>	<b>267</b>	<b>311</b>	<b>356</b>	<b>400</b>	<b>444</b>
	PS	X	.02	.03	.05	.08	.11	.14	.19	.24
	PT	X	.02	.04	.07	.10	.14	.18	.24	.30
	NC	L	L	L	21	27	32	36	41	44
	Throw - 150 FPM	1	2	3	4	5	6	6	7	8
	Throw - 100 FPM	2	4	4	5	6	8	10	11	12
	Throw - 50 FPM	5	7	10	12	14	16	18	19	20
<b>10x10</b> <b>A<sub>k</sub> .673</b>	CFM	<b>139</b>	<b>208</b>	<b>278</b>	<b>347</b>	<b>416</b>	<b>486</b>	<b>555</b>	<b>625</b>	<b>694</b>
	PS	X	.02	.04	.06	.09	.12	.16	.21	.27
	PT	X	.02	.04	.07	.11	.15	.20	.26	.33
	NC	L	L	21	26	32	35	40	44	48
	Throw - 150 FPM	1	3	4	4	5	6	7	8	9
	Throw - 100 FPM	3	4	5	7	8	9	11	12	13
	Throw - 50 FPM	5	8	11	13	16	18	21	22	23
<b>12x12</b> <b>A<sub>k</sub> .990</b>	CFM	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>1000</b>
	PS	X	.02	.04	.07	.10	.14	.19	.25	.32
	PT	.01	.03	.05	.08	.12	.17	.23	.30	.38
	NC	L	20	25	30	35	38	43	47	51
	Throw - 150 FPM	2	4	5	7	8	9	11	12	13
	Throw - 100 FPM	4	6	8	10	12	14	15	16	17
	Throw - 50 FPM	8	12	15	17	20	22	24	26	27
<b>14x14</b> <b>A<sub>k</sub> .972</b>	CFM	<b>272</b>	<b>408</b>	<b>544</b>	<b>681</b>	<b>817</b>	<b>953</b>	<b>1089</b>	<b>1225</b>	<b>1361</b>
	PS	.01	.03	.05	.08	.12	.17	.23	.30	.38
	PT	.01	.03	.06	.10	.15	.20	.27	.35	.44
	NC	L	22	29	34	39	42	46	50	54
	Throw - 150 FPM	2	5	7	9	11	13	14	16	18
	Throw - 100 FPM	5	8	11	14	16	19	20	21	22
	Throw - 50 FPM	11	16	20	22	24	27	28	30	32
<b>16x16</b> <b>A<sub>k</sub> 1.570</b>	CFM	<b>357</b>	<b>523</b>	<b>711</b>	<b>889</b>	<b>1067</b>	<b>1245</b>	<b>1422</b>	<b>1600</b>	<b>1778</b>
	PS	X	.02	.04	.07	.10	.14	.19	.25	.31
	PT	.01	.03	.05	.08	.12	.17	.23	.30	.37
	NC	L	20	26	32	37	41	45	49	52
	Throw - 150 FPM	2	5	7	9	11	13	15	17	19
	Throw - 100 FPM	5	8	11	14	17	19	21	22	23
	Throw - 50 FPM	11	17	21	23	25	27	29	31	32
<b>18x18</b> <b>A<sub>k</sub> 1.818</b>	CFM	<b>450</b>	<b>675</b>	<b>900</b>	<b>1125</b>	<b>1350</b>	<b>1575</b>	<b>1800</b>	<b>2025</b>	<b>2250</b>
	PS	X	.02	.03	.05	.08	.11	.14	.19	.24
	PT	X	.02	.04	.07	.10	.14	.18	.24	.30
	NC	L	L	23	30	34	39	43	47	50
	Throw - 150 FPM	3	6	7	10	11	13	15	17	19
	Throw - 100 FPM	6	8	11	14	17	20	21	22	24
	Throw - 50 FPM	11	17	21	24	26	28	29	31	33

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

• Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.

- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

Perf. Face Sup. & Ret. Diffusers



**PERFORMANCE DATA - Return (SLRB/SPRB)**

• **12" x 12" Flush Face**      • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	39	58	78	98	117	137	157	176	196
	Neg. PS	X	.01	.02	.03	.04	.05	.07	.09	.11
	NC	L	L	L	L	L	L	L	L	L
8	CFM	69	104	139	174	209	244	279	314	349
	Neg. PS	.01	.01	.02	.03	.05	.06	.08	.10	.12
	NC	L	L	L	L	L	L	L	L	L

**PERFORMANCE DATA - Return (SLRB/SPRB)**

• **24" x 24" Flush Face**      • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	39	58	78	98	117	137	157	176	196
	Neg. PS	X	.01	.02	.02	.04	.05	.06	.08	.10
	NC	L	L	L	L	L	L	L	L	L
8	CFM	69	104	139	174	209	244	279	314	349
	Neg. PS	.01	.01	.02	.03	.04	.06	.08	.10	.12
	NC	L	L	L	L	L	L	L	L	L
10	CFM	109	163	218	272	327	381	436	490	545
	Neg. PS	.01	.01	.02	.03	.05	.06	.08	.11	.17
	NC	L	L	L	L	L	L	L	L	L
12	CFM	157	235	314	392	471	549	628	706	785
	Neg. PS	.01	.01	.02	.03	.05	.07	.09	.11	.14
	NC	L	L	L	L	L	L	L	L	L
14	CFM	213	320	427	534	641	748	855	962	1069
	Neg. PS	.01	.01	.02	.04	.05	.07	.09	.12	.14
	NC	L	L	L	L	L	L	L	L	L
16	CFM	279	418	558	698	837	977	1117	1256	1396
	Neg. PS	.01	.01	.02	.04	.06	.08	.10	.12	.15
	NC	L	L	L	L	L	L	L	L	L

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**PERFORMANCE DATA - Return (SLJB/SPJB)**

• 12" x 12" Flush Face    • Square Neck

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	50	75	100	125	150	175	200	225	250
	Neg. PS	X	.01	.02	.03	.04	.05	.07	.09	.11
	NC	L	L	L	L	L	L	L	L	L
8x8	CFM	88	133	177	222	266	311	355	400	444
	Neg. PS	X	.01	.02	.03	.04	.06	.07	.09	.11
	NC	L	L	L	L	L	L	L	L	L
10x10	CFM	138	208	277	347	416	486	555	625	694
	Neg. PS	.01	.01	.03	.04	.06	.08	.10	.13	.16
	NC	L	L	L	L	L	L	22	25	28

**PERFORMANCE DATA - Return (SLJB/SPJB)**

• 12" x 24" Flush Face    • Rectangular Neck

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
10x22	CFM	306	458	611	764	917	1069	1222	1375	1527
	Neg. PS	.01	.01	.02	.04	.05	.07	.09	.12	.14
	NC	L	L	L	L	L	L	L	L	L

**PERFORMANCE DATA - Return (SLJB/SPJB)**

• 24" x 24" Flush Face    • Square Neck

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6x6	CFM	50	75	100	125	150	175	200	225	250
	Neg. PS	X	.01	.02	.02	.04	.05	.06	.08	.10
	NC	L	L	L	L	L	L	L	L	L
8x8	CFM	88	133	177	222	266	311	355	400	444
	Neg. PS	X	.01	.02	.03	.04	.06	.07	.09	.11
	NC	L	L	L	L	L	L	L	L	L
10x10	CFM	138	208	277	347	416	486	555	625	694
	Neg. PS	.01	.01	.02	.03	.05	.06	.08	.11	.13
	NC	L	L	L	L	L	L	22	25	28
12x12	CFM	200	300	400	500	600	700	800	900	1000
	Neg. PS	.01	.02	.03	.04	.05	.07	.09	.11	.14
	NC	L	L	L	L	L	L	L	L	L
14x14	CFM	272	408	544	680	816	952	1088	1225	1361
	Neg. PS	.01	.01	.02	.04	.05	.07	.09	.11	.14
	NC	L	L	L	L	L	L	L	L	L
16x16	CFM	355	533	711	777	1066	1244	1422	1600	1777
	Neg. PS	.01	.02	.03	.04	.06	.08	.10	.13	.15
	NC	L	L	L	L	L	L	L	L	L
18x18	CFM	450	675	900	1125	1350	1575	1800	2025	2250
	Neg. PS	.01	.02	.03	.05	.07	.09	.11	.13	.16
	NC	L	L	L	L	L	L	L	L	L
22x22	CFM	672	1008	1344	1680	2016	2352	2688	3025	3361
	Neg. PS	.01	.02	.04	.06	.08	.10	.13	.15	.19
	NC	L	L	L	L	L	25	29	32	35

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

Perf. Face Sup. & Ret. Diffusers

**PERFORMANCE DATA - Four-Way Pattern (SPCB)**

• **24" x 24" Flush Face**     • **Round Neck**

Neck Size (Inches)		Duct Velocity - FPM								
		200	300	400	500	600	700	800	900	1000
6	CFM	<b>40</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>
	PS	X	X	.01	.02	.03	.04	.05	.06	.08
	Throw - 150 FPM	—	—	—	—	1	2	2	2	2
	Throw - 100 FPM	—	—	1	2	2	2	3	3	3
	Throw - 50 FPM	1	2	3	3	4	4	5	5	5
	NC	L	L	L	L	L	L	L	L	22
8	CFM	<b>70</b>	<b>105</b>	<b>140</b>	<b>175</b>	<b>210</b>	<b>245</b>	<b>280</b>	<b>315</b>	<b>350</b>
	PS	X	X	.01	.03	.04	.05	.06	.07	.09
	Throw - 150 FPM	—	—	—	1	1	2	2	2	2
	Throw - 100 FPM	—	1	1	2	2	2	3	3	3
	Throw - 50 FPM	1	2	3	3	4	4	5	5	6
	NC	L	L	L	L	L	L	L	L	24
10	CFM	<b>110</b>	<b>165</b>	<b>220</b>	<b>270</b>	<b>330</b>	<b>380</b>	<b>435</b>	<b>490</b>	<b>545</b>
	PS	X	.01	.02	.04	.05	.07	.09	.11	.14
	Throw - 150 FPM	—	—	1	1	2	2	2	3	3
	Throw - 100 FPM	1	2	2	3	3	3	4	4	5
	Throw - 50 FPM	2	3	4	4	5	6	7	8	9
	NC	L	L	L	L	L	23	27	31	34
12	CFM	<b>160</b>	<b>235</b>	<b>315</b>	<b>390</b>	<b>470</b>	<b>550</b>	<b>630</b>	<b>705</b>	<b>785</b>
	PS	.01	.02	.03	.05	.07	.10	.12	.15	.19
	Throw - 150 FPM	1	1	2	2	3	3	3	4	4
	Throw - 100 FPM	1	2	2	3	4	4	5	6	7
	Throw - 50 FPM	3	4	5	6	8	9	9	10	11
	NC	L	L	L	21	26	31	35	38	41
14	CFM	<b>215</b>	<b>320</b>	<b>430</b>	<b>535</b>	<b>640</b>	<b>750</b>	<b>855</b>	<b>960</b>	<b>1070</b>
	PS	.01	.02	.04	.06	.09	.12	.15	.19	.24
	Throw - 150 FPM	1	2	2	3	3	4	4	4	5
	Throw - 100 FPM	2	2	3	4	4	5	6	7	8
	Throw - 50 FPM	3	4	6	8	9	11	12	14	15
	NC	L	L	L	24	31	35	39	44	48
16	CFM	<b>280</b>	<b>420</b>	<b>560</b>	<b>700</b>	<b>840</b>	<b>980</b>	<b>1120</b>	<b>1260</b>	<b>1400</b>
	PS	.01	.03	.05	.08	.11	.15	.20	.25	.31
	Throw - 150 FPM	1	2	3	3	4	5	5	6	7
	Throw - 100 FPM	2	3	4	5	6	7	8	9	10
	Throw - 50 FPM	4	6	8	10	12	14	16	18	20
	NC	L	L	24	30	35	39	43	46	50

**Notes on Performance Data:**

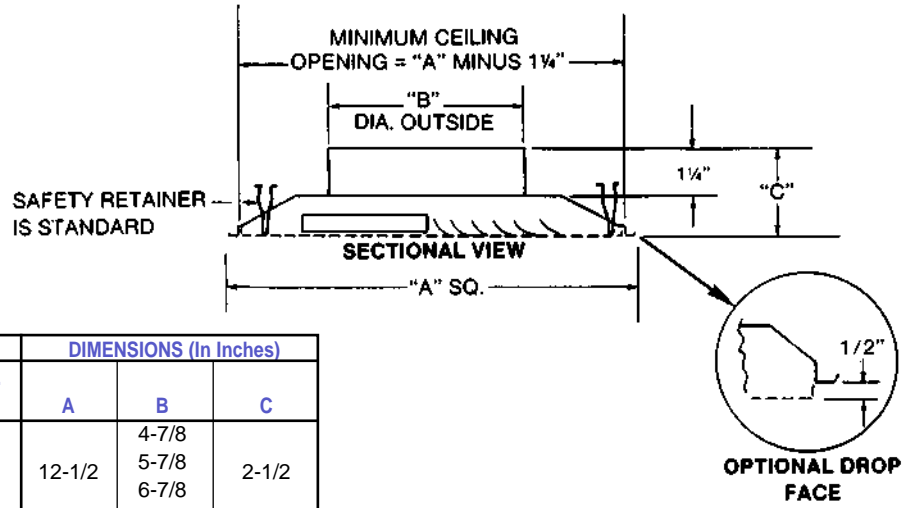
- Performance data is based on tests conducted in accordance w/ ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.

- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- "X" designates pressure of less than .010 w.g. inches.
- Dash mark (—) indicates throw less than one foot.
- "L" designates sound measured at less than 20 db.

**Units of Measure Used:**

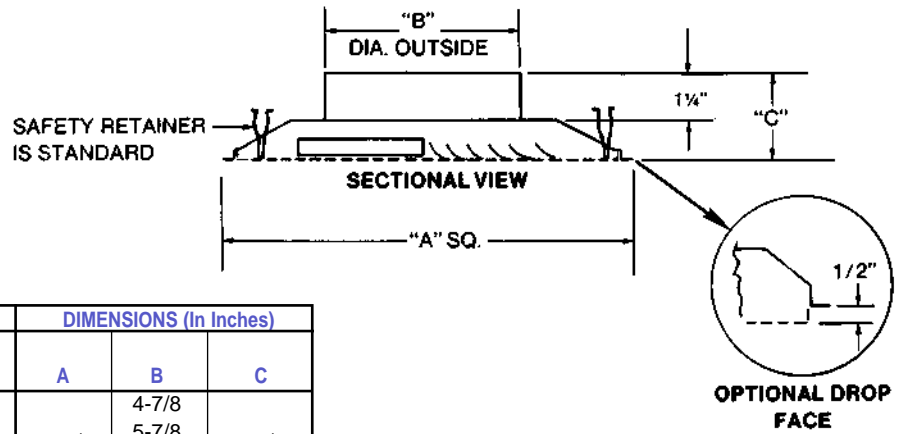
- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w.g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throw data is measured in feet.

**DIMENSIONAL DATA - Surface Mount - Supply w/Round Neck (SL/SPAB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)			
	DROP FACE	ALUM. FACE	A	B	C	
SL/SPAB 11 2	05	N/A	A	4-7/8	2-1/2	
	06			12-1/2		5-7/8
	07			6-7/8		
	08			7-7/8		
SL/SPAB 22 2	05	D	A	4-7/8	2-3/4	
	06			5-7/8		
	07			6-7/8		
	08			7-7/8		
	10			9-7/8		
	12			11-7/8		
	14			13-7/8		
16	15-7/8					

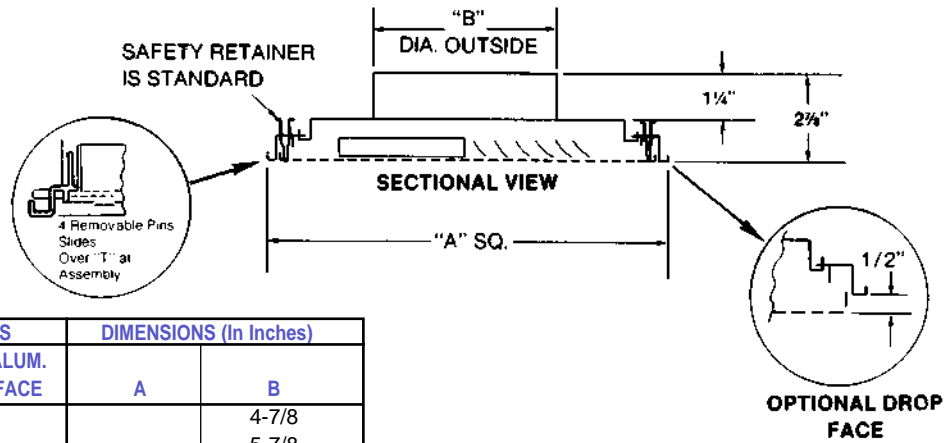
**T-bar Mount - Supply w/Round Neck (SL/SPAB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)			
	DROP FACE	ALUM. FACE	A	B	C	
SL/SPAB 11 4	05	N/A	A	4-7/8	2-1/2	
	06			11-3/4		5-7/8
	07			6-7/8		
	08			7-7/8		
SL/SPAB 22 4	05	D	A	4-7/8	2-3/4	
	06			5-7/8		
	07			6-7/8		
	08			7-7/8		
	10			9-7/8		
	12			11-7/8		
	14			13-7/8		
16	15-7/8					

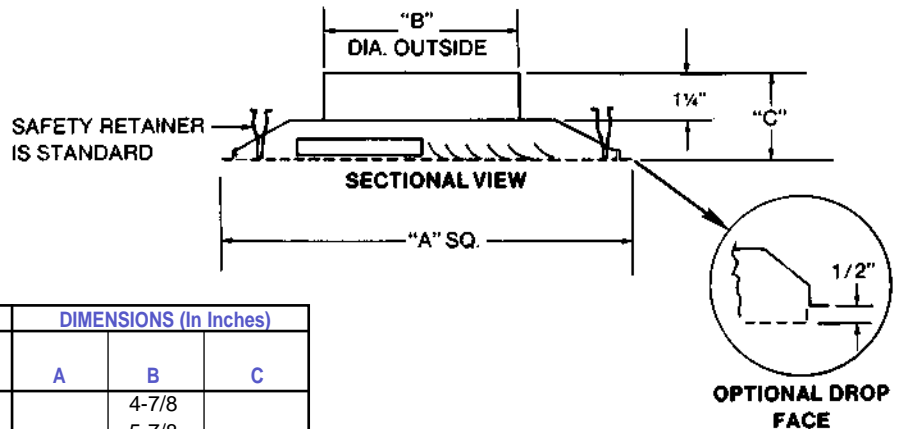
Perf. Face Sup. & Ret. Diffusers

**DIMENSIONAL DATA - Concealed Spline - Supply w/Round Neck (SL/SPAB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)	
	DROP FACE	ALUM. FACE	A	B
SL/SPAB 11 8	05 06 07 08	N/A A	12	4-7/8 5-7/8 6-7/8 7-7/8
SL/SPAB 22 8	05 06 07 08 10 12 14 16	D A	24	4-7/8 5-7/8 6-7/8 7-7/8 9-7/8 11-7/8 13-7/8 15-7/8

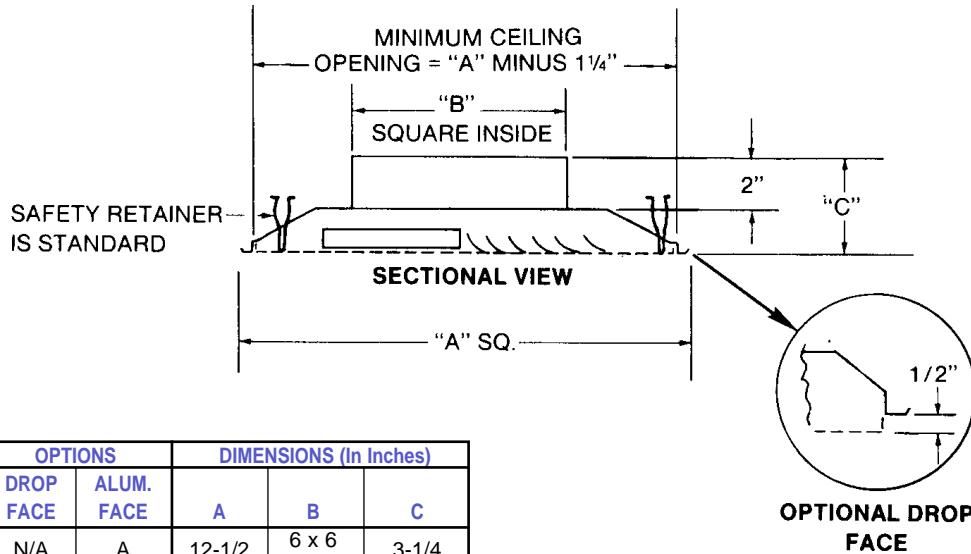
**Donn Finline® Ceiling - Supply w/Round Neck (SL/SPAB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)		
	DROP FACE	ALUM. FACE	A	B	C
SL/SPAB 11 9	05 06 07 08	N/A A	11-3/4	4-7/8 5-7/8 6-7/8 7-7/8	2-13/16
SL/SPAB 22 9	05 06 07 08 10 12 14 16	D A	23-3/4	4-7/8 5-7/8 6-7/8 7-7/8 9-7/8 11-7/8 13-7/8 15-7/8	3-1/16

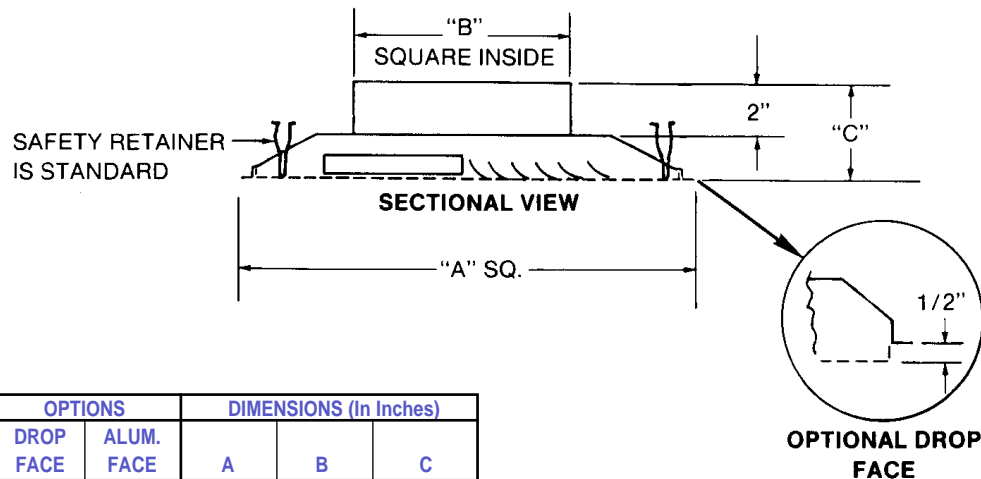
Perf. Face Supp. & Ret. Diffusers

**DIMENSIONAL DATA - Surface Mount - Supply w/Square Neck (SL/SPDB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)			
	DROP FACE	ALUM. FACE	A	B	C	
SL/SPDB 11 2	06 08	N/A	A	12-1/2	6 x 6 8 x 8	3-1/4
SL/SPDB 22 2	06 08 10 12 14 16 18	D	A	24-1/2	6 x 6 8 x 8 10 x 10 12 x 12 14 x 14 16 x 16 18 x 18	3-1/2

**T-bar Mount - Supply w/Square Neck (SL/SPDB)**

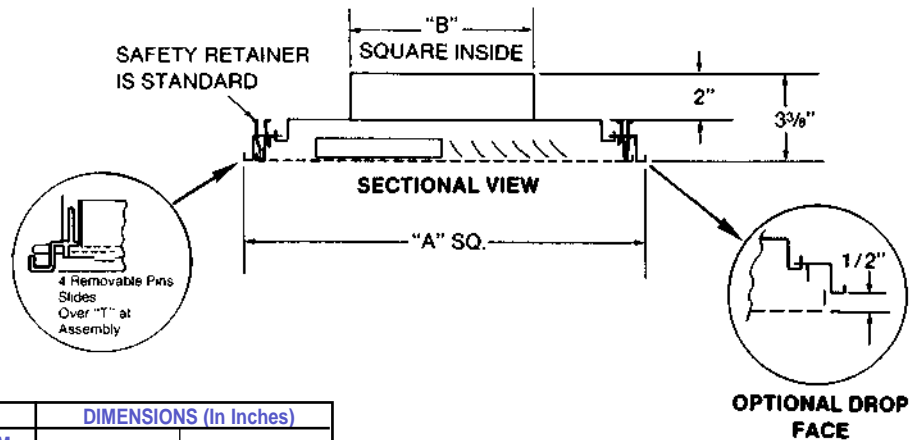


MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)			
	DROP FACE	ALUM. FACE	A	B	C	
SL/SPDB 11 4	06 08	N/A	A	11-3/4	6 x 6 8 x 8	3-1/4
SL/SPDB 22 4	06 08 10 12 14 16 18	D	A	23-3/4	6 x 6 8 x 8 10 x 10 12 x 12 14 x 14 16 x 16 18 x 18	3-1/2

Perf. Face Sup. & Ret. Diffusers

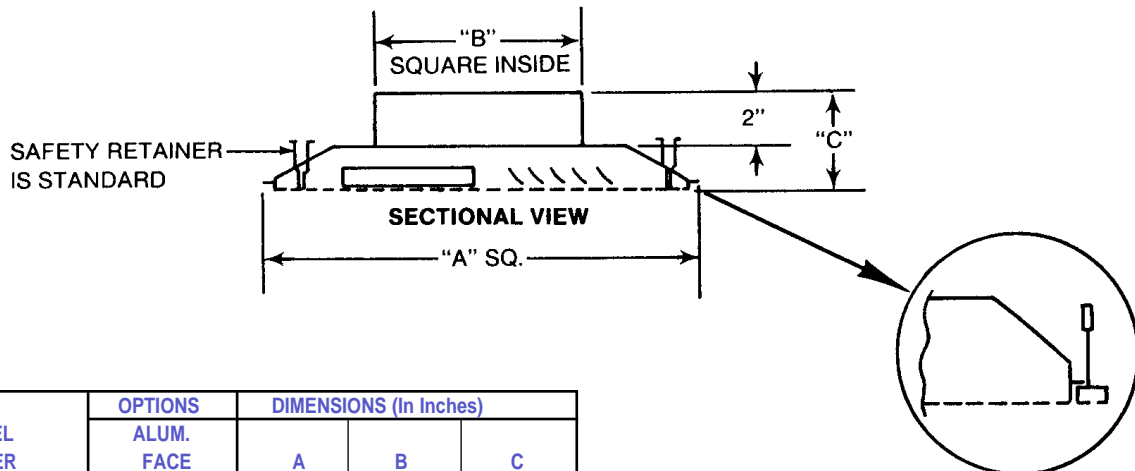


**DIMENSIONAL DATA - Concealed Mount - Supply w/Square Neck (SL/SPDB)**



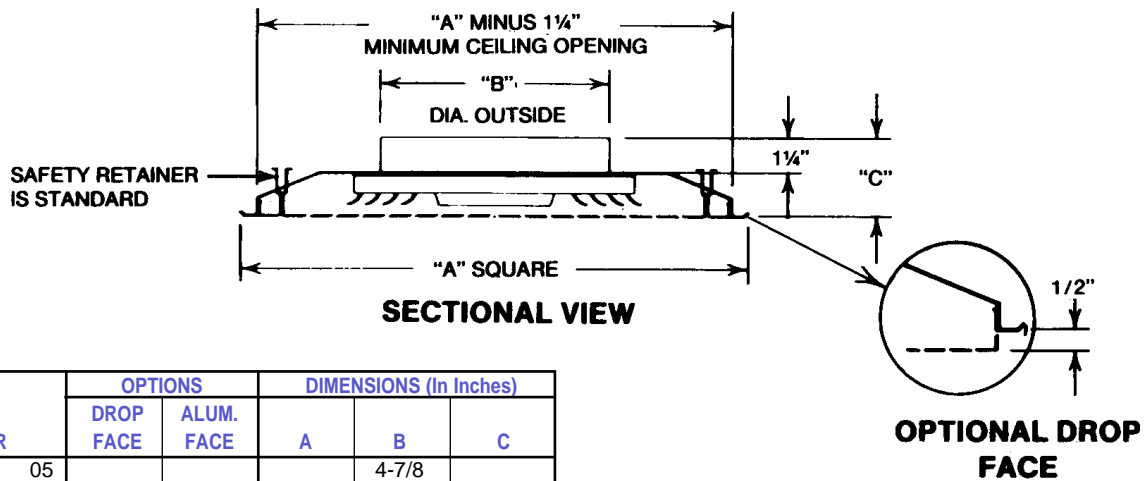
MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)		
	DROP FACE	ALUM. FACE	A	B	
SL/SPDB 11 8	06 08	N/A	A	12	6 x 6
				8 x 8	
	06 08 10				6 x 6
				8 x 8	
				10 x 10	
SL/SPDB 22 8				D	A
	14 x 14				
	16 x 16				
	18 x 18				

**Donn Finline® Ceiling - Supply w/Square Neck (SL/SPDB)**



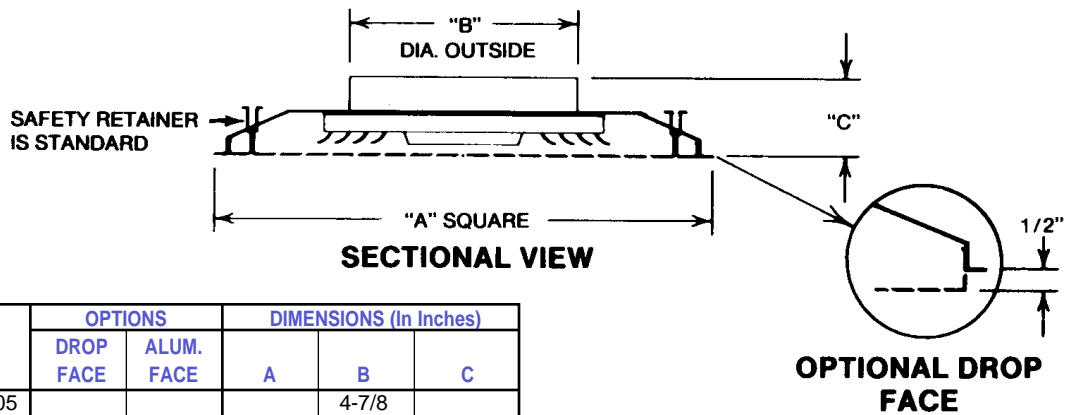
MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)		
	ALUM. FACE		A	B	C
SK/SPDB 11 9	06 08	A	11-3/4	6 x 6	3/9/16
				8 x 8	
	06 08 10			6 x 6	
				8 x 8	
				10 x 10	
SL/SPDB 22 9				A	
	14 x 14				
	16 x 16				
	18 x 18				

**DIMENSIONAL DATA - Surface Mount - Supply w/Round Neck w/Adjustable Curved Blades (SL/SPFC)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)		
	DROP FACE	ALUM. FACE	A	B	C
SL/SPFC 11 2	05	N/A	A	4-7/8	2-1/2
	06			5-7/8	
	07			6-7/8	
	08			7-7/8	
SL/SPFC 22 2	05	D	A	4-7/8	2-3/4
	06			5-7/8	
	07			6-7/8	
	08			7-7/8	
	10			9-7/8	
	12			11-7/8	
	14			13-7/8	
16	15-7/8				

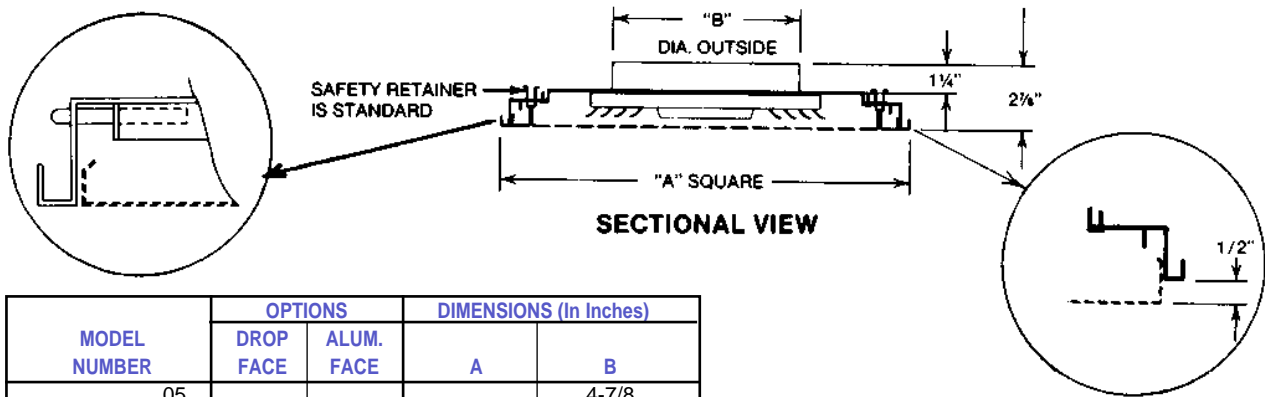
**T-bar Mount - Supply w/Round Neck w/Adjustable Curved Blades (SL/SPFC)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)		
	DROP FACE	ALUM. FACE	A	B	C
SL/SPFC 11 4	05	N/A	A	4-7/8	2-1/2
	06			5-7/8	
	07			6-7/8	
	08			7-7/8	
SL/SPFC 22 4	05	D	A	4-7/8	2-3/4
	06			5-7/8	
	07			6-7/8	
	08			7-7/8	
	10			9-7/8	
	12			11-7/8	
	14			13-7/8	
16	15-7/8				

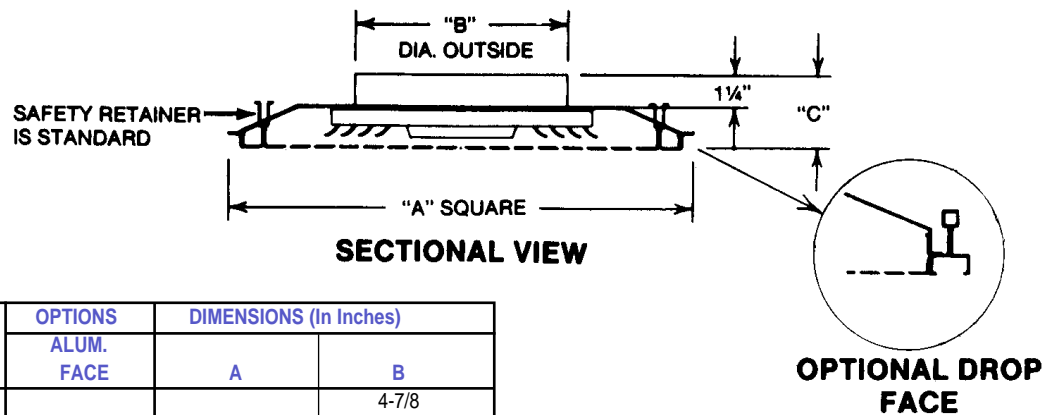
Perf. Face Sup. & Ret. Diffusers

**DIMENSIONAL DATA - Concealed Spline - Supply w/Round Neck w/Adjustable Curved Blades (SL/SPFC)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)	
	DROP FACE	ALUM. FACE	A	B
SL/SPFC 11 8	N/A	A	12	05 4-7/8
06 5-7/8				
07 6-7/8				
08 7-7/8				
SL/SPFC 22 8	D	A	24	05 4-7/8
06 5-7/8				
07 6-7/8				
08 7-7/8				
10 9-7/8				
12 11-7/8				
14 13-7/8				
16 15-7/8				

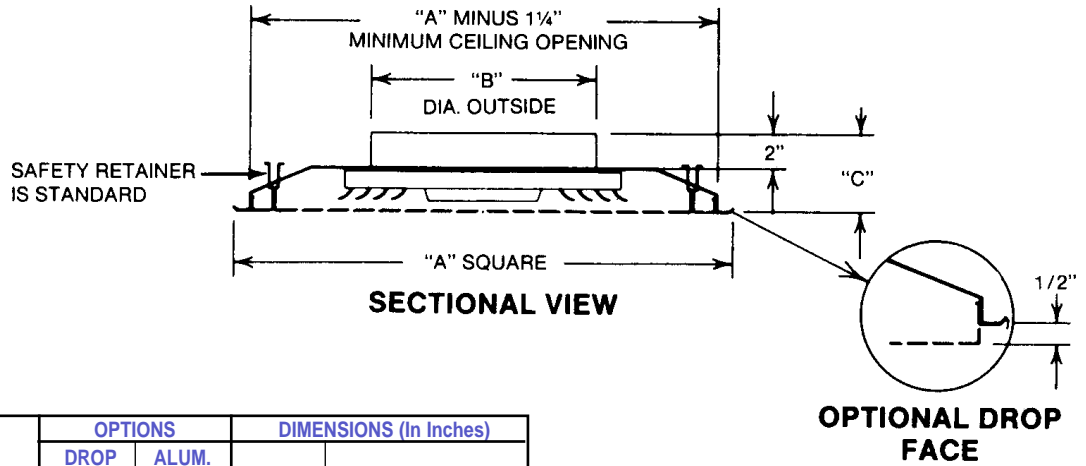
**Donn Finline® Ceiling - Supply w/Round Neck w/Adjustable Curved Blades (SL/SPFC)**



MODEL NUMBER	OPTIONS	DIMENSIONS (In Inches)	
	ALUM. FACE	A	B
SK/SPFC 11 9	A	12	05 4-7/8
06 5-7/8			
07 6-7/8			
08 7-7/8			
SL/SPFC 22 9	A	23-3/4	05 4-7/8
06 5-7/8			
07 6-7/8			
08 7-7/8			
10 9-7/8			
12 11-3/4			
14 13-3/4			
16 15-3/4			

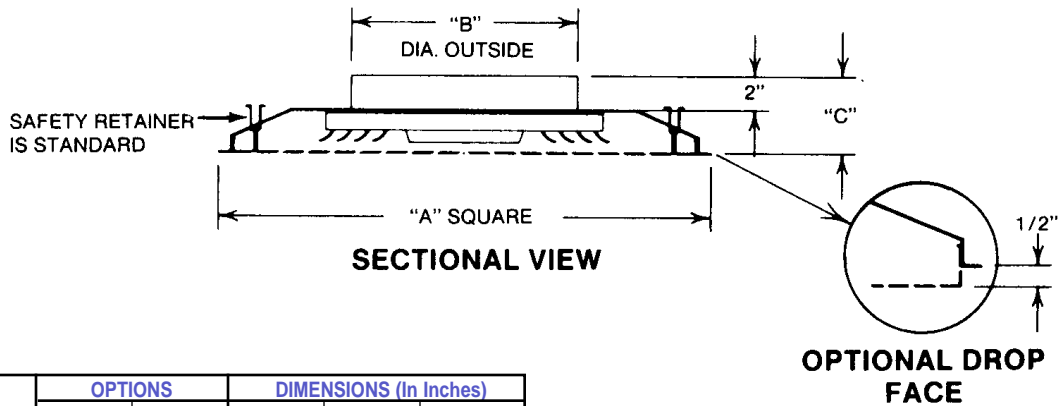
Perf. Face Supp. & Ret. Diffusers

**DIMENSIONAL DATA - Surface Mount - Supply w/Square Neck w/Adjustable Curved Blades (SL/SPGC)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)			
	DROP FACE	ALUM. FACE	A	B	C	
SL/SPGC 11 2	N/A	A	12-1/2	6 x 6	3-1/4	
06				8 x 8		
SL/SPGC 22 2	D	A	24-1/2	6 x 6	3-1/2	
				06		8 x 8
				08		10 x 10
				10		12 x 12
				12		14 x 14
14	16 x 16					
16	18 x 18					

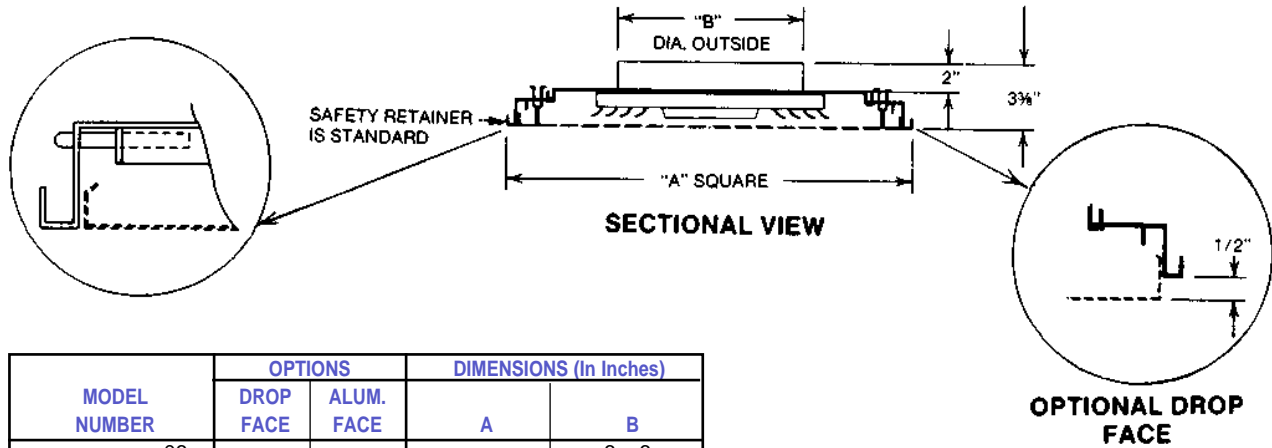
**T-bar Mount - Supply w/Square Neck w/Adjustable Curved Blades (SL/SPGC)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)			
	DROP FACE	ALUM. FACE	A	B	C	
SL/SPGC 11 4	N/A	A	11-3/4	6 x 6	3-1/4	
06				8 x 8		
SL/SPGC 22 4	D	A	23-3/4	6 x 6	3-1/2	
				06		8 x 8
				08		10 x 10
				10		12 x 12
				12		14 x 14
14	16 x 16					
16	18 x 18					

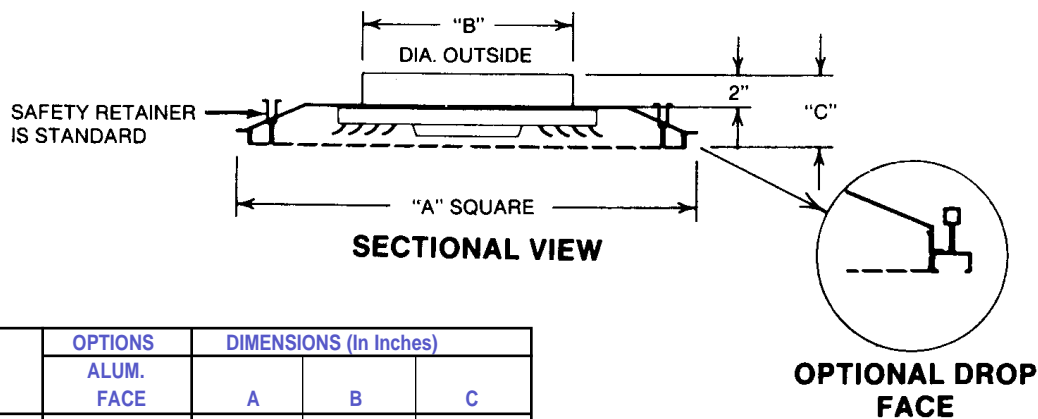
Perf. Face Sup. & Ret. Diffusers

**DIMENSIONAL DATA - Concealed Spline - Supply w/Square Neck w/Adjustable Curved Blades (SL/SPGC)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)	
	DROP FACE	ALUM. FACE	A	B
SL/SPGC 11 8 06	N/A	A	12	6 x 6
08				8 x 8
SL/SPGC 22 8	D	A	24	06 6 x 6
				08 8 x 8
				10 10 x 10
				12 12 x 12
				14 14 x 14
16 16 x 16				
18 18 x 18				

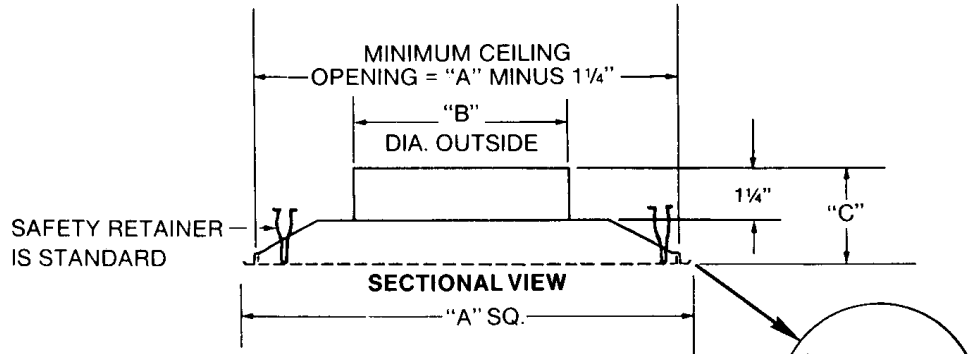
**Donn Finline® Ceiling - Supply w/Square Neck w/Adjustable Curved Blades (SL/SPGC)**



MODEL NUMBER	OPTIONS	DIMENSIONS (In Inches)		
	ALUM. FACE	A	B	C
SK/SPGC 11 9 06	A	11-3/4	6 x 6	3/9/16
08			8 x 8	
SL/SPGC 22 9	A	23-3/4	06 6 x 6	3-13/16
			08 8 x 8	
			10 10 x 10	
			12 12 x 12	
			14 14 x 14	
16 16 x 16				
18 18 x 18				

Perf. Face Supp. & Ret. Diffusers

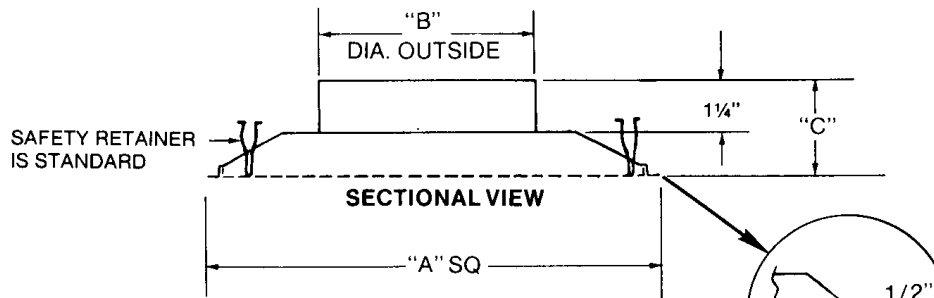
**DIMENSIONAL DATA - Surface Mount - Return w/Round Neck (SL/SPRB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)		
	DROP FACE	ALUM. FACE	A	B	C
SL/SPRB 11 2	N/A	A	12-1/2	05 4-7/8	2-1/2
06 5-7/8					
07 6-7/8					
08 7-7/8					
SL/SPRB 22 2	D	A	24-1/2	05 4-7/8	2-3/4
06 5/7/8					
07 6-7/8					
08 7-7/8					
10 9-7/8					
12 11-7/8					
14 13-7/8					
16 15-7/8					

**OPTIONAL DROP FACE**

**T-bar Mount - Return w/Round Neck (SL/SPRB)**



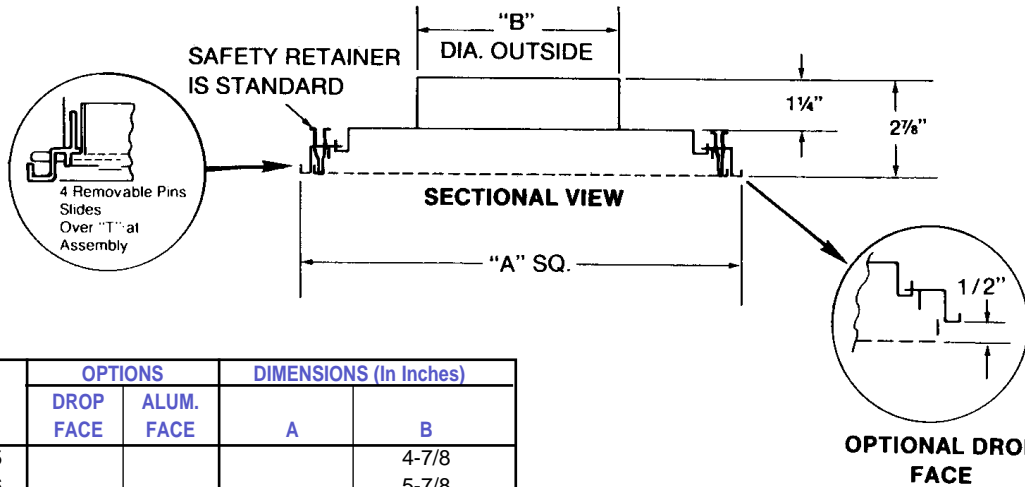
MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)		
	DROP FACE	ALUM. FACE	A	B	C
SL/SPRB 11 4	N/A	A	11-3/4	05 4-7/8	2-1/4
06 5-7/8					
07 6-7/8					
08 7-7/8					
SL/SPRB 22 4	D	A	23-3/4	05 4-7/8	2-3/4
06 5/7/8					
07 6-7/8					
08 7-7/8					
10 9-7/8					
12 11-7/8					
14 13-7/8					
16 15-7/8					

**OPTIONAL DROP FACE**

Perf. Face Sup. & Ret. Diffusers

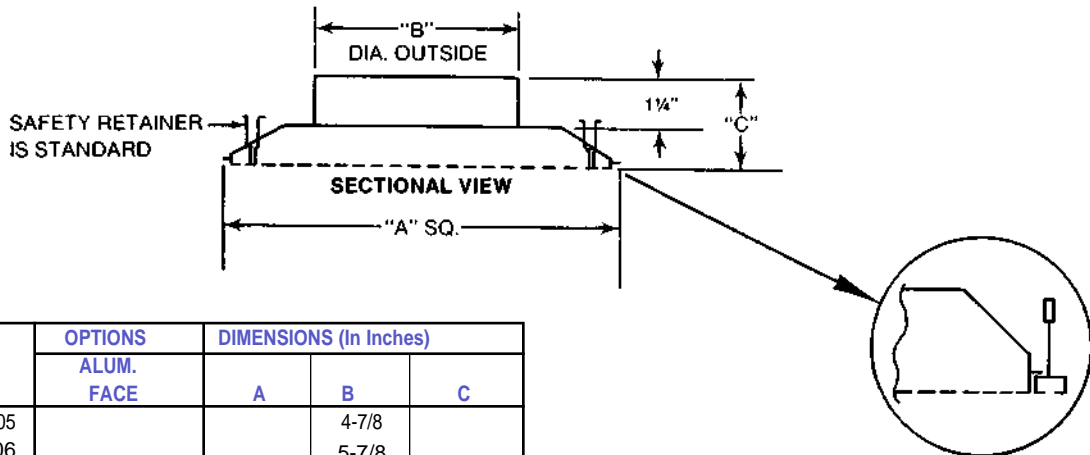


**DIMENSIONAL DATA - Concealed Spline - Return w/Round Neck (SL/SPRB)**



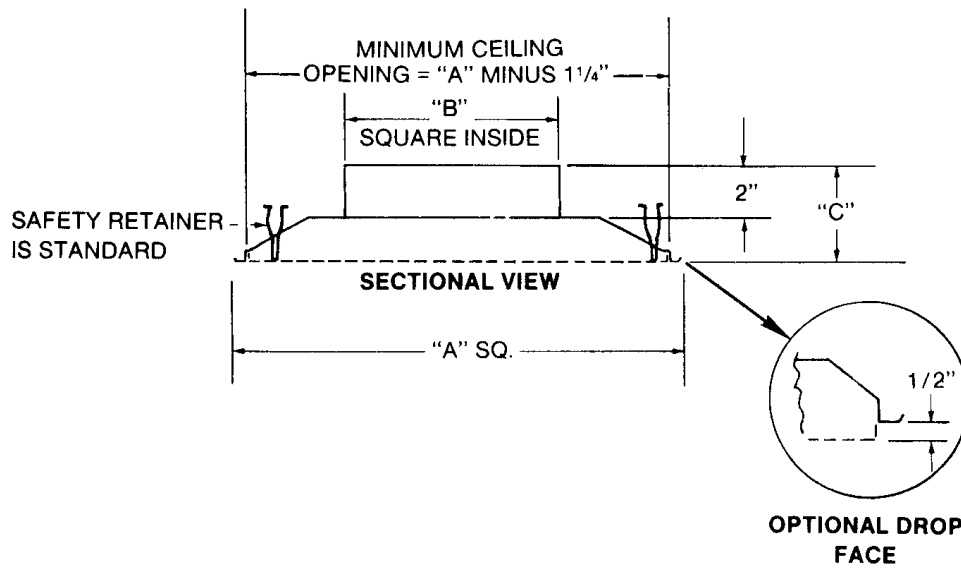
MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)	
	DROP FACE	ALUM. FACE	A	B
SL/SPRB 11 8	N/A	A	05	4-7/8
06			5-7/8	
07			6-7/8	
08			7-7/8	
SL/SPRB 22 8	D	A	05	4-7/8
06			5-7/8	
07			6-7/8	
08			7-7/8	
10			9-7/8	
12			11-7/8	
14			13-7/8	
16	15-7/8			

**Donn Finline® Ceiling - Return w/Round Neck (SL/SPRB)**

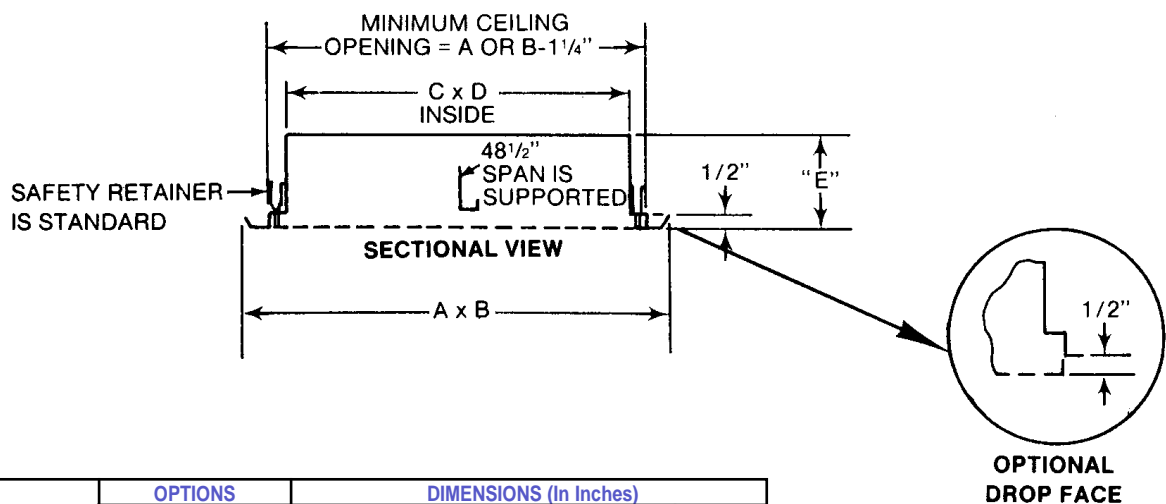


MODEL NUMBER	OPTIONS	DIMENSIONS (In Inches)		
	ALUM. FACE	A	B	C
SK/SPRB 11 9	A	11-3/4	05	4-7/8
06			5-7/8	
07			6-7/8	
08			7-7/8	
SL/SPRB 22 9	A	23-3/4	05	4-7/8
06			5-7/8	
07			6-7/8	
08			7-7/8	
10			9-7/8	
12			11-3/4	
14			13-3/4	
16	15-3/4			

**DIMENSIONAL DATA - Surface Mount - Return w/Square Neck (SL/SPJB)**

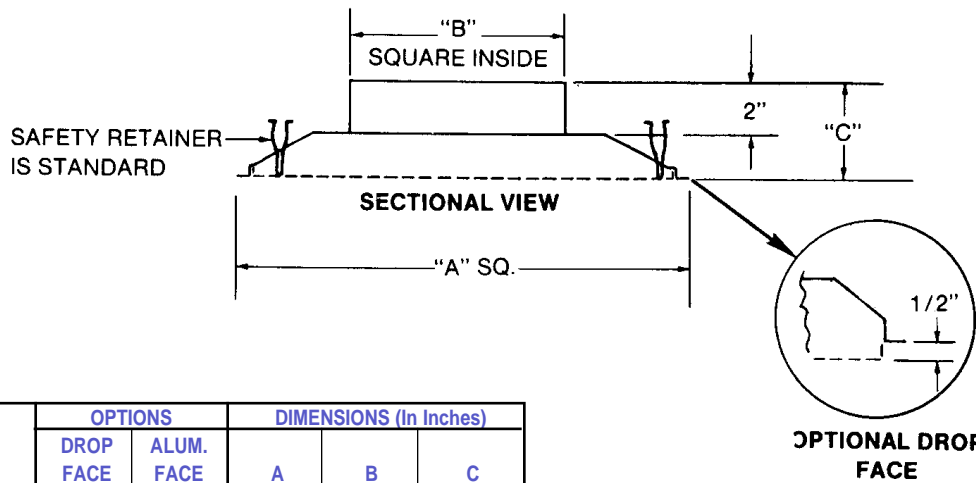


**Surface Mount - Return w/Square or Rectangular Neck (SL/SPJB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)				
	DROP FACE	ALUM. FACE	OVERALL		NECKS		E
			A	B	C	D	
SL/SPJB 11 2 10	N/A	A	12-1/2	12-1/2	10	10	2-5/16
SL/SPJB 12 2 13			12-1/2	24-1/2	10	22	
SL/SPJB 22 2 22	D	A	24-1/2	24-1/2	22	22	2-5/16
SL/SPJB 24 2 26			24-1/2	48-1/2	22	46	

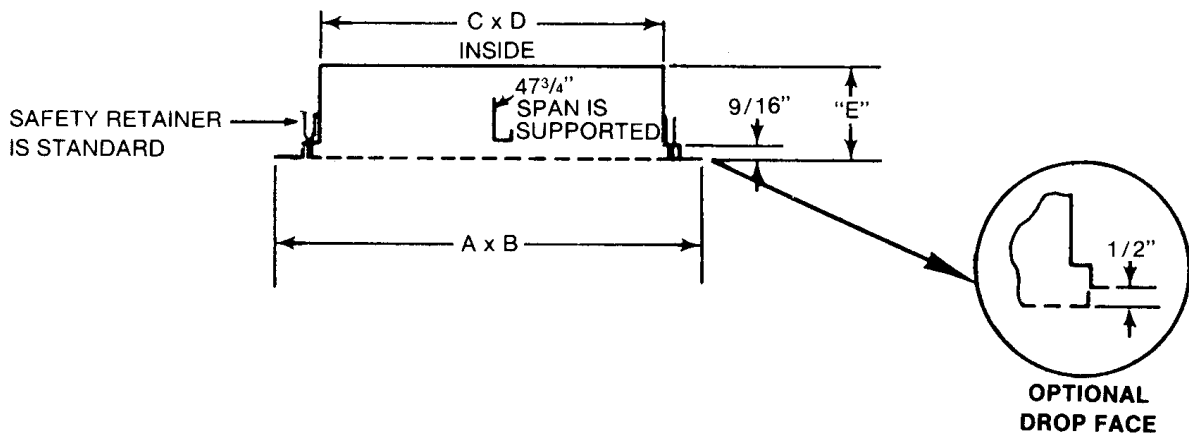
**DIMENSIONAL DATA - T-bar Mount - Return w/Square Neck (SL/SPJB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)		
	DROP FACE	ALUM. FACE	A	B	C
SL/SPJB 11 4 06 08	N/A	A	11-3/4	6 x 6 8 x 8	3-1/4
SL/SPJB 22 4 12 14 16 18	D	A	23-3/4	6 x 6 8 x 8 10 x 10 12 x 12 14 x 14 16 x 16 18 x 18	3-1/2

OPTIONAL DROP FACE

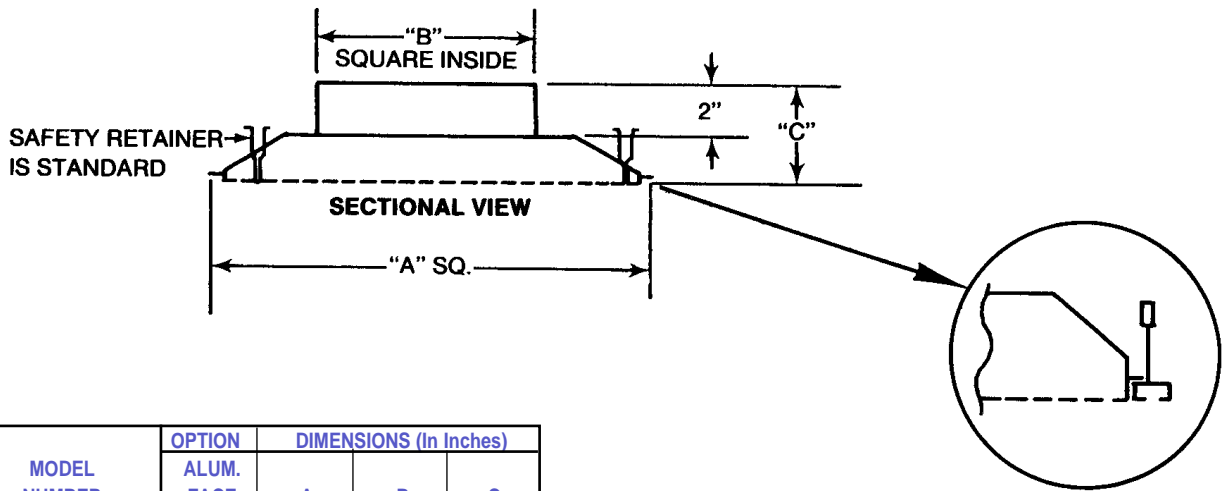
**T-bar Mount - Return w/Square or Rectangular Neck (SL/SPJB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)				
	DROP FACE	ALUM. FACE	OVERALL		NECKS		E
			A	B	C	D	
SL/SPJB 11 4 10	N/A	A	11-3/4	11-3/4	10	10	2-29/32
SL/SPJB 12 4 13			11-3/4	23-3/4	10	22	
SL/SPJB 22 4 22	D	A	23-3/4	23-3/4	22	22	2-29/32
SL/SPJB 24 4 26			23-3/4	47-3/4	22	46	

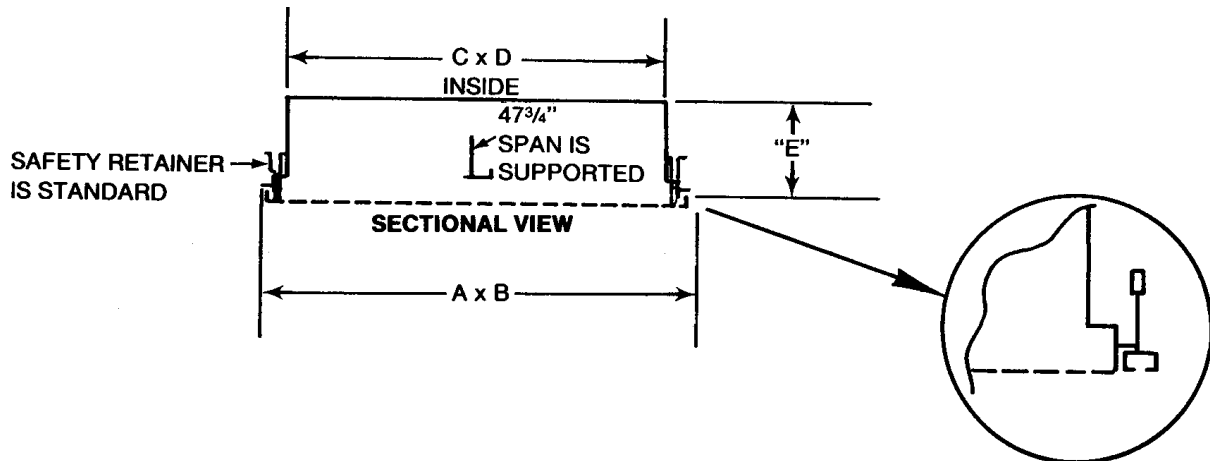
OPTIONAL DROP FACE

**DIMENSIONAL DATA - Donn Finline® Ceiling - Return w/Square Neck (SL/SPJB)**



MODEL NUMBER	OPTION	DIMENSIONS (In Inches)		
	ALUM. FACE	A	B	C
SL/SPJB 11 9 06	A	11-3/4	6 x 6	3-9/16
08			8 x 8	
06	A	23-3/4	6 x 6	3-13/16
08			8 x 8	
10			10 x 10	
SL/SPJB 22 9 12			12 x 12	
14			14 x 14	
16			16 x 16	
18	18 x 18			

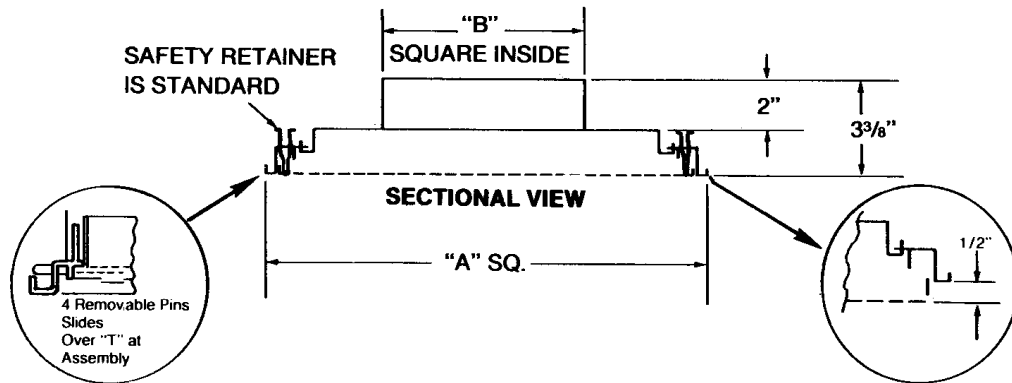
**Donn Finline® Ceiling - Return w/Square or Rectangular Neck (SL/SPJB)**



MODEL NUMBER	OPTION	ALUM. FACE	DIMENSIONS (In Inches)				
			OVERALL		NECKS		
			A	B	C	D	E
SL/SPJB 11 9 10	A	A	11-3/4	11-3/4	10	10	3-7/32
SL/SPJB 12 9 13			11-3/4	23-3/4	10	22	
SL/SPJB 22 9 22	A	A	23-3/4	23-3/4	22	22	3-7/32
SL/SPJB 24 9 26			23-3/4	47-3/4	22	46	

Perf. Face Sup. & Ret. Diffusers

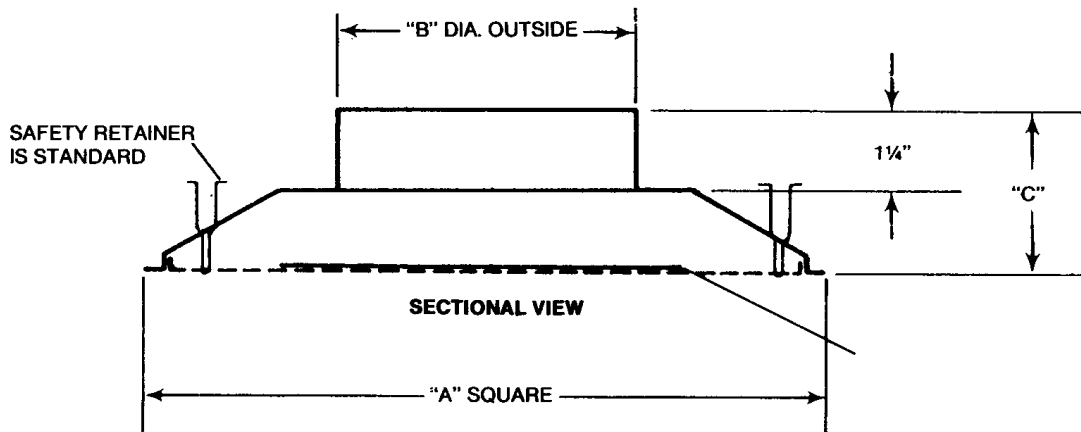
**DIMENSIONAL DATA - Concealed Spline - Return w/Square Neck (SL/SPJB)**



MODEL NUMBER	OPTIONS		DIMENSIONS (In Inches)	
	DROP FACE	ALUM. FACE	A	B
SL/SPJB 11 8	06	N/A	12	6 x 6
	08	A		8 x 8
	10			10 X 10
SL/SPJB 22 8	06	D	24	6 x 6
	08			8 x 8
	10			10 x 10
	12	A		12 x 12
	14			14 x 14
	16			16 x 16
	18			18 x 18

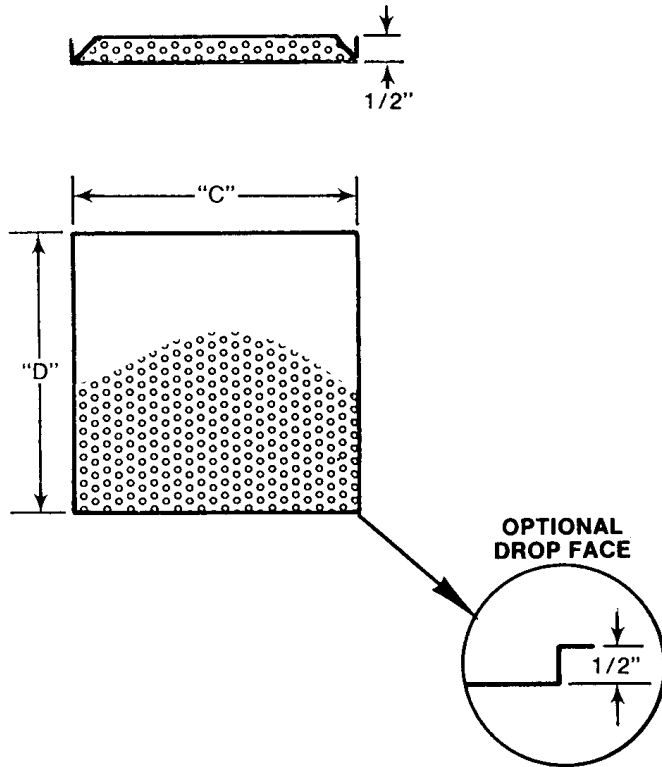
OPTIONAL DROP FACE

**T-bar Mount - Supply w/Round Neck - Fixed Air Pattern (SL/SPCB)**



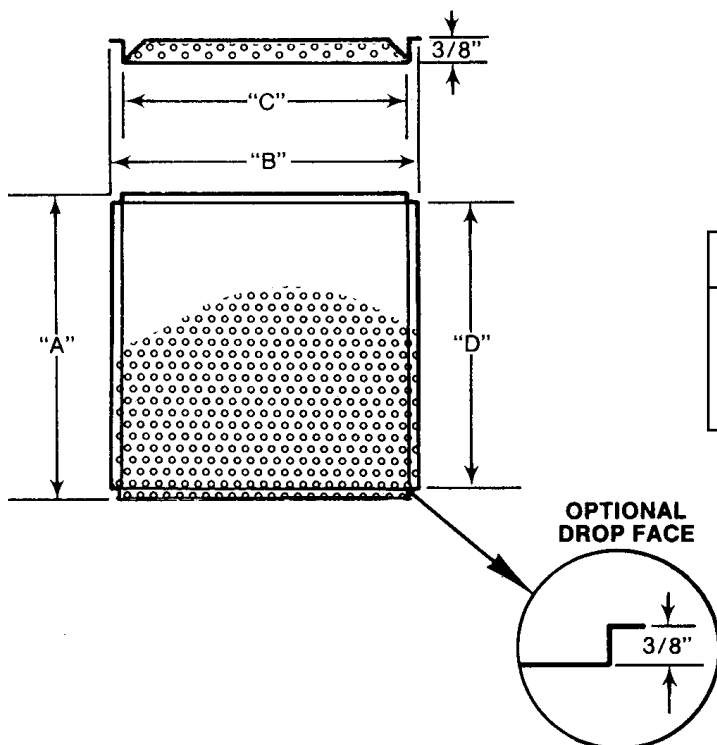
MODEL NUMBER	T-BAR MOUNT		
	A	B	C
SL/SPCB 22 4	06	5-7/8	
	08	7-7/8	
	10	9-7/8	
	12	11-7/8	2-3/4
	14	13-7/8	
	16	15-7/8	

**DIMENSIONAL DATA - T-bar Mount - Non-Ducted Return (SL/SPHB)**



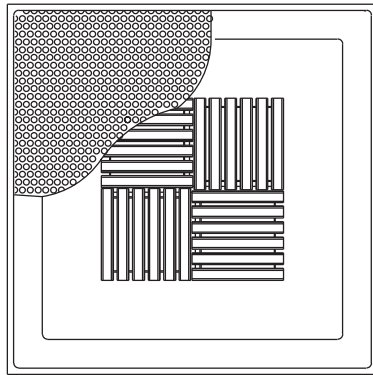
MODEL NUMBER	C	D
11 4	11-3/4	11-3/4
12 4	11-3/4	23-3/4
SL/SPHB 14 4	11-3/4	47-3/4
22 4	23-3/4	23-3/4
24 4	23-3/4	47-3/4

**Donn Finline<sup>®</sup> Ceiling - Non-Ducted Return (SL/SPHB)**



MODEL NUMBER	A	B	C	D
11 9	11-3/4	11-3/4	11-11/32	11-11/32
12 9	11-3/4	23-3/4	11-11/32	23-11/32
SL/SPHB 14 9	11-3/4	47-3/4	11-11/32	47-11/32
22 9	23-3/4	23-3/4	23-11/32	23-11/32
24 9	23-3/4	47-3/4	23-11/32	47-11/32





### Application

This diffuser is designed for use in commercial spaces where the room dimensions change and require a change in the air distribution plan. The cores are field adjustable without tools to all blow patterns. The perforated face masks the louvers from view.

### Standard Features

- Steel (SP) or aluminum (SL) construction.
- Core blades have hemmed edges for durability after repeated blow pattern changes.
- Square inlet sizes 6" x 6" through 18" x 18" in 2" increments on 24" x 24" face units.
- Square inlet sizes 6" x 6" and 8" x 8" available on 12" x 12" face units.
- Nominal face sizes 12" x 12" or 24" x 24".
- Square inlet is oversized to fit outside duct.
- Standard finish is electrocoat acrylic baked enamel.
- Standard color is #11 bright white.
- Fits T-bar, surface mount or Donn® Finline® ceilings.

### Optional Features

- Factory-mounted square-to-round transitions.
- Aluminum face on steel ceiling plate and cores (Opt. A) (p. A143).
- Drop Face (Opt. B, D) for 15/16" tegular ceilings (p. A143).
- Panels are available to enable the diffuser to fit larger T-bar grids, as follows (p. A143):

Option	Nom. Face	Fits this T-bar
P	24" x 24"	24" x 48"
Q	12" x 12"	24" x 24"
R	12" x 12"	12" x 24"

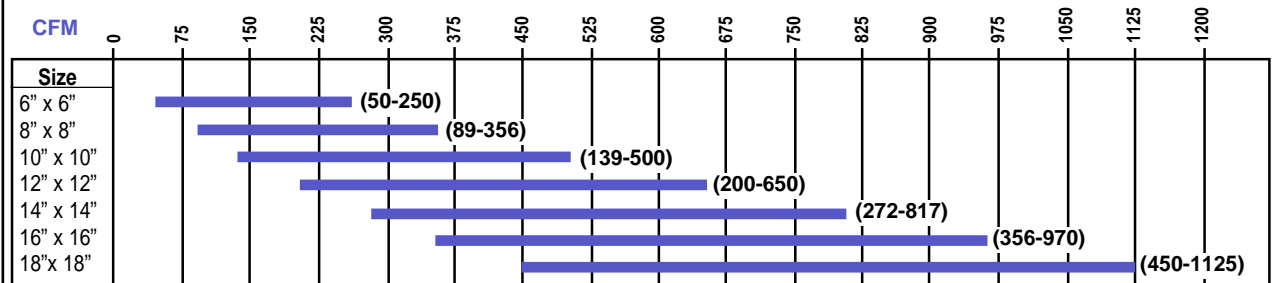
### Accessories

- For square inlet models, use damper KXAB (p. A436).
- For round neck models, use damper KXMB (p. A429).

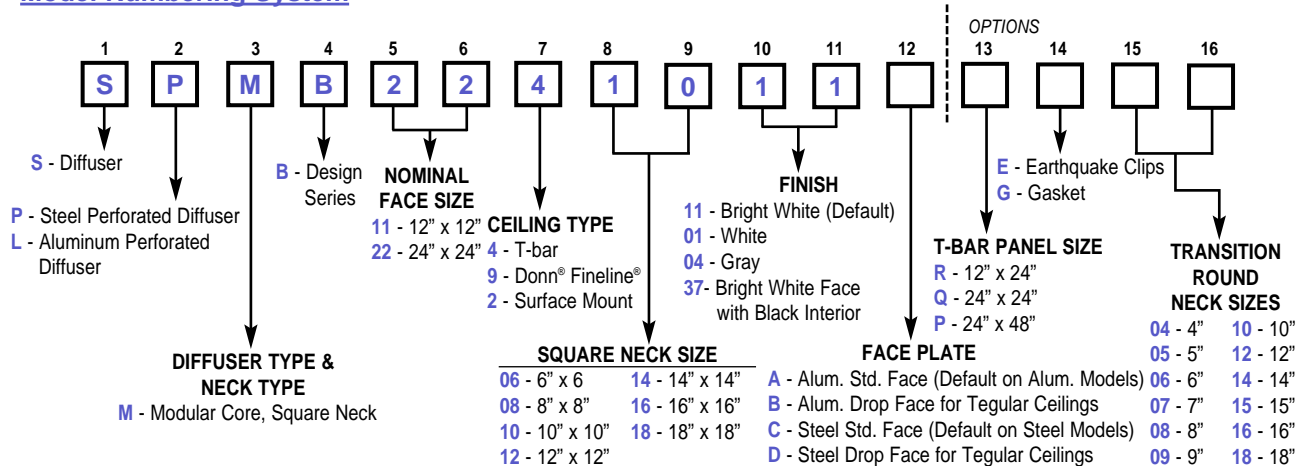
### Quick Select Chart

This shows units with:

- A maximum NC/RC of 35.
- A minimum face velocity of 200 FPM.



### Model Numbering System

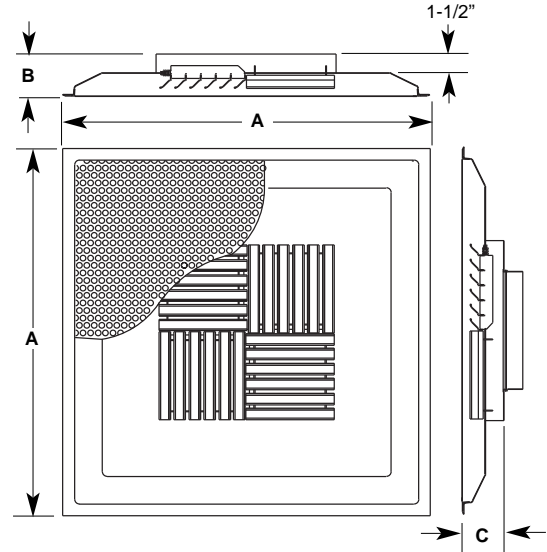
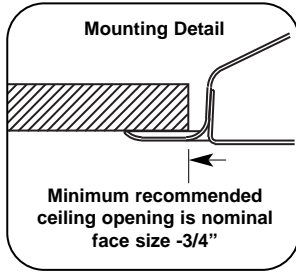


Perf. Face Supp. & Ret. Diffusers

**Surface Mount Frame  
(Frame Style 2)**

- Used in plaster and other hard ceilings.

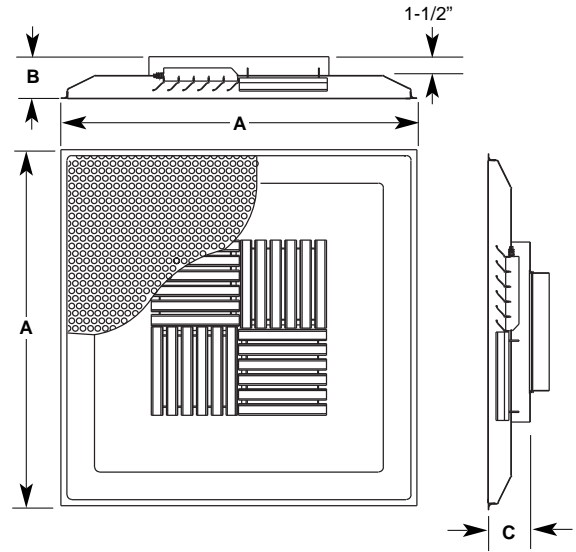
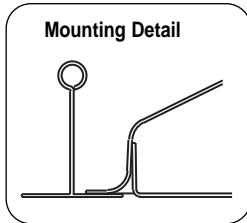
Dim.	Description	Nominal Face Size	
		12" x 12"	24" x 24"
A	Face O. D.	12-1/2"	24-1/2"
B	Sq. Neck Unit Ht.	2-15/16"	3-3/16"
C	Rd. Neck Unit Ht.	3-1/16"	3-5/16"



**T-bar Mount Frame  
(Frame Style 4)**

- Fits 15/16" flat-faced T-bar.
- Fits 9/16" flat-faced T-bar.
- Fits 9/16" reveal-face T-bar.
- Nominal Face sizes 12" x 12" or 24" x 24".

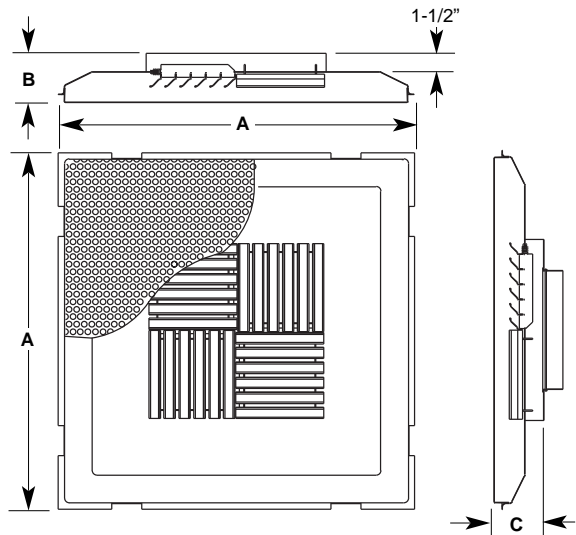
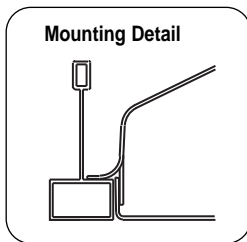
Dim.	Description	Nominal Face Size	
		12" x 12"	24" x 24"
A	Face O. D.	11-3/4"	23-3/4"
B	Sq. Neck Unit Ht.	2-15/16"	3-3/16"
C	Rd. Neck Unit Ht.	3-1/16"	3-5/16"



**Donn<sup>®</sup> Finline<sup>®</sup> Ceiling  
(Frame Style 9)**

- Fits Donn<sup>®</sup> Finline<sup>®</sup> and other brands.

Dim.	Description	Nominal Face Size	
		12" x 12"	24" x 24"
A	Face O. D.	11-3/4"	23-3/4"
B	Sq. Neck Unit Ht.	3-5/16"	3-9/16"
C	Rd. Neck Unit Ht.	3-3/8"	3-5/8"



Perf. Face Sup. & Ret. Diffusers

• 24" x 24" Nominal Face • Square Neck Sizes

	Duct Velocity (fpm)	200	300	400	500	600	700	800	900	1000	
	Velocity Pressure	.003	.006	.010	.016	.022	.031	.040	.051	.062	
6" x 6"	Air Flow (CFM)	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>	
	Total Pressure	.008	.019	.035	.058	.088	.124	.166	.217	.250	
	Sound (NC/RC)	—/—	—/—	—/—	16/15N	20/19N	24/23H	29/28H	34/32H	37/35H	
	Throw (Feet)	4-Way	1-2-4	2-3-6	3-4-9	4-5-11	5-6-12	6-7-13	7-8-14	8-10-15	9-11-16
		3-Way	1-2-5	3-4-8	4-5-11	5-6-14	6-8-15	8-9-17	9-10-18	11-12-19	12-14-21
		2-Way Corner	1-2-5	3-4-8	4-5-11	5-6-14	6-8-15	8-9-17	9-10-18	11-12-19	12-14-21
		2-Way Opposite	1-2-5	3-4-8	4-5-11	5-6-14	6-8-15	8-9-17	9-10-18	11-12-19	12-14-21
		1-Way	2-4-8	4-6-12	6-8-18	8-10-22	10-12-25	13-15-27	15-17-29	17-20-31	19-23-33
	8" x 8"	Air Flow (CFM)	<b>89</b>	<b>133</b>	<b>178</b>	<b>222</b>	<b>267</b>	<b>311</b>	<b>356</b>	<b>400</b>	<b>444</b>
		Total Pressure	.008	.021	.039	.065	.097	.138	.184	.240	.298
Sound (NC/RC)		—/—	—/—	15/14N	21/20N	26/25N	30/29H	35/34H	40/38H	43/41H	
Throw (Feet)		4-Way	1-2-5	3-4-7	4-5-10	5-6-12	6-8-14	7-9-15	9-10-16	10-12-18	11-13-19
		3-Way	2-3-6	3-5-9	5-7-13	6-8-16	8-10-18	10-11-20	11-13-21	13-15-23	14-17-25
		2-Way Corner	2-3-6	3-5-9	5-7-13	6-8-16	8-10-18	10-11-20	11-13-21	13-15-23	14-17-25
		2-Way Opposite	2-3-6	3-5-9	5-7-13	6-8-16	8-10-18	10-11-20	11-13-21	13-15-23	14-17-25
		1-Way	3-5-11	6-8-15	8-11-21	10-13-26	13-16-29	15-18-32	18-21-34	21-24-37	23-28-39
10" x 10"		Air Flow (CFM)	<b>139</b>	<b>208</b>	<b>278</b>	<b>347</b>	<b>417</b>	<b>486</b>	<b>556</b>	<b>625</b>	<b>694</b>
		Total Pressure	.009	.023	.044	.072	.109	.152	.203	.264	.336
	Sound (NC/RC)	—/—	11/10H	18/17N	25/24N	30/29N	34/34H	39/38H	44/42H	47/46H	
	Throw (Feet)	4-Way	2-3-6	3-5-9	5-6-12	6-8-14	7-9-16	9-10-17	10-12-19	12-14-20	13-15-21
		3-Way	2-4-8	4-6-11	6-8-15	8-10-18	10-12-20	11-14-22	13-15-24	15-17-26	17-20-28
		2-Way Corner	2-4-8	4-6-11	6-8-15	8-10-18	10-12-20	11-14-22	13-15-24	15-17-26	17-20-28
		2-Way Opposite	2-4-8	4-6-11	6-8-15	8-10-18	10-12-20	11-14-22	13-15-24	15-17-26	17-20-28
		1-Way	4-6-13	7-10-18	10-13-25	13-16-30	15-19-33	18-22-36	22-25-39	25-28-42	27-32-45
	12" x 12"	Air Flow (CFM)	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>1000</b>
		Total Pressure	.010	.025	.048	.080	.120	.170	.230	.298	.383
Sound (NC/RC)		—/—	13/13H	21/20N	28/27N	33/33N	28/37H	42/41H	47/45H	50/49H	
Throw (Feet)		4-Way	2-3-7	4-6-10	6-7-13	7-9-16	8-11-18	10-12-19	12-14-21	13-15-22	14-17-24
		3-Way	3-4-9	5-7-13	7-9-17	9-12-20	11-14-22	13-16-25	15-18-27	17-20-29	19-22-31
		2-Way Corner	3-4-9	5-7-13	7-9-17	9-12-20	11-14-22	13-16-25	15-18-27	17-20-29	19-22-31
		2-Way Opposite	3-4-9	5-7-13	7-9-17	9-12-20	11-14-22	13-16-25	15-18-27	17-20-29	19-22-31
		1-Way	4-7-15	8-12-20	12-15-28	14-19-33	18-22-37	21-25-40	25-28-43	28-32-47	30-36-50
14" x 14"		Air Flow (CFM)	<b>272</b>	<b>408</b>	<b>544</b>	<b>681</b>	<b>817</b>	<b>953</b>	<b>1089</b>	<b>1225</b>	<b>1361</b>
		Total Pressure	.012	.030	.057	.094	.142	.199	.268	.348	.438
	Sound (NC/RC)	—/—	16/15H	23/22N	30/29N	36/35N	40/40H	45/44H	50/48H	53/51H	
	Throw (Feet)	4-Way	2-4-8	5-6-11	6-8-15	8-10-17	10-12-19	11-14-21	13-15-23	15-17-24	16-19-26
		3-Way	3-5-10	6-8-14	8-11-19	10-13-22	12-16-25	15-18-27	17-20-29	19-22-32	21-24-24
		2-Way Corner	3-5-10	6-8-14	8-11-19	10-13-22	12-16-25	15-18-27	17-20-29	19-22-32	21-24-24
		2-Way Opposite	3-5-10	6-8-14	8-11-19	10-13-22	12-16-25	15-18-27	17-20-29	19-22-32	21-24-24
		1-Way	5-8-17	10-13-23	13-18-31	16-22-36	20-25-41	23-29-44	27-32-47	31-36-51	34-39-54
	16" x 16"	Air Flow (CFM)	<b>356</b>	<b>533</b>	<b>711</b>	<b>889</b>	<b>1067</b>	<b>1244</b>	<b>1422</b>	<b>1600</b>	<b>1778</b>
		Total Pressure	.014	.035	.066	.110	.166	.235	.319	.414	.526
Sound (NC/RC)		—/—	17/16H	25/24N	33/32N	38/38N	43/42H	47/46H	52/50H	56/53H	
Throw (Feet)		4-Way	3-4-9	5-7-12	7-9-16	9-12-19	11-14-21	12-15-23	14-17-25	16-19-26	17-20-28
		3-Way	3-6-12	7-9-16	9-12-20	11-15-24	14-18-27	16-20-29	18-22-32	21-25-34	23-26-37
		2-Way Corner	3-6-12	7-9-16	9-12-20	11-15-24	14-18-27	16-20-29	18-22-32	21-25-34	23-26-37
		2-Way Opposite	3-6-12	7-9-16	9-12-20	11-15-24	14-18-27	16-20-29	18-22-32	21-25-34	23-26-37
		1-Way	6-9-19	11-15-25	15-20-34	18-25-39	22-28-44	26-32-47	30-35-51	34-39-55	37-43-59
18" x 18"		Air Flow (CFM)	<b>450</b>	<b>675</b>	<b>900</b>	<b>1125</b>	<b>1350</b>	<b>1575</b>	<b>1800</b>	<b>2025</b>	<b>2250</b>
		Total Pressure	.017	.041	.079	.129	.198	.276	.374	.488	.612
	Sound (NC/RC)	11/10H	19/18H	27/26N	35/34N	40/40N	45/44H	49/48H	54/51H	57/55H	
	Throw (Feet)	4-Way	3-5-10	6-8-13	8-10-17	10-13-20	12-15-23	14-17-24	16-19-26	18-20-28	19-22-30
		3-Way	4-6-13	8-10-17	10-14-22	12-17-26	15-19-29	17-22-31	20-25-34	23-27-36	25-29-39
		2-Way Corner	4-6-13	8-10-17	10-14-22	12-17-26	15-19-29	17-22-31	20-25-34	23-27-36	25-29-39
		2-Way Opposite	4-6-13	8-10-17	10-14-22	12-17-26	15-19-29	17-22-31	20-25-34	23-27-36	25-29-39
		1-Way	7-10-21	12-17-27	17-22-37	20-27-42	24-31-47	29-35-50	32-39-55	37-43-59	40-46-63

**Notes on Performance Data:**

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- Testing was conducted in isothermal conditions.
- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- A "—" indicates an NC or RC value of less than 10.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w. g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throws are given in feet to terminal velocities of 150, 100 & 50 fpm, respectively.
- Sound Data is given in both NC and RC. NC is first with RC second, separated by a slash.

**• 24" x 24" Nominal Face**

**• Round Neck Sizes**

Duct Velocity (fpm)		200	300	400	500	600	700	800	900	1000
Velocity Pressure		.003	.006	.010	.016	.022	.031	.040	.051	.062
<b>6" x 6" To</b>	Air Flow (CFM)	<b>39</b>	<b>59</b>	<b>79</b>	<b>98</b>	<b>118</b>	<b>138</b>	<b>157</b>	<b>177</b>	<b>196</b>
	Total Pressure	.007	.018	.035	.058	.087	.123	.165	.215	.274
<b>6" Round</b>	Sound (NC/RC)	—/—	—/—	—/—	11/12N	16/16N	22/21H	27/25H	31/28H	34/31H
	4-Way	1-2-4	2-3-6	3-4-8	4-5-10	5-6-11	6-7-12	7-8-13	8-9-14	8-10-15
Throw (Feet)	3-Way	1-2-5	2-3-7	3-5-10	5-6-13	6-7-14	7-8-16	9-10-17	10-11-18	11-13-19
	2-Way Corner	1-2-5	2-3-7	3-5-10	5-6-13	6-7-14	7-8-16	9-10-17	10-11-18	11-13-19
	2-Way Opposite	1-2-5	2-3-7	3-5-10	5-6-13	6-7-14	7-8-16	9-10-17	10-11-18	11-13-19
	1-Way	2-3-7	4-6-11	6-7-16	8-9-20	9-11-23	11-13-25	14-15-27	16-18-29	17-21-31
	8" x 8" To	Air Flow (CFM)	<b>200</b>	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>
<b>6" Round</b>	Total Pressure	.007	.019	.036	.060	.091	.128	.172	.224	.283
	Sound (NC/RC)	—/—	—/—	—/—	15/15N	19/19N	26/25H	31/29H	35/31H	38/34H
Throw (Feet)	4-Way	1-2-4	2-3-6	3-4-9	4-5-11	5-6-12	6-7-13	7-8-14	8-10-15	9-11-16
	3-Way	1-2-5	2-3-8	4-5-11	5-7-14	6-8-15	8-9-17	9-11-18	11-12-19	12-14-21
	2-Way Corner	1-2-5	2-3-8	4-5-11	5-7-14	6-8-15	8-9-17	9-11-18	11-12-19	12-14-21
	2-Way Opposite	1-2-5	2-3-8	4-5-11	5-7-14	6-8-15	8-9-17	9-11-18	11-12-19	12-14-21
	1-Way	2-3-8	4-6-12	6-8-18	9-10-22	10-12-25	12-15-27	15-17-29	17-20-31	19-23-34
<b>8" x 8" To</b>	Air Flow (CFM)	<b>70</b>	<b>105</b>	<b>140</b>	<b>175</b>	<b>210</b>	<b>244</b>	<b>279</b>	<b>314</b>	<b>349</b>
	Total Pressure	.008	.020	.038	.063	.095	.133	.180	.234	.293
<b>8" Round</b>	Sound (NC/RC)	—/—	—/—	12/12N	17/17N	22/21N	28/27H	34/31H	37/34H	41/37H
	4-Way	1-2-5	2-3-7	3-5-10	5-6-12	6-7-13	7-8-14	8-9-15	9-11-17	10-12-18
Throw (Feet)	3-Way	2-3-6	3-4-9	5-6-12	6-8-15	7-9-17	9-10-18	10-12-20	12-14-21	13-16-23
	2-Way Corner	2-3-6	3-4-9	5-6-12	6-8-15	7-9-17	9-10-18	10-12-20	12-14-21	13-16-23
	2-Way Opposite	2-3-6	3-4-9	5-6-12	6-8-15	7-9-17	9-10-18	10-12-20	12-14-21	13-16-23
	1-Way	2-4-10	5-7-14	7-10-20	10-12-24	12-14-27	14-17-30	17-19-32	19-22-34	21-25-37
	<b>10" x 10" To</b>	Air Flow (CFM)	<b>70</b>	<b>105</b>	<b>140</b>	<b>175</b>	<b>210</b>	<b>244</b>	<b>279</b>	<b>314</b>
Total Pressure		.008	.021	.040	.066	.099	.139	.188	.243	.306
<b>8" Round</b>	Sound (NC/RC)	—/—	—/—	14/14N	19/19N	24/23N	30/29H	36/33H	40/36H	43/39H
	4-Way	1-2-5	2-3-7	3-5-10	5-6-12	6-7-14	7-9-15	9-10-16	10-11-18	11-13-19
Throw (Feet)	3-Way	2-3-6	3-4-9	5-6-13	6-8-16	8-10-18	9-11-19	11-13-21	13-15-22	14-17-24
	2-Way Corner	2-3-6	3-4-9	5-6-13	6-8-16	8-10-18	9-11-19	11-13-21	13-15-22	14-17-24
	2-Way Opposite	2-3-6	3-4-9	5-6-13	6-8-16	8-10-18	9-11-19	11-13-21	13-15-22	14-17-24
	1-Way	2-4-10	5-8-15	8-11-21	10-13-25	13-15-29	15-18-32	18-20-34	20-24-36	23-27-39
	<b>10" x 10" To</b>	Air Flow (CFM)	<b>109</b>	<b>164</b>	<b>218</b>	<b>273</b>	<b>327</b>	<b>382</b>	<b>437</b>	<b>491</b>
Total Pressure		.009	.022	.042	.069	.104	.145	.196	.253	.319
<b>10" Round</b>	Sound (NC/RC)	—/—	—/—	16/15N	20/20N	26/25N	32/31H	38/35H	41/38H	44/41H
	4-Way	1-3-6	3-4-8	4-6-11	5-7-13	7-8-15	8-10-16	10-11-17	11-12-19	12-14-20
Throw (Feet)	3-Way	2-3-7	4-5-10	5-7-14	7-9-17	9-11-19	10-12-21	12-14-22	14-16-24	15-18-26
	2-Way Corner	2-3-7	4-5-10	5-7-14	7-9-17	9-11-19	10-12-21	12-14-22	14-16-24	15-18-26
	2-Way Opposite	2-3-7	4-5-10	5-7-14	7-9-17	9-11-19	10-12-21	12-14-22	14-16-24	15-18-26
	1-Way	3-5-11	6-9-16	9-12-23	11-15-27	14-17-31	17-20-34	20-22-37	22-26-39	25-29-42
	<b>12" x 12" To</b>	Air Flow (CFM)	<b>109</b>	<b>164</b>	<b>218</b>	<b>273</b>	<b>327</b>	<b>382</b>	<b>437</b>	<b>491</b>
Total Pressure		.009	.023	.044	.072	.109	.152	.205	.265	.335
<b>10" Round</b>	Sound (NC/RC)	—/—	10/10H	17/17N	22/22N	28/26N	34/33H	39/37H	43/40H	46/43H
	4-Way	1-3-6	3-4-8	4-6-11	5-7-14	7-9-15	8-10-17	10-11-18	11-13-20	12-15-21
Throw (Feet)	3-Way	2-3-7	4-5-11	5-7-15	7-10-18	9-11-20	11-13-22	13-15-23	15-17-25	16-19-27
	2-Way Corner	2-3-7	4-5-11	5-7-15	7-10-18	9-11-20	11-13-22	13-15-23	15-17-25	16-19-27
	2-Way Opposite	2-3-7	4-5-11	5-7-15	7-10-18	9-11-20	11-13-22	13-15-23	15-17-25	16-19-27
	1-Way	3-5-12	6-9-17	9-13-24	12-16-29	15-18-32	18-21-35	21-24-39	23-27-41	26-31-44

**Notes on Performance Data:**

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- Testing was conducted in isothermal conditions.
- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- A "—" indicates an NC or RC value of less than 10.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w. g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throws are given in feet to terminal velocities of 150, 100 & 50 fpm, respectively.
- Sound Data is given in both NC and RC. NC is first with RC second, separated by a slash.

Perf. Face Sup. & Ret. Diffusers

• **24" x 24" Nominal Face**  
 • **Round Neck Sizes**

Duct Velocity (fpm)	200	300	400	500	600	700	800	900	1000
Velocity Pressure	.003	.006	.010	.016	.022	.031	.040	.051	.062
<b>12" x 12" To Air Flow (CFM)</b>	<b>157</b>	<b>236</b>	<b>314</b>	<b>393</b>	<b>471</b>	<b>550</b>	<b>629</b>	<b>707</b>	<b>786</b>
<b>12" Round</b> Total Pressure	.010	.024	.046	.076	.114	.159	.214	.277	.351
Sound (NC/RC)	—/—	11/11H	18/18N	23/23N	29/28N	35/34H	41/38H	44/41H	48/45H
Throw (Feet)	4-Way	2-3-6	4-5-9	5-7-12	6-8-15	8-10-16	9-11-18	11-12-19	12-14-21
	3-Way	2-4-8	5-6-12	6-8-16	8-11-19	10-12-21	12-14-23	14-16-25	16-18-27
	2-Way Corner	2-4-8	5-6-12	6-8-16	8-11-19	10-12-21	12-14-23	14-16-25	16-18-27
	2-Way Opposite	2-4-8	5-6-12	6-8-16	8-11-19	10-12-21	12-14-23	14-16-25	16-18-27
	1-Way	4-6-13	7-10-19	10-14-26	13-17-31	16-20-34	19-23-37	22-26-41	25-29-44
28-33-46									
<b>14" x 14" To Air Flow (CFM)</b>	<b>157</b>	<b>236</b>	<b>314</b>	<b>393</b>	<b>471</b>	<b>550</b>	<b>629</b>	<b>707</b>	<b>786</b>
<b>12" Round</b> Total Pressure	.010	.025	.049	.081	.121	.171	.231	.300	.372
Sound (NC/RC)	—/—	12/12H	19/19N	25/24N	30/29N	37/36H	42/40H	46/43H	49/46H
Throw (Feet)	4-Way	2-3-6	4-5-9	5-7-12	6-9-15	8-10-17	9-11-19	11-13-20	13-15-22
	3-Way	2-4-8	5-6-12	7-9-16	8-11-20	10-13-22	12-15-24	14-17-26	17-19-28
	2-Way Corner	2-4-8	5-6-12	7-9-16	8-11-20	10-13-22	12-15-24	14-17-26	17-19-28
	2-Way Opposite	2-4-8	5-6-12	7-9-16	8-11-20	10-13-22	12-15-24	14-17-26	17-19-28
	1-Way	4-6-14	8-11-20	11-15-27	14-18-32	17-21-36	20-24-39	23-27-42	26-31-46
29-34-48									
<b>14" x 14" To Air Flow (CFM)</b>	<b>214</b>	<b>321</b>	<b>428</b>	<b>535</b>	<b>642</b>	<b>749</b>	<b>856</b>	<b>963</b>	<b>1069</b>
<b>14" Round</b> Total Pressure	.011	.027	.052	.086	.129	.184	.249	.324	.413
Sound (NC/RC)	—/—	13/13H	20/20N	26/25N	32/31N	38/37H	43/41H	47/44H	50/47H
Throw (Feet)	4-Way	2-4-7	4-6-10	6-8-13	7-10-16	9-11-18	10-12-20	12-14-21	14-16-23
	3-Way	3-4-9	5-7-13	7-10-17	9-12-21	11-14-23	13-16-25	15-18-27	17-20-29
	2-Way Corner	3-4-9	5-7-13	7-10-17	9-12-21	11-14-23	13-16-25	15-18-27	17-20-29
	2-Way Opposite	3-4-9	5-7-13	7-10-17	9-12-21	11-14-23	13-16-25	15-18-27	17-20-29
	1-Way	4-7-15	9-12-21	12-16-29	15-20-34	18-23-38	21-26-41	25-29-44	28-33-48
31-36-51									
<b>16" x 16" To Air Flow (CFM)</b>	<b>214</b>	<b>321</b>	<b>428</b>	<b>535</b>	<b>642</b>	<b>749</b>	<b>856</b>	<b>963</b>	<b>1069</b>
<b>14" Round</b> Total Pressure	.011	.028	.059	.091	.138	.196	.267	.347	.442
Sound (NC/RC)	—/—	14/13H	21/21N	27/26N	33/32N	39/38H	44/42H	48/45H	51/48H
Throw (Feet)	4-Way	2-4-7	4-6-10	6-8-14	7-10-16	9-11-18	10-13-20	12-14-22	14-16-23
	3-Way	3-4-10	5-7-13	7-10-18	9-13-22	11-15-24	13-17-26	16-19-28	18-21-30
	2-Way Corner	3-4-10	5-7-13	7-10-18	9-13-22	11-15-24	13-17-26	16-19-28	18-21-30
	2-Way Opposite	3-4-10	5-7-13	7-10-18	9-13-22	11-15-24	13-17-26	16-19-28	18-21-30
	1-Way	4-7-16	9-12-22	13-17-30	15-21-35	19-24-39	22-27-42	26-30-46	29-34-49
32-38-53									
<b>16" x 16" To Air Flow (CFM)</b>	<b>279</b>	<b>419</b>	<b>559</b>	<b>698</b>	<b>838</b>	<b>978</b>	<b>1117</b>	<b>1257</b>	<b>1397</b>
<b>16" Round</b> Total Pressure	.012	.030	.058	.097	.147	.208	.285	.371	.472
Sound (NC/RC)	—/—	15/14H	22/22N	28/27N	34/33N	40/39H	45/43H	49/46H	52/49H
Throw (Feet)	4-Way	2-4-8	5-6-11	6-8-15	8-11-17	9-12-19	11-14-21	13-15-23	15-17-24
	3-Way	3-5-11	6-8-14	8-11-19	10-14-23	12-16-25	14-18-27	17-20-29	19-22-32
	2-Way Corner	3-5-11	6-8-14	8-11-19	10-14-23	12-16-25	14-18-27	17-20-29	19-22-32
	2-Way Opposite	3-5-11	6-8-14	8-11-19	10-14-23	12-16-25	14-18-27	17-20-29	19-22-32
	1-Way	5-8-17	10-13-23	13-18-31	16-22-36	20-26-41	24-29-44	27-32-48	31-36-51
34-30-55									
<b>18" x 18" To Air Flow (CFM)</b>	<b>354</b>	<b>530</b>	<b>707</b>	<b>884</b>	<b>1061</b>	<b>1238</b>	<b>1414</b>	<b>1591</b>	<b>1768</b>
<b>18" Round</b> Total Pressure	.013	.034	.065	.108	.164	.233	.308	.414	.519
Sound (NC/RC)	—/—	16/16H	24/23N	30/29N	36/35N	42/41H	47/45H	51/48H	54/51H
Throw (Feet)	4-Way	3-4-9	5-7-12	7-9-16	9-12-19	10-14-21	12-15-22	14-17-24	16-19-26
	3-Way	3-6-12	7-9-16	9-12-20	11-15-24	14-18-27	16-20-29	19-22-32	21-25-34
	2-Way Corner	3-6-12	7-9-16	9-12-20	11-15-24	14-18-27	16-20-29	19-22-32	21-25-34
	2-Way Opposite	3-6-12	7-9-16	9-12-20	11-15-24	14-18-27	16-20-29	19-22-32	21-25-34
	1-Way	6-9-19	11-15-25	15-20-34	18-25-39	22-28-44	26-32-47	30-35-51	34-40-55
37-43-59									

**Notes on Performance Data:**

- Performance data is based on tests conducted in accordance with ANSI/ASHRAE Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.
- Sound level values are based on a room absorption of 10db re 10<sup>-12</sup> watts.
- A "—" indicates an NC or RC value of less than 10.

**Units of Measure Used:**

- Velocity is given in Feet per minute (FPM).
- Pressure is given in Inches of Water (w. g.).
- Flows are given in Cubic Feet per Minute (CFM).
- Throws are given in feet to terminal velocities of 150, 100 & 50 fpm, respectively.
- Sound Data is given in both NC and RC. NC is first with RC second, separated by a slash.



**T-bar Panel (Options P, Q & R)**

**Application**

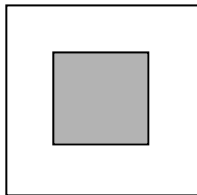
This option is used when the ceiling style requires a face or panel O. D. that is larger than the face of the diffuser. As an example, when the design calls for a 24" x 24" face, but the ceiling requires a 24" x 48" unit.

**Features**

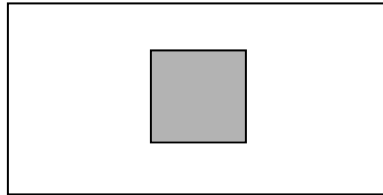
- Option P is a panel with a 24" x 48" nominal size, and allows diffusers with 12" x 12" or 24" x 24" nominal face sizes to lay into 24" x 48" suspended ceiling.
- Option Q is a panel with a 24" x 24" nominal size, and allows a diffuser with a 12" x 12" nominal face size to lay into 24" x 24" suspended ceilings.
- Option R is a panel with a 12" x 24" nominal size, and allows diffusers with 12" x 12" nominal face size to lay into 12" x 24" suspended ceilings.
- All three options fit the following suspended ceilings as standard. Panels to fit other ceiling styles are available on request.
  - 15/16" flat face T-bar
  - 9/16" flat face T-bar
  - 9/16" narrow reveal T-bar



**Option R**  
12" x 12" face unit set in a 12" x 24" panel



**Option Q**  
A 12" x 12" face unit set in a 24" x 24" panel



**Option P**  
A 12" x 12" face unit set in a 24" x 48" panel



**Option P**  
A 24" x 24" face unit set in a 24" x 48" panel

**Face Plate Options (Options A, B, C & D)**

**Application**

Certain suspended ceiling styles call for the face to project below the face of the grid, for the purpose of being flush with a tegular ceiling tile. Carnes offers all of its perforated face diffusers with a choice of flush face (for standard ceilings) or drop face (for tegular ceilings).

**Option A Features**

- Aluminum Flush Face face plate.
- Standard for SL aluminum perforated diffusers.
- Available as an option on SP steel perforated diffusers.

**Option B Features**

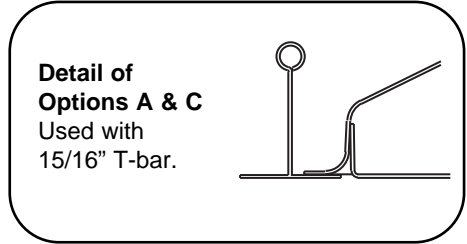
- Use with t-bar model for tegular ceilings.
- Aluminum Drop Face face plate.
- Available as an option on SL aluminum perforated diffusers.
- Available as an option on SP steel perforated diffusers.

**Option C Features**

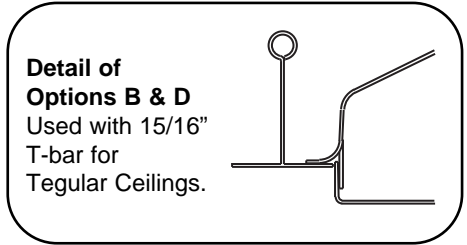
- Steel Flush Face face plate.
- Standard for SP steel perforated diffusers.

**Option D Features**

- Use with t-bar model for tegular ceilings.
- Steel drop face face plate.
- Available as an option on SP steel perforated diffusers.



**Detail of Options A & C**  
Used with 15/16" T-bar.



**Detail of Options B & D**  
Used with 15/16" T-bar for Tegular Ceilings.