




	<p>PRISM This supply diffuser features an arcuate faceplate. Center square appliqué offers nine standard colors to match interior décor.</p>
	<p>PLQ & 5PLQ This supply diffuser features a square plaque faceplate.</p>
	<p>PLQR This supply diffuser features a round plaque faceplate.</p>
	<p>PLQLT This supply diffuser features a square plaque face plate and insulated backpan for low-temperature applications.</p>
	<p>PLQIMP This supply diffuser features a square plaque faceplate with an integrated multi-port ring.</p>
	<p>KSD This architectural supply diffuser features a center swirl.</p>

PRISM

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PLQ, 5PLQ, PLQR, PLQLT, 5PLQLT

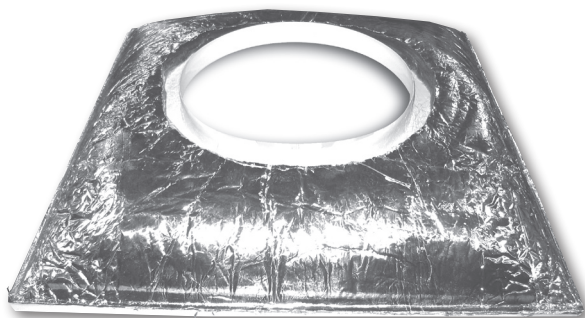
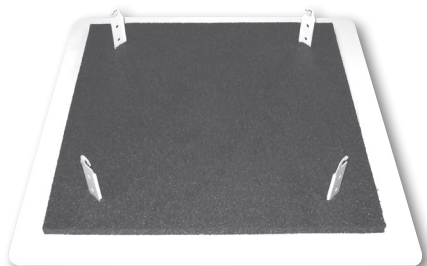
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PLQIMP

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KSD

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*PLQLT, Face View**PLQLT, Back View of Backpan**PLQLT, Back View of Plaque***Introduction: PLQLT, 5PLQLT**

The PLQLT architectural ceiling diffuser provides the building designer with the desired appearance and superior performance of a uniform, 360° horizontal discharge air pattern while providing condensation resistance.

The 24"x24" PLQLT has a square faceplate made of one-piece, non-folded material with rounded corners, backed by 3/8" thick cellular liner that insulates the plaque from cold supply air. Held in place by hooks that lock into the backpan, the single faceplate gives the diffuser reduced pressure drops and a quiet sound profile. The one-piece stamped backpan provides smooth, consistent corners, exacting dimensions, and performance tolerances and is covered with a foil faced R-6 formed fiberglass backing to provide excellent condensation resistance. Additionally, the removable faceplate offers easy duct and damper access.

MODEL

PLQLT - Square Plaque-Style Ceiling Diffuser with R-6 Rigid Fiberglass Insulated Backpan and 3/8" Insulated Plaque Face, Steel Construction

5PLQLT - Square Plaque-Style Ceiling Diffuser with R-6 Rigid Fiberglass Insulated Backpan and 3/8" Insulated Plaque Face, Aluminum Construction

PANEL SIZE

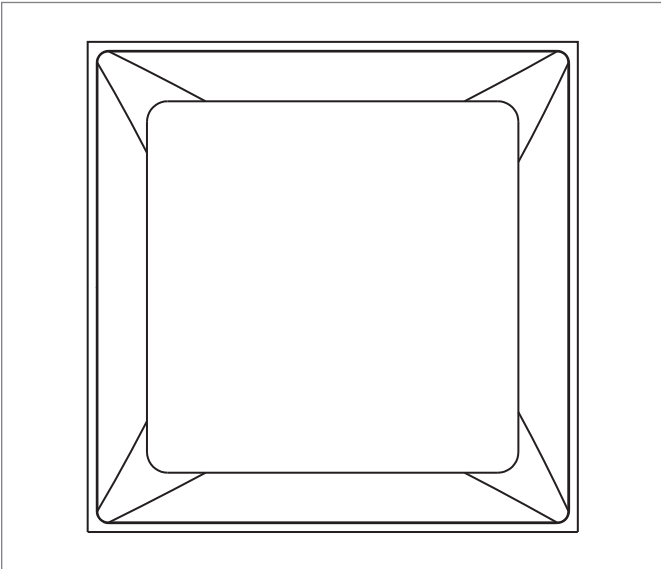
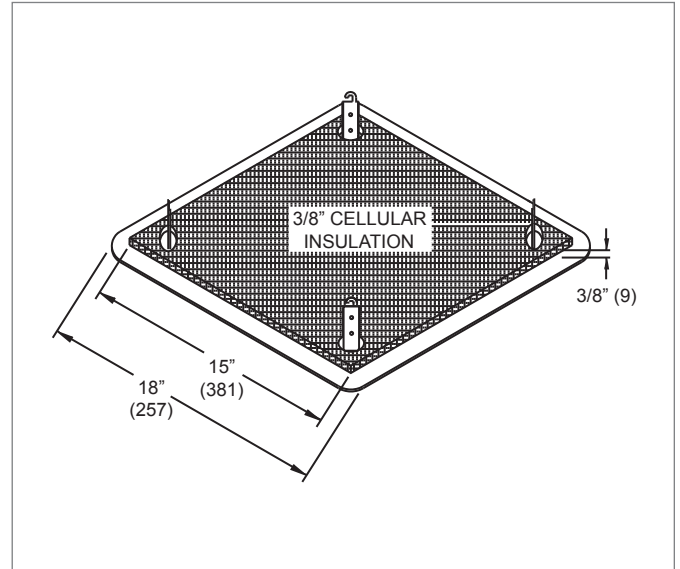
- 24"x24" (Plaque drops 1/4" below ceiling.)

ACCESSORIES

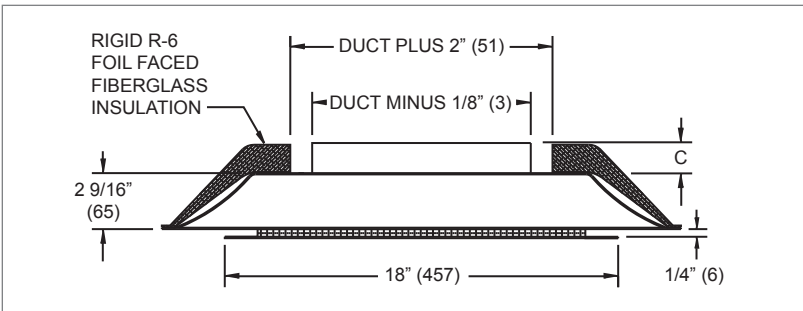
- Dampers
- Straightening Grid

FINISHES

- Standard finish is #44 British White.
- Optional finishes available.

PLQLT, 5PLQLT Dimensional Information
PLQLT, 5PLQLT, FACE VIEW

PLQLT, 5PLQLT, BACK VIEW OF PLAQUE


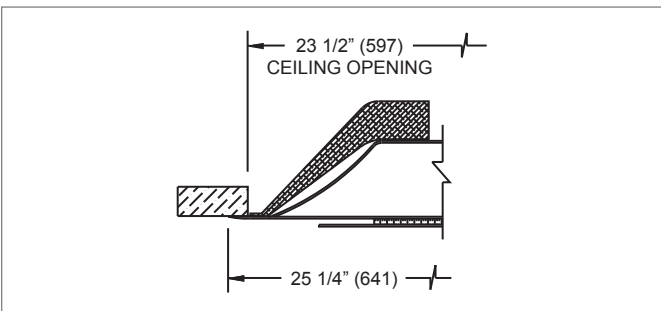
NOTE: Dimensions in parentheses are mm.

PLQLT, 5PLQLT, 24"x24" PANEL SIDE VIEW


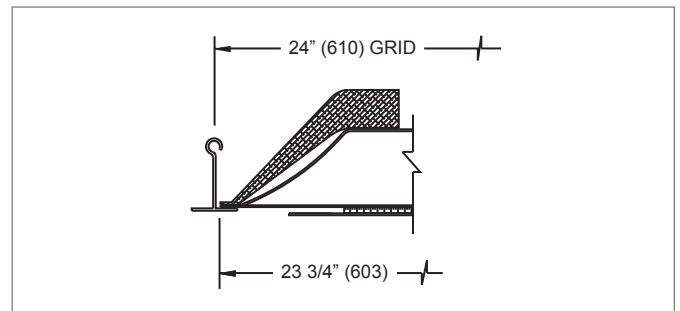
NOTE: Dimensions in parentheses are mm.

PLQLT, 5PLQLT, AVAILABLE NECK SIZES

24" x 24" Panel	
Nominal Duct Size	C
6" (152)	1 1/8" (29)
8" (203)	1 1/4" (32)
10" (254)	1 3/8" (35)
12" (305)	1 3/8" (35)
14" (356)	1 3/8" (35)
15" (381)	1 3/8" (35)

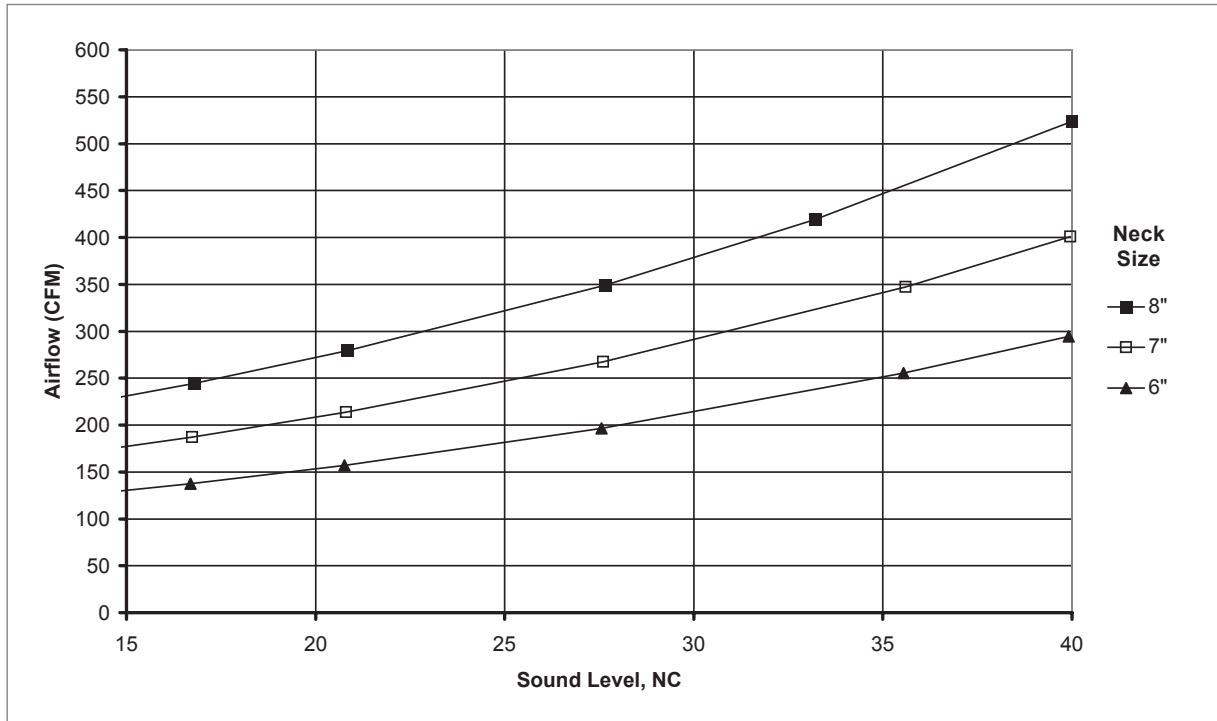
PLQLT, 5PLQLT Frame Styles
PLQLT, 5PLQLT, FRAME 22, 24"x24" PANEL, SURFACE MOUNT


NOTE: Dimensions in parentheses are mm.

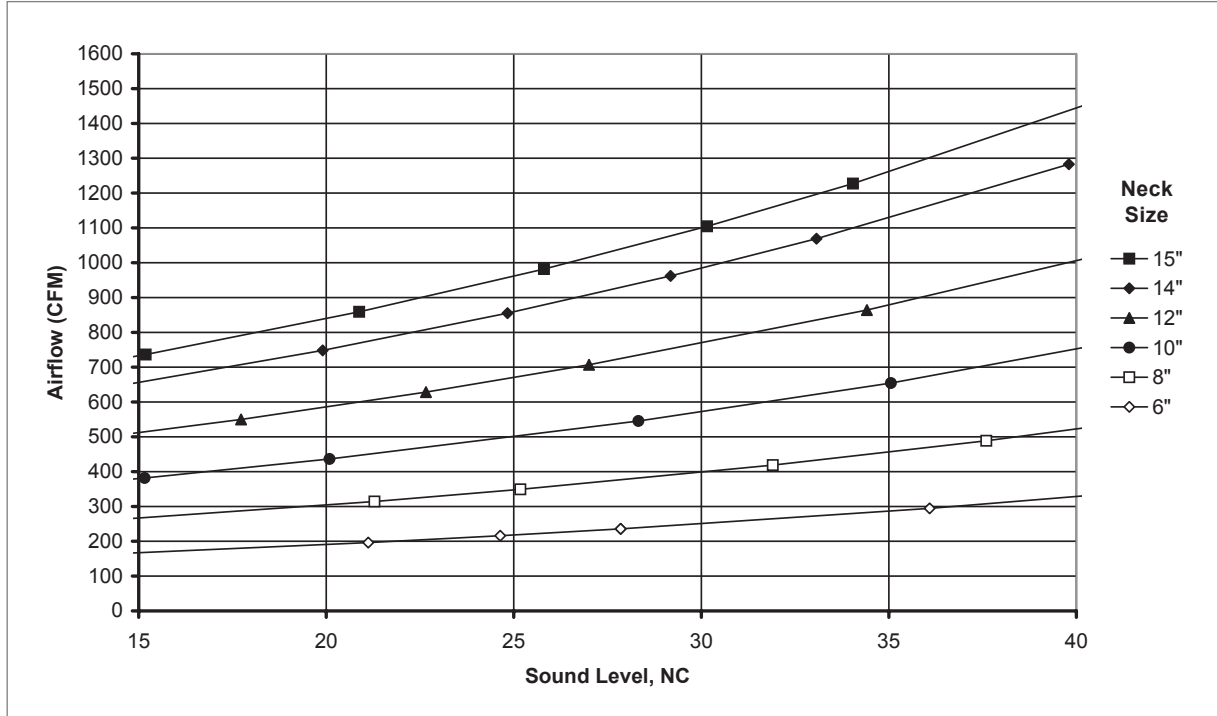
PLQLT, 5PLQLT, FRAME 23, 24"x24" PANEL, LAY-IN T-BAR


PLQ, 5PLQ, PLQLT, 5PLQLT Reference Charts

AIRFLOW VS. NC LEVEL: PLQ, 12"x12" PANEL (NO DAMPER)



AIRFLOW VS. NC LEVEL: PLQ, 5PLQ, PLQLT, 5PLQLT, 24"x24" PANEL (NO DAMPER)



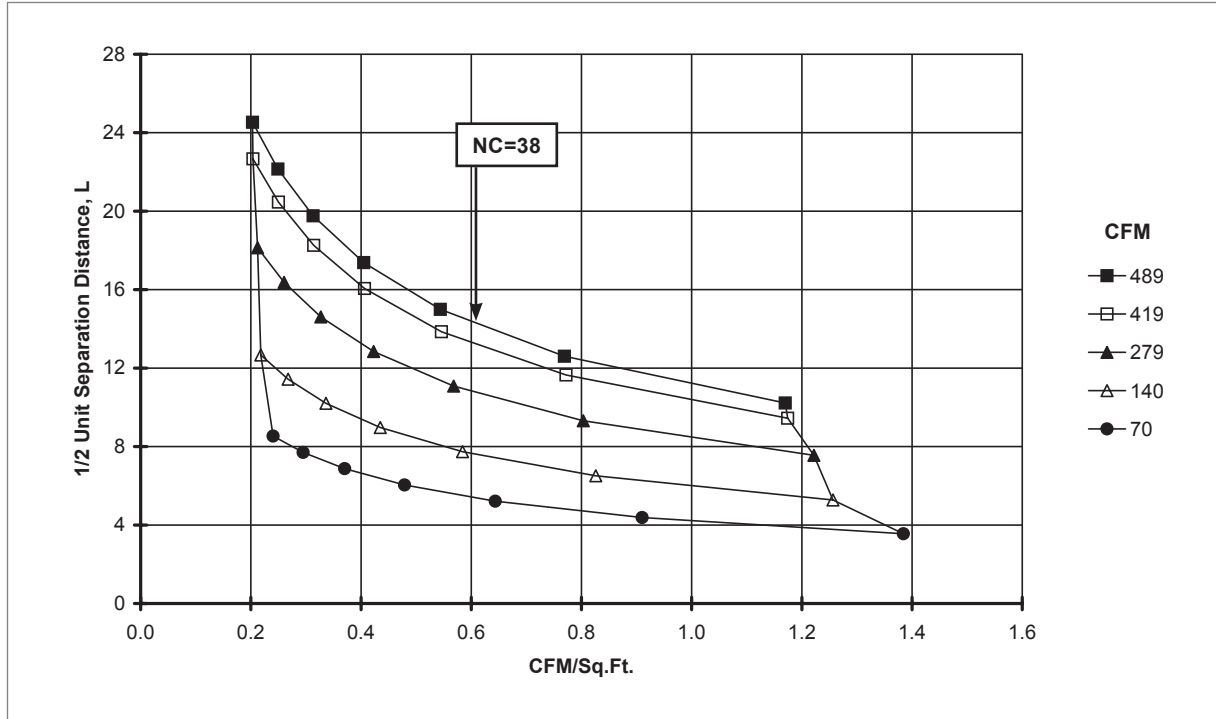
ARCHITECTURAL & PLAQUE DIFFUSERS

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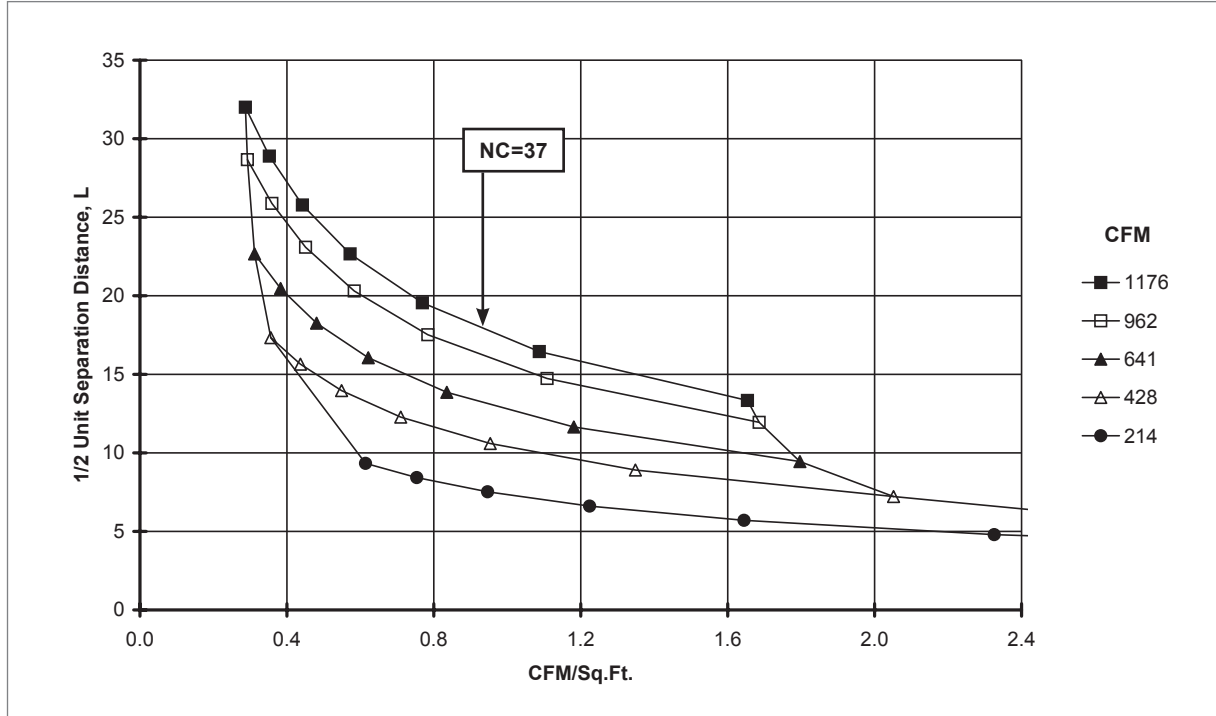
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PLQ, 5PLQ, PLQLT, 5PLQLT Reference Charts: Horizontal Throw

DIFFUSER SPACING FOR 80% ADPI: PLQ, 5PLQ, PLQLT, 5PLQLT, 24"x24" PANEL, 8" NECK, 4-WAY (NO DAMPER)



DIFFUSER SPACING FOR 80% ADPI: PLQ, 5PLQ, PLQLT, 5PLQLT, 24"x24" PANEL, 14" NECK, 4-WAY (NO DAMPER)



NOTES: Charts are at 20 BTUH/ft² loads. See the Engineering section of this catalog for instructions on how to read these charts and additional ADPI information.

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PLQ, 5PLQ, PLQLT | Plaque Face

PLQ, 5PLQ, PLQLT, 5PLQLT Performance Data: Horizontal Throw

IP/METRIC DATA: PLQ, 5PLQ, PLQLT, 5PLQLT, 24"x24" PANEL, ROUND NECK (NO DAMPER)

	IP Data					NC	Metric Data					Octave Band, dB						
	Neck Vel	Air Flow	Ps	Pt	Throw		Neck Vel	Air Flow	Ps	Pt	Throw	2	3	4	5	6	7	
	FPM	CFM	"WG	"WG	ft		m/s	L/s	Pa	Pa	m							
6" Dia.	200	39	0.000	.003	0 - 0 - 1	-	1.02	19	0.1	0.7	0.0 - 0.1 - 0.4	-	-	-	-	-	-	
	300	59	0.001	.006	0 - 1 - 3	-	1.52	28	0.2	1.6	0.1 - 0.2 - 0.8	14	-	-	-	-	-	
	500	98	0.002	.017	1 - 2 - 4	-	2.54	46	0.4	4.3	0.3 - 0.7 - 1.3	28	21	17	-	-	-	
	600	118	0.002	.025	1 - 3 - 5	-	3.05	56	0.6	6.2	0.4 - 0.8 - 1.6	33	27	23	11	-	-	
	700	137	0.003	.034	2 - 3 - 6	-	3.56	65	0.8	8.4	0.6 - 0.9 - 1.9	37	31	28	17	-	-	
	800	157	0.004	.044	2 - 4 - 7	13	4.06	74	1.1	11.0	0.7 - 1.1 - 2.1	41	35	32	22	11	-	
	900	177	0.006	.056	3 - 4 - 8	17	4.57	83	1.4	14.0	0.8 - 1.2 - 2.4	44	39	36	26	16	-	
	1000	196	0.007	.069	3 - 4 - 9	21	5.08	93	1.7	17.2	0.9 - 1.3 - 2.7	47	42	40	30	21	-	
1100	216	0.008	.084	3 - 5 - 10	25	5.59	102	2.1	20.8	1.0 - 1.5 - 2.9	49	45	43	33	25	-		
8" Dia.	200	70	0.002	.005	0 - 1 - 3	-	1.02	33	0.5	1.1	0.1 - 0.3 - 0.9	-	-	-	-	-	-	
	300	105	0.005	.010	1 - 2 - 4	-	1.52	49	1.1	2.5	0.3 - 0.6 - 1.3	19	-	-	-	-	-	
	500	175	0.012	.028	2 - 4 - 7	-	2.54	82	3.1	7.0	0.7 - 1.1 - 2.2	33	25	20	-	-	-	
	600	209	0.018	.040	3 - 4 - 9	-	3.05	99	4.5	10.1	0.9 - 1.3 - 2.6	38	30	26	15	-	-	
	700	244	0.024	.055	3 - 5 - 10	12	3.56	115	6.1	13.7	1.0 - 1.5 - 3.1	42	35	31	21	11	-	
	800	279	0.032	.072	4 - 6 - 12	17	4.06	132	8.0	17.9	1.2 - 1.8 - 3.5	46	39	36	26	16	-	
	900	314	0.040	.091	4 - 6 - 12	21	4.57	148	10.1	22.7	1.3 - 2.0 - 3.7	49	43	39	30	21	-	
	1000	349	0.050	.112	5 - 7 - 13	25	5.08	165	12.4	28.0	1.5 - 2.2 - 3.9	52	46	43	34	26	11	
1100	384	0.060	.136	5 - 8 - 14	29	5.59	181	15.1	33.8	1.6 - 2.4 - 4.1	54	49	46	38	30	16		
10" Dia.	200	109	0.004	.007	1 - 2 - 4	-	1.02	51	1.1	1.7	0.2 - 0.5 - 1.3	12	-	-	-	-	-	
	300	164	0.009	.015	2 - 3 - 6	-	1.52	77	2.4	3.8	0.5 - 0.9 - 1.9	23	12	-	-	-	-	
	500	273	0.026	.042	3 - 5 - 10	-	2.54	129	6.6	10.4	1.0 - 1.6 - 3.1	37	28	23	12	-	-	
	600	327	0.038	.060	4 - 6 - 12	-	3.05	154	9.4	15.0	1.3 - 1.9 - 3.8	42	33	29	19	-	-	
	700	382	0.052	.082	5 - 7 - 13	15	3.56	180	12.9	20.5	1.5 - 2.2 - 4.1	46	38	34	24	15	-	
	800	436	0.067	.107	5 - 8 - 14	20	4.06	206	16.8	26.7	1.7 - 2.5 - 4.4	49	42	38	29	20	-	
	900	491	0.085	.136	6 - 9 - 15	24	4.57	232	21.3	33.8	1.9 - 2.8 - 4.6	53	46	42	34	25	12	
	1000	545	0.105	.168	7 - 10 - 16	28	5.08	257	26.2	41.8	2.1 - 3.1 - 4.9	55	49	45	37	30	17	
1100	600	0.128	.203	8 - 11 - 17	32	5.59	283	31.8	50.5	2.3 - 3.4 - 5.1	58	52	49	41	34	22		
12" Dia.	200	157	0.007	.009	1 - 3 - 5	-	1.02	74	1.7	2.3	0.3 - 0.8 - 1.6	15	-	-	-	-	-	
	300	236	0.016	.021	3 - 4 - 8	-	1.52	111	3.9	5.3	0.8 - 1.2 - 2.5	26	14	-	-	-	-	
	500	393	0.043	.059	4 - 7 - 13	-	2.54	185	10.8	14.7	1.4 - 2.1 - 4.1	40	30	25	15	-	-	
	600	471	0.062	.085	5 - 8 - 15	12	3.05	222	15.5	21.1	1.6 - 2.5 - 4.6	45	36	31	21	11	-	
	700	550	0.085	.115	6 - 9 - 16	18	3.56	259	21.1	28.7	1.9 - 2.9 - 4.9	49	40	36	27	18	-	
	800	628	0.111	.151	7 - 11 - 17	23	4.06	297	27.6	37.5	2.2 - 3.3 - 5.3	53	44	40	32	23	12	
	900	707	0.140	.191	8 - 12 - 18	27	4.57	334	34.9	47.5	2.5 - 3.7 - 5.6	56	48	44	36	28	17	
	1000	785	0.173	.236	9 - 13 - 19	31	5.08	371	43.1	58.6	2.7 - 4.1 - 5.9	59	51	47	40	33	22	
1100	864	0.210	.285	10 - 14 - 20	34	5.59	408	52.2	71.0	3.0 - 4.4 - 6.2	61	54	51	44	37	26		
14" Dia.	200	214	0.010	.013	2 - 3 - 7	-	1.02	101	2.5	3.1	0.5 - 1.0 - 2.0	18	-	-	-	-	-	
	300	321	0.023	.028	3 - 5 - 10	-	1.52	151	5.7	7.1	1.0 - 1.5 - 3.1	29	16	-	-	-	-	
	500	535	0.063	.079	6 - 8 - 16	-	2.54	252	15.8	19.6	1.7 - 2.5 - 4.9	42	32	26	17	-	-	
	600	641	0.091	.114	7 - 10 - 17	14	3.05	303	22.7	28.3	2.0 - 3.1 - 5.3	47	38	32	24	14	-	
	700	748	0.124	.155	8 - 12 - 19	20	3.56	353	30.9	38.5	2.4 - 3.6 - 5.7	52	42	37	29	20	-	
	800	855	0.162	.202	9 - 13 - 20	25	4.06	404	40.4	50.3	2.7 - 4.1 - 6.1	55	46	42	34	26	16	
	900	962	0.205	.256	10 - 15 - 21	29	4.57	454	51.1	63.7	3.1 - 4.6 - 6.5	58	50	46	39	31	21	
	1000	1069	0.253	.316	11 - 16 - 23	33	5.08	505	63.1	78.6	3.4 - 4.9 - 6.9	61	53	49	43	35	26	
1100	1176	0.306	.382	12 - 17 - 24	37	5.59	555	76.3	95.1	3.7 - 5.1 - 7.2	64	56	52	46	39	30		
15" Dia.	200	245	0.012	.014	2 - 4 - 7	-	1.02	116	3.0	3.6	0.6 - 1.1 - 2.2	19	-	-	-	-	-	
	300	368	0.027	.032	4 - 6 - 11	-	1.52	174	6.7	8.1	1.1 - 1.7 - 3.4	30	17	-	-	-	-	
	500	614	0.074	.090	6 - 9 - 17	-	2.54	290	18.5	22.4	1.9 - 2.8 - 5.2	44	33	27	18	-	-	
	600	736	0.107	.130	7 - 11 - 19	15	3.05	347	26.7	32.3	2.2 - 3.4 - 5.7	49	38	33	25	15	-	
	700	859	0.146	.177	9 - 13 - 20	21	3.56	405	36.4	44.0	2.6 - 3.9 - 6.1	53	43	38	30	22	11	
	800	982	0.191	.231	10 - 15 - 22	26	4.06	463	47.5	57.4	3.0 - 4.5 - 6.6	56	47	43	35	27	17	
	900	1104	0.241	.292	11 - 16 - 23	30	4.57	521	60.1	72.7	3.4 - 4.9 - 7.0	59	51	47	40	32	23	
	1000	1227	0.298	.360	12 - 17 - 24	34	5.08	579	74.2	89.7	3.7 - 5.2 - 7.3	62	54	50	44	37	28	
1100	1350	0.361	.436	14 - 18 - 25	38	5.59	637	89.8	108.6	4.1 - 5.5 - 7.7	65	57	53	47	41	32		

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC or dB value of less than 10. Nominal duct is duct width. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See Krueger's selection software for performance data not shown, including octave band data.

ARCHITECTURAL & PLAQUE DIFFUSERS

P L Q

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5PLQ, PLQLT, 5PLQLT Suggested Specification & Configuration

1. **SERIES: (XXXXX)**
 5PLQ - Square, Aluminum Plaque-Style Ceiling Diffuser
 PLQLT - Square Plaque-Style Ceiling Diffuser with R-6 Rigid Fiberglass Insulated Backpan and 3/8" Cellular Insulated Plaque Face
2. **NECK: (XX)**
 6"
 8"
 10"
 12"
 14"
 15"
3. **FRAME STYLE: (XXX)**
 F22 - Surface Mount
 F23 - Lay-in T-Bar
 F98 - Narrow-T
4. **PANEL: (XX)x(XX)**
 24"x24"
5. **DAMPER: (XX)**
 00 - No Damper
 03 - PR10
 04 - PRD10 *
 06 - PR12 *
 08 - PRN100
6. **ACCESSORIES: (XX)**
 00 - No Accessories
 IB - Insulated Blanket**
 R - Round Straightening Grid
 R6 - Molded Insulation**
7. **FINISH: (XX)**
 01 - Mill
 10 - Alumican
 35 - Black
 44 - British White

* PR12 and PRD10 are provided with a black finish.
 ** 24" x 24" Panel with 6", 8", 10", or 12" neck dimensions only.

5PLQ

The Architectural square panel ceiling diffusers of the sizes and mounting types shown on the plans or outlet schedule shall be the Krueger model 5PLQ. The 5PLQ shall have a square face plaque not exceeding 18"x18" for 24"x24" panel. The panel shall be constructed of aluminum. The face plaque shall not extend below the ceiling more than 1/4" and shall be removable from the backpan for access to the optional damper. Diffusers must discharge in the horizontal plane of the room. The diffuser backpan shall be one piece stamped construction of .0253" thick aluminum and have an integrally drawn round neck. The construction shall be 100% aluminum for use in MRI rooms and high humidity environments.

Optional duct or neck mounted round damper shall be constructed of heavy gage steel. Damper shall be operable from the face of the diffuser.

Optional directional blow tabs shall be constructed of aluminum and offered to provide 1-way, 2-way and 3-way throw patterns.

PLQLT

The low temperature architectural square panel ceiling diffusers of the sizes and mounting types shown on the plans or outlet schedule shall be the Krueger model PLQLT. The PLQLT shall have a one piece square face plaque not exceeding 18"x18" for 24"x24" panel size and be constructed of 16 gage steel with rounded corners that have a minimum radius of 3/4". The face plaque shall have a backing of 3/8" closed-cell engineered polymer foam insulation meeting UL 181 and NFPA 90A. Face plaques that have a secondary wrapper or use fiberglass on the back side of the plaque are not acceptable. The face plaque shall not extend below the ceiling more than 3/8" and shall be removable from the backpan for access to the optional damper. The diffuser backpan shall be one piece stamped construction of 22 gage steel and have an integrally drawn round neck. An R-6 rigid foil faced fiberglass cover shall be used on the backpan for vapor barrier isolation.

Diffusers must discharge in the horizontal plane of the room.

Optional duct or neck mounted round damper shall be constructed of heavy gage steel. Damper shall be operable from the face of the diffuser.

PERFORMANCE

The manufacturer shall provide published performance data for the diffuser, including 2 thru 7 Octave Band data. The diffuser shall be tested in accordance to the data standards at the time of product introduction or ANSI/ASHRAE Standard 70.

FINISH

The paint finish shall be #44 British White and be an anodic acrylic paint, baked at 315°F for 30 minutes. The paint thickness shall be 0.8 – 1.0 mils, gloss at 60° per ASTM D523-89 of 50 – 85%, pencil hardness per ASTM D3363-92A of HB – H, crosshatch adhesion per ASTM D3359-83 of 4B – 5B, impact per ASTM D2794-93 of direct impact >100 in/lb and reverse impact >80 in/lb, salt spray per ASTM B117-9048 of 96 hours, humidity per ASTM D2247-92 of >500 hours and water soak per ASTM D870-92 of 250 hours.

SAMPLE CONFIGURATION: 5PLQ – 12 – F23 – 24x24 – 08 – 00 – 44