SQUARE DIFFUSERS

AIRVECTOR®

Rev. 6

ARCHITECTURAL PLAQUE DIFFUSERS

Square Face • 360° Air Distribution

ISO

PRODUCT MODELS

Steel Construction
ISO – Round neck
ISOD – 2" high collar, single-box
ISOI – insulated (-R6 standard) - Pre-scored for collars

Aluminum Construction
AISO – Aluminum version of ISO
AISOD – Aluminum version with 2" high collar
AISOI – Aluminum insulated version

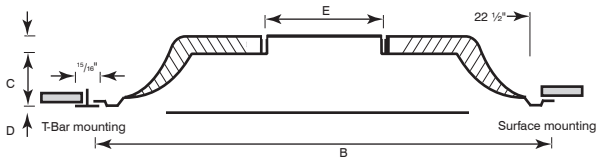
-R4 and **-R6** insulation options available on select models.

The Airvector® **ISO** Series supply diffusers are designed for heating, ventilating, and cooling applications requiring quiet, efficient, and uniform air distribution. Featuring a round-neck-to-square-face geometry, **ISO** plaque diffusers deliver a true 360° horizontal air diffusion pattern comparable to full round diffusers, while preserving a clean, architectural square ceiling appearance.

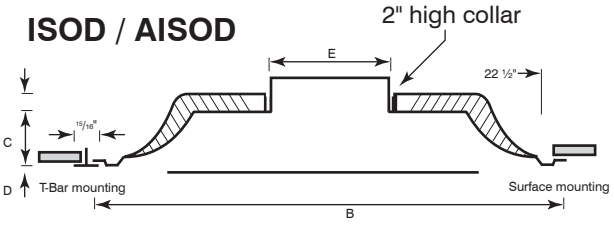
High induction diffusion promotes rapid temperature and velocity equalization of the mixed air mass well above the occupied zone. This performance allows confident use in cooling applications with temperature differentials up to 30°, while maintaining low air motion levels of approximately 35 fpm within the occupied zone.

ISO Series supply diffusers perform efficiently with air loadings ranging from 6 to 30 air changes per hour (based on a 10 ft ceiling height) and operate within a sound level range of NC 25 to 35. Available in painted steel or aluminum construction, the **ISO** Series provides flexibility to meet performance, weight, and corrosion-resistance requirements across a wide range of commercial installations.

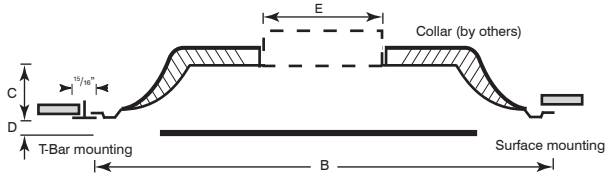
ISO / AISO



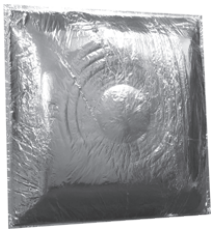
ISOD / AISOD



ISOI / AISOI



Model	Nominal Face Size	Overall Face Size B x B
ISOI	24 x 24	23¾ x 23¾



ISOI fiberglass back.

All dimensions in inches

SQUARE DIFFUSERS

AIRVECTOR

Rev. 1

ISO/AISO SERIES
ARCHITECTURAL PLAQUE DIFFUSERS

Square Face • 360° Air Distribution

KEY FEATURES (ALL MODELS)

- **Universal Ceiling Compatibility**

One standard model suits both T-bar and drywall installations using rigid ducts; compatible with Airvector PF Easy Install Frame.

- **Service-Friendly Design**

Tool-free removable core allows easy access to duct and optional damper.

- **360° Horizontal Air Distribution**

Uniform diffusion across the ceiling plane for balanced comfort.

- **High Induction Performance**

Rapid mixing and temperature equalization above the occupied zone.

- **Quiet Operation**

Engineered for low sound levels in comfort-driven environments.

- **Steel or Aluminum Heavy-Gauge Construction**

Painted steel or aluminum options to suit project needs.

OPTIONS & ACCESSORIES

- Standard white powder-coated finish; custom colors available.
- Optional **-R4** or **-R6** insulation (**-R6** standard on **ISOI** / **AISOI**)
- Compatible **N4** / **N5** opposed blade dampers, adjustable from the face.
- **NBI** balancing baffle
- **PF** Easy Install Frame for drywall ceilings.
- Single-box packaging.

ISO Model Size	Neck Dia.	Nominal Face Size	Overall Face Size B x B	Drywall Ceiling Opening
1206	6	12 x 12	11¾ x 11¾	10½ x 10½
1208	8	12 x 12	11¾ x 11¾	10½ x 10½
2406	6	24 x 24	23¾ x 23¾	22½ x 22½
2408	8	24 x 24	23¾ x 23¾	22½ x 22½
2410	10	24 x 24	23¾ x 23¾	22½ x 22½
2412	12	24 x 24	23¾ x 23¾	22½ x 22½
2414	14	24 x 24	23¾ x 23¾	22½ x 22½

All dimensions in inches

HOW TO ORDER ISO/AISO SERIES

ISO-R4-W3-S 2408 /W

MODEL SERIES
Plaque Diffuser **ISO**
Plaque Diffuser, ... 2" Collar, Single-Box **ISOD**
Add prefix "**A**" for Aluminum.

INSULATION (OPTIONAL)
Standard is uninsulated
R4.2 Taped Insulation **-R4**
R6 Taped Insulation **-R6**

DIRECTION (OPTIONAL)
Standard is 4 Way
1 Way **-W1**
2 Way Corner **-WC**
2 Way Opposed **-WO**
3 Way **-W3**

PACKAGING (OPTIONAL)
Standard is 2 per box
Single Box **-S**

FACE DIMENSIONS
12" x 12" **12**
24" x 24" **24**

NECK DIAMETER
In Inches
06-08-10-12-14"

FINISH (OPTIONAL)
*Standard is White (/**W**)*
See chart for more

HOW TO ORDER ISOI/AISOI

ISOI-S /W

MODEL SERIES
Plaque Diffuser **ISOI**
Alu. Plaque Diff. **AISOI**

PACKAGING (OPTIONAL)
Standard is 2 per box
Single Box **-S**

FINISH (OPTIONAL)
*Standard is White (/**W**)*
See chart for more

ISO, ISOD, ISOI (steel) / AISO, AISOD, AISOI (aluminum)

Plaque Diffusers

12" x 12" face

SIZE (inches)	Neck Velocity (fpm)	400	500	600	700	800	1000	1200	1400	1600
	Velocity Pressure (in H_2O)	.010	.016	.022	.031	.041	.062	.090	.122	.160
6	CFM	78	98	118	137	157	196	235	274	313
	Total Pressure	.05	.07	.10	.14	.18	.29	.41	.58	.72
	NC	< 20	< 20	< 20	< 20	<20	21	24	29	37
	Throw (ft)	2-3-6	3-4-7	4-5-9	4-5-10	5-6-11	6-8-12	7-9-13	8-10-15	9-11-16
8	CFM	140	175	209	244	279	349	419	489	559
	Total Pressure	.07	.10	.15	.21	.29	.42	.62	.84	1.00
	NC	< 20	< 20	< 20	<20	<20	25	30	38	45
	Throw (ft)	2-4-7	3-5-9	4-7-10	5-8-11	6-9-12	7-10-14	8-12-17	10-12-18	11-14-20

24" x 24" face

SIZE (inches)	Neck Velocity (fpm)	400	500	600	700	800	1000	1200	1400	1600
	Velocity Pressure (in H_2O)	.010	.016	.022	.031	.041	.062	.090	.122	.160
6	CFM	78	98	118	137	157	196	235	274	313
	Total Pressure	.02	.03	.04	.05	.08	.1	.14	.19	.24
	NC	< 20	< 20	< 20	< 20	<20	23	27	32	37
	Throw (ft)	1-2-4	2-3-4	2-3-5	2-3-6	3-4-7	4-5-8	4-6-9	4-7-10	6-8-14
8	CFM	140	175	209	244	279	349	419	489	559
	Total Pressure	.02	.03	.04	.06	.08	.11	.17	.23	.29
	NC	< 20	< 20	< 20	<20	<20	28	32	36	41
	Throw (ft)	2-3-5	2-3-7	3-4-8	3-5-8	4-6-9	5-7-11	6-8-14	7-9-14	7-10-14
10	CFM	218	273	327	382	436	545	654	763	872
	Total Pressure	.03	.04	.06	.08	.11	.18	.24	.35	.48
	NC	< 20	< 20	< 20	<20	23	29	36	40	44
	Throw (ft)	3-4-6	4-5-8	4-6-10	5-7-12	6-8-14	7-9-15	8-11-16	9-12-17	10-13-19
12	CFM	314	393	471	550	628	785	941	1099	1246
	Total Pressure	.04	.06	.08	.13	.16	.25	.35	.50	.67
	NC	< 20	< 20	<20	21	24	31	38	43	47
	Throw (ft)	4-5-9	5-6-10	6-7-10	6-8-13	7-9-15	8-11-18	10-13-20	11-15-21	12-16-22
14	CFM	492>	615	738	861	984	1230	1476	1722	1968
	Total Pressure	.05	.08	.13	.16	.22	.32	.43	.59	.80
	NC	< 20	< 20	<20	22	27	34	40	43	47
	Throw (ft)	4-6-10	5-6-11	6-8-14	7-10-16	8-11-18	10-14-20	12-15-22	12-17-23	14-19-24

NC Value based on 10 db room attenuation.

Throw Values are based on isothermal air and terminal velocities of 150 fpm, 100 fpm & 75 fpm respectively.
Total Pressure the sum of static pressure plus velocity pressure and is given in inches w.g.