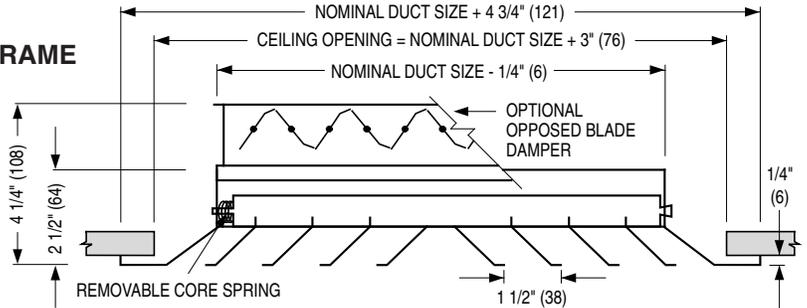




**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6200 AND 6200-O TYPES S & B**

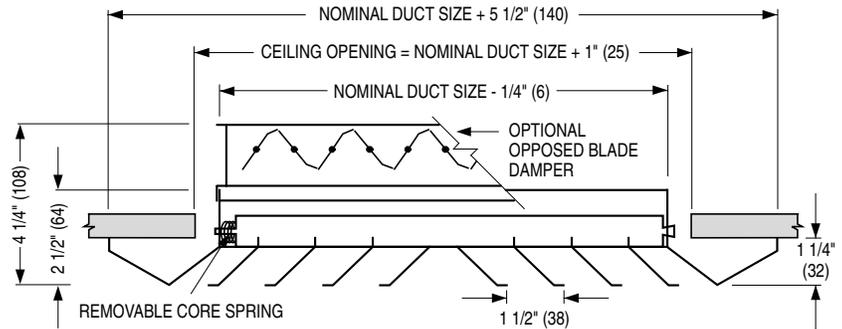
**TYPE S • SURFACE MOUNT • FLAT FRAME**

Minimum duct size: 6 x 6 (152 x 152)  
 Maximum duct size: 36 x 36 (914 x 914)  
 or 36 x 24 (914 x 610) with O.B.D.  
 Available in 3" (76) increments only.



**TYPE B • BEVELED DROP FACE • SURFACE MOUNT**

Minimum duct size: 6 x 6 (152 x 152)  
 Maximum duct size: 36 x 36 (914 x 914)  
 or 36 x 24 (914 x 610) with O.B.D.  
 Available in 3" (76) increments only.



**CORE STYLE SELECTION**

	SQUARE	RECTANGULAR	
→ 1-WAY	□ 1S	□ 1A	□ 1B
↕ 2-WAY	□ 2S	□ 2A	□ 2B
↙ 2-WAY CORNER	□ 2G	□ 2E	□ 2F
↻ 3-WAY	□ 3A	□ 3A1 (A is greater than B)	□ 3A2 (B is less than A but greater than A/2)
		□ 3B (B is equal to A/2)	□ 3E (B is less than A/2)
↔ 4-WAY	□ 4A	□ 4B	□ 4C

Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum.
2. Model 6200 is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

**SQUARE AND RECTANGULAR NECK**

- Steel opposed blade damper. Model 6200-O.
- Aluminum opposed blade damper. Model 6200-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

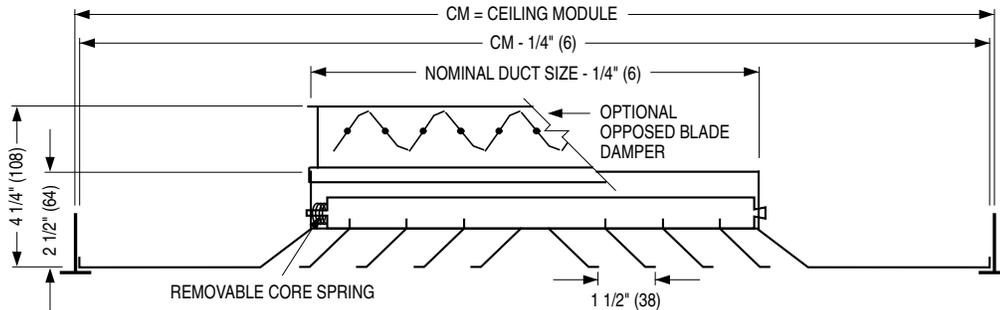
- SP Special. Specify \_\_\_\_\_.

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	11 - 24 - 16	6200	5 - 11 - 15	6200-1



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6200 AND 6200-O TYPE L**

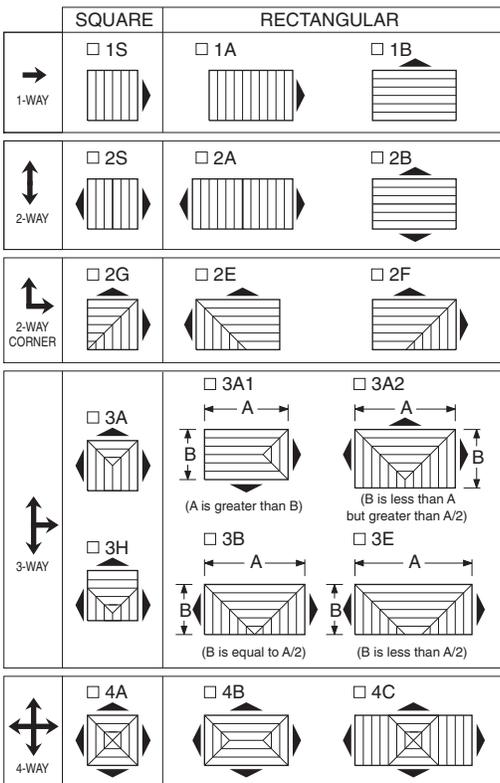
**TYPE L LAY-IN T-BAR**



If the ceiling module is not 3" (76) or 6" (152) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
20 x 20	15 x 15	508 x 508	381 x 381	500 x 500	381 x 381
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457
48 x 24	45 x 21	1219 x 610	1143 x 533	1200 x 600	1067 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200 is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- Steel opposed blade damper. Model 6200-O.
- Aluminum opposed blade damper. Model 6200-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_ .

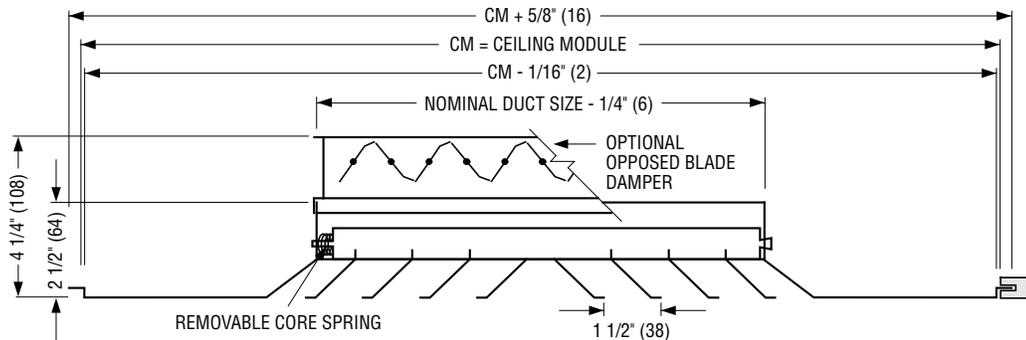
Dimensions are in inches (mm).

<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6200	1 - 16 - 17	6200-2



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6200 AND 6200-O TYPE SP**

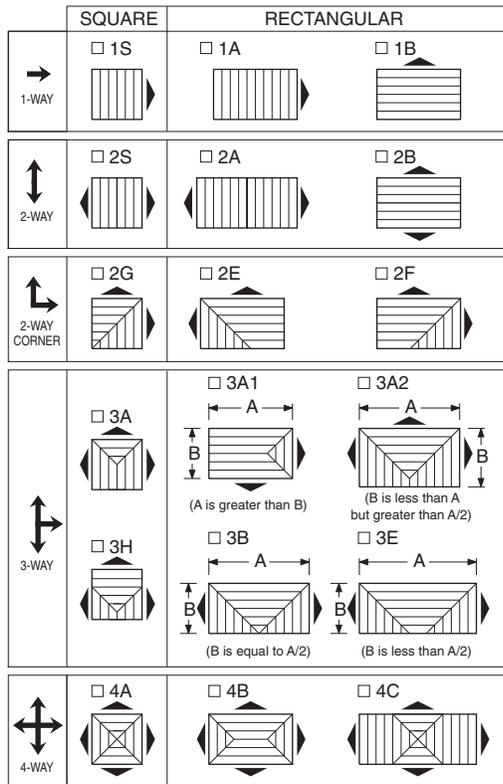
**TYPE SP SPLINE**



If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)	Metric Units (mm)	Imperial Units (in.)	Metric Units (mm)	Imperial Units (in.)	Metric Units (mm)
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

Spline Type Diffuser for one-directional exposed T-bar lay-in grid or for concealed T-bar grid (splines on two opposite sides - steel lift brackets on other two sides).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200 is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6200-O.
- Aluminum opposed blade damper. Model 6200-OA.
- ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_ .

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

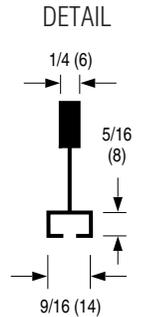
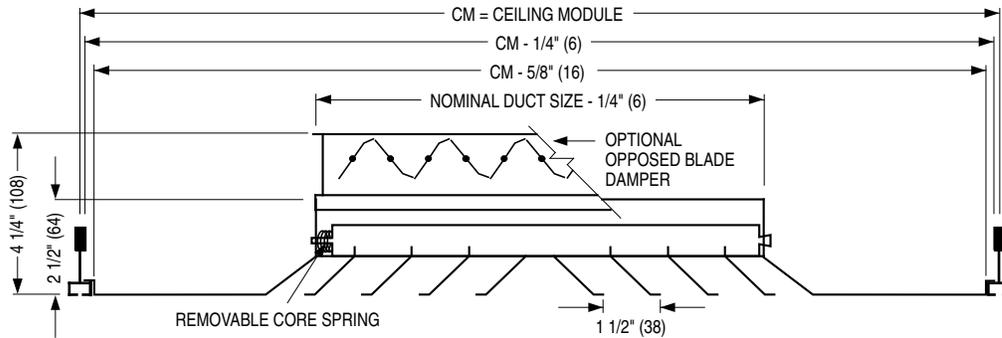
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 8 - 18	6200	11 - 24 - 16	6200-3



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6200 AND 6200-O TYPE F**

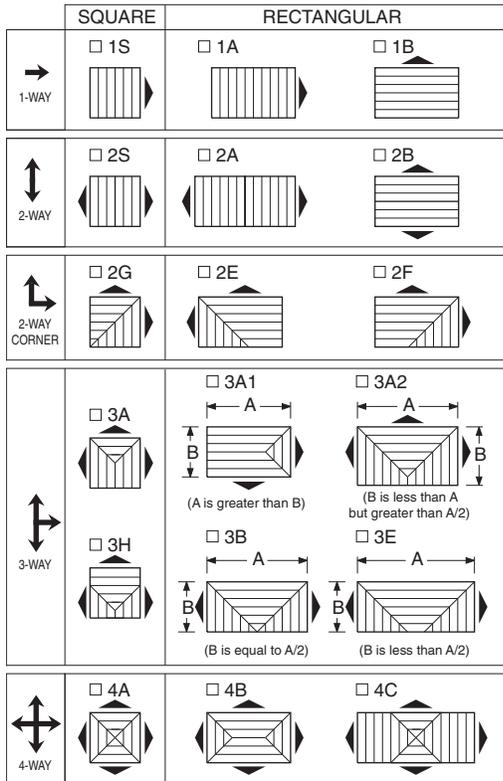
**TYPE F FINELINE® T-BAR** FOR FINELINE® TYPE CEILING SYSTEMS



The diffuser is supplied in a steel, module sized extended panel.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES		METRIC MODULES	
Imperial Units (in.)	Metric Units (mm)	Imperial Units (in.)	Metric Units (mm)
CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200 is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK
- Steel opposed blade damper. Model 6200-O.
- Aluminum opposed blade damper. Model 6200-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

Fineline® is a registered trademark of USG Interiors Inc..

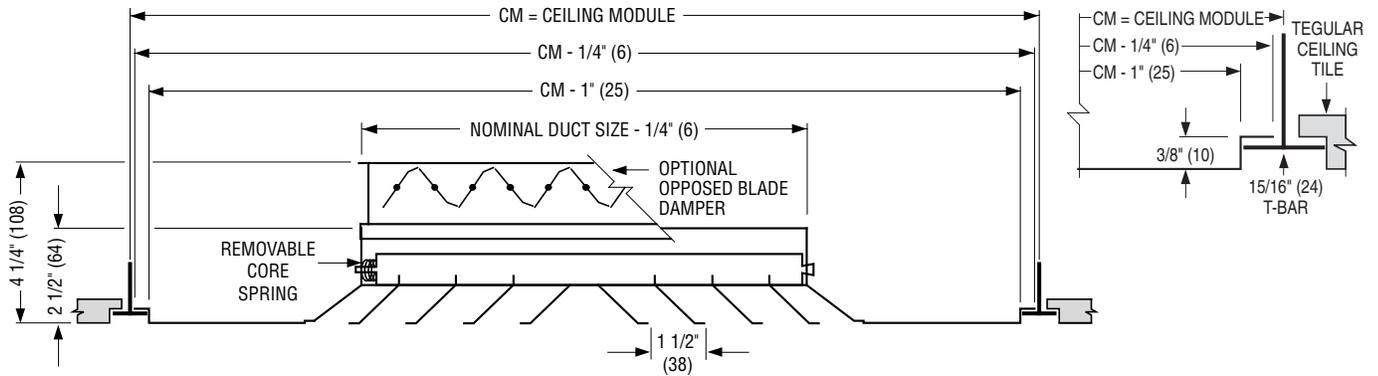
Dimensions are in inches (mm).

<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	1 - 16 - 17	6200	5 - 11 - 15	6200-4



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6200 AND 6200-O TYPE TL**

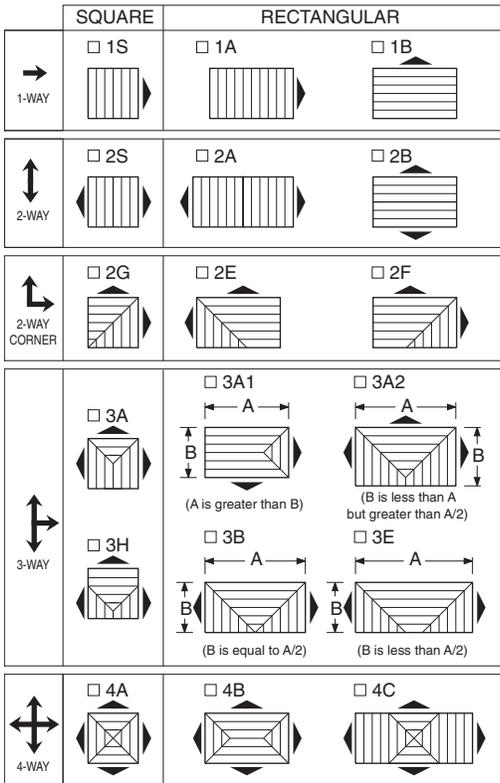
**TYPE TL TEGULAR LAY-IN**



Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES		METRIC MODULES		METRIC MODULES	
Imperial Units (in.)	Maximum Duct Size	Metric Units (mm)	Maximum Duct Size	Metric Units (mm)	Maximum Duct Size
CM		CM		CM	
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200 is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.  
The diffuser is supplied in a module sized extended panel which drops the diffuser face below the T-bar so that it is flush with the tegular ceiling panels.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6200-O.
- Aluminum opposed blade damper. Model 6200-OA.
- ROUND NECK**
- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

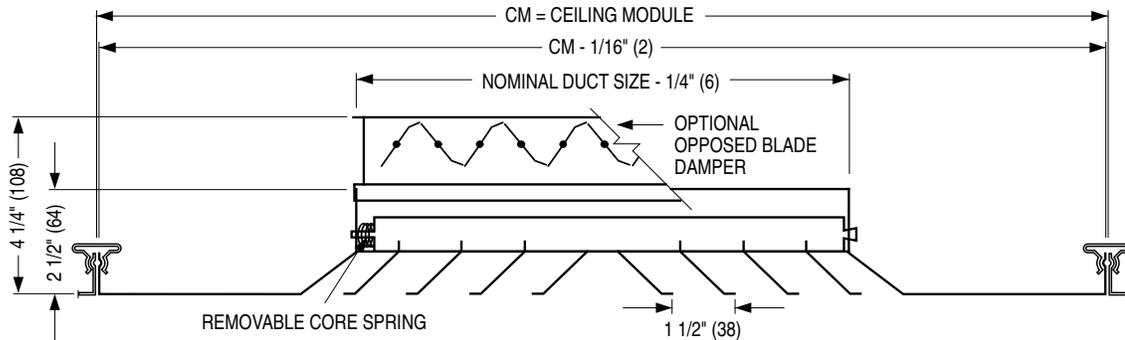
Dimensions are in inches (mm).

<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	1 - 16 - 17	6200	5 - 11 - 15	6200-5



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6200 AND 6200-O TYPE M**

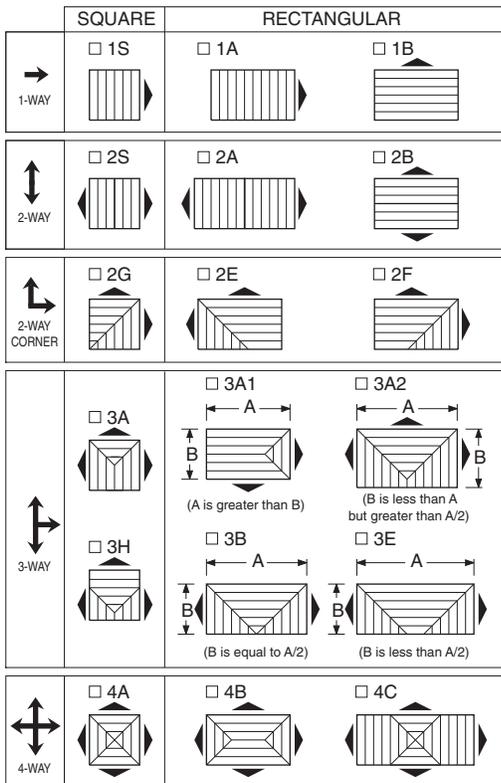
**TYPE M METAL PAN (SNAP-IN)**



If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES		METRIC MODULES	
Imperial Units (in.)	Metric Units (mm)	Imperial Units (in.)	Metric Units (mm)
CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229
24 x 12	21 x 9	610 x 305	533 x 229
24 x 24	21 x 21	610 x 610	533 x 533

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200 is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK
- Steel opposed blade damper. Model 6200-O.
- Aluminum opposed blade damper. Model 6200-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

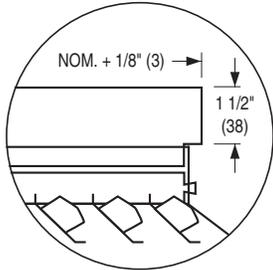
- SP Special. Specify \_\_\_\_\_.

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6200	11 - 24 - 16	6200-6

## PATTERN CEILING DIFFUSERS WITH IV INDUCTION VANES

ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6200IV AND 6200IV-O TYPES S & B

### OFFSET NECK OPTION



#### TYPE S • SURFACE MOUNT • FLAT FRAME

Minimum duct size: 6 x 6 (152 x 152)  
 Maximum duct size: 36 x 36 (914 x 914) or  
 36 x 24 (914 x 610) with O.B.D.  
 Available in 3" (76) increments only.

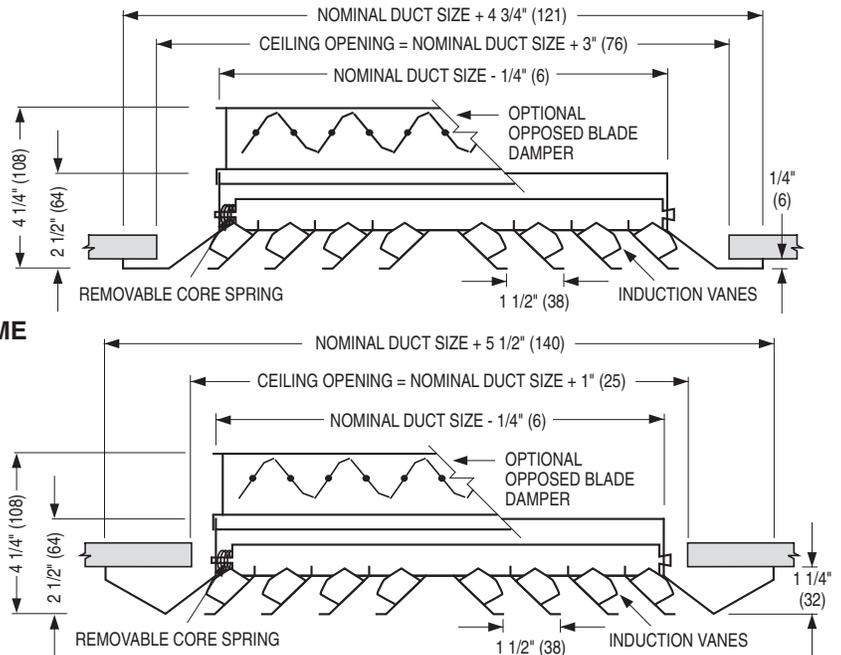
#### TYPE B • BEVELED DROP FACE • SURFACE MOUNT

Minimum duct size: 6 x 6 (152 x 152)  
 Maximum duct size: 36 x 36 (914 x 914) or  
 36 x 24 (914 x 610) with O.B.D.  
 Available in 3" (76) increments only.

### CORE STYLE SELECTION

	SQUARE	RECTANGULAR	
→ 1-WAY	<input type="checkbox"/> 1S	<input type="checkbox"/> 1A	<input type="checkbox"/> 1B
↕ 2-WAY	<input type="checkbox"/> 2S	<input type="checkbox"/> 2A	<input type="checkbox"/> 2B
↖↗ 2-WAY CORNER	<input type="checkbox"/> 2G	<input type="checkbox"/> 2E	<input type="checkbox"/> 2F
↕↔ 3-WAY	<input type="checkbox"/> 3A	<input type="checkbox"/> 3A1 A > B	<input type="checkbox"/> 3A2 B < A but > A/2
		<input type="checkbox"/> 3B B = A/2	<input type="checkbox"/> 3E B < A/2
		<input type="checkbox"/> 3H	
↕↔↔ 4-WAY	<input type="checkbox"/> 4A	<input type="checkbox"/> 4B	<input type="checkbox"/> 4C

Patterns are shown in plan view (looking down into inlet).



### DESCRIPTION:

1. Material: Aluminum.
2. Model 6200IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. The induction vanes consist of a set of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser eminently suitable for VAV applications as the possibility of downdrafts (dumping) are eliminated.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

### OPTIONS:

#### SQUARE AND RECTANGULAR NECK

- Steel opposed blade damper. Model 6200IV-O.
- Aluminum opposed blade damper. Model 6200IV-OA.
- ONA Offset neck adaptor. Fits outside duct (if a damper is required, order separately for remote mount. See Model OBDD).

#### ROUND NECK

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

#### EXTERNAL INSULATION

- EX External Foil-Back Insulation, installed - R-4.2.

#### OPTIONAL FINISH:

- SP Special. Specify \_\_\_\_\_.

### SCHEDULE TYPE:

### PROJECT:

### ENGINEER:

### CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

11 - 24 - 16

6200

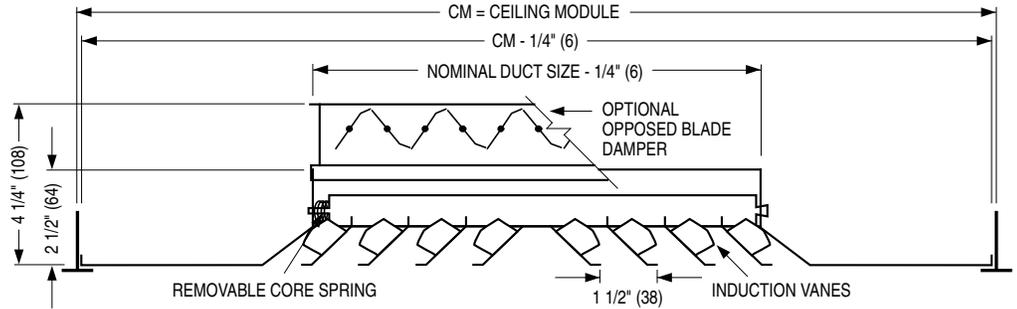
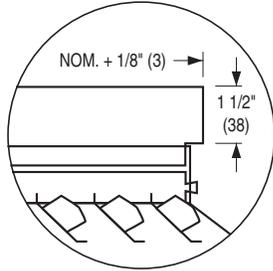
2 - 12 - 16

6200IV-1



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6200IV AND 6200IV-O TYPE L

**OFFSET NECK OPTION**



**TYPE L • LAY-IN T-BAR**

If the ceiling module is not 3" (76) or 6" (152) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.

Minimum duct size: 6 x 6 (152 x 152).

Maximum duct size: see table.

Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
20 x 20	15 x 15	508 x 508	381 x 381	500 x 500	381 x 381
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457
48 x 24	45 x 21	1219 x 610	1143 x 533	1200 x 600	1067 x 457

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. The induction vanes consist of a set of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser eminently suitable for VAV applications as the possibility of downdrafts (dumping) are eliminated.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6200IV-O.
- Aluminum opposed blade damper. Model 6200IV-OA.
- ONA Offset neck adaptor. Fits outside duct (if a damper is required, order separately for remote mount. See Model OBDD).

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

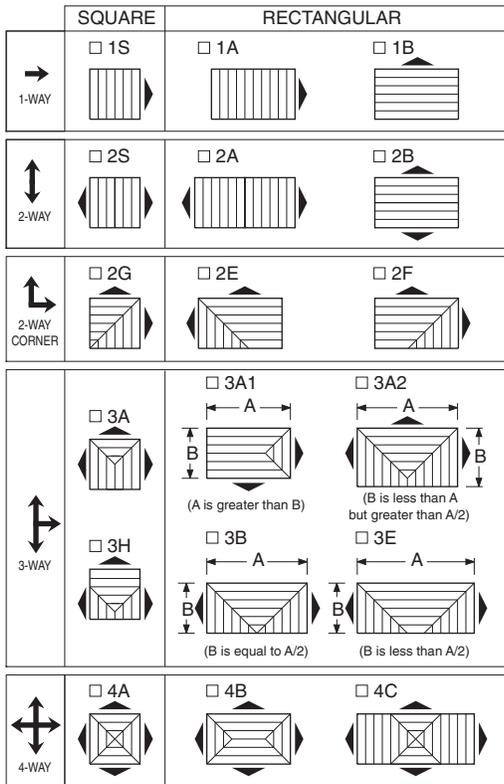
**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_ .

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

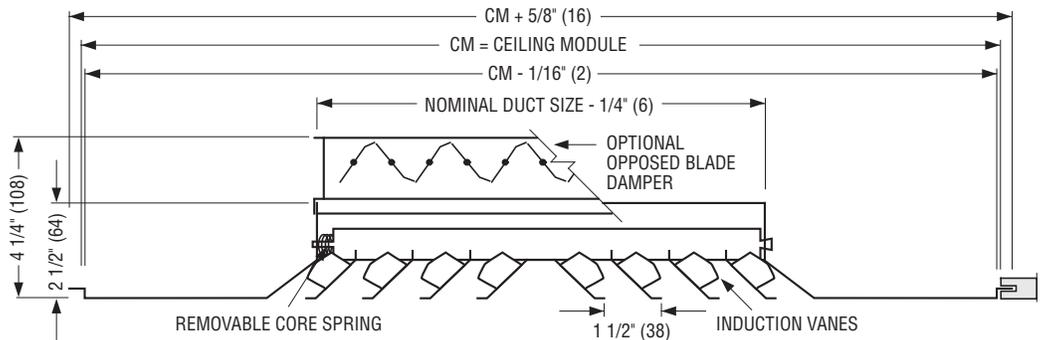
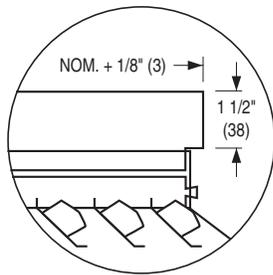
Dimensions are in inches (mm).

<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6200	1 - 16 - 17	6200IV-2



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6200IV AND 6200IV-O TYPE SP

**OFFSET NECK OPTION**



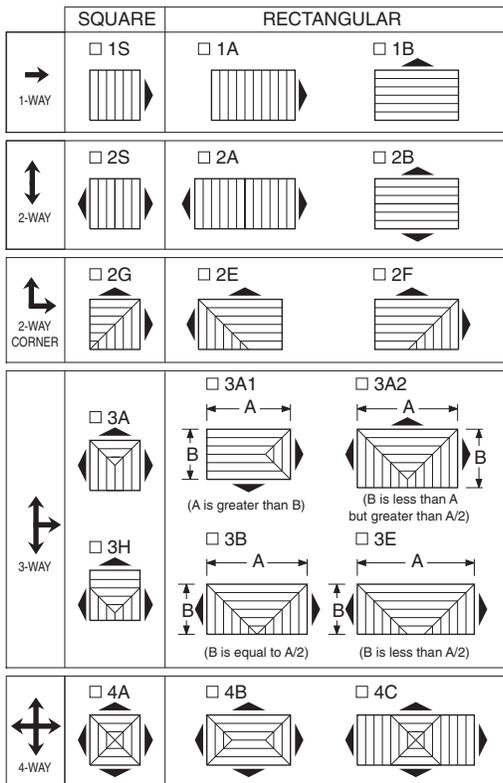
**TYPE SP • SPLINE**

If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel module sized extended panel will be added.  
Minimum duct size: 6 x 6 (152 x 152)  
Maximum duct size: see table.  
Available in 3" (76) increments only.

IMPERIAL MODULES (INCHES)	METRIC MODULES (MM)	MAXIMUM DUCT SIZE
12 x 12	300 x 300	6 x 6 (152 x 152)
24 x 12	600 x 300	18 x 6 (457 x 152)
24 x 24	600 x 600	18 x 18 (457 x 457)

Spline Type Diffuser for one-directional exposed T-bar lay-in grid or for concealed T-bar grid (splines on two opposite sides - steel lift brackets on other two sides).

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. The induction vanes consist of a set of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser eminently suitable for VAV applications as the possibility of downdrafts (dumping) are eliminated.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6200IV-O.
  - Aluminum opposed blade damper. Model 6200IV-OA.
  - ONA Offset neck adaptor. Fits outside duct (if a damper is required, order separately for remote mount. See Model OBDD).

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

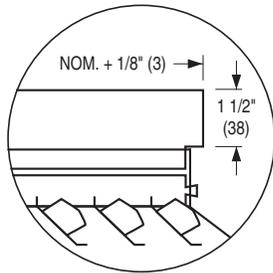
- SP Special. Specify \_\_\_\_\_.

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6200	11 - 24 - 16	6200IV-3

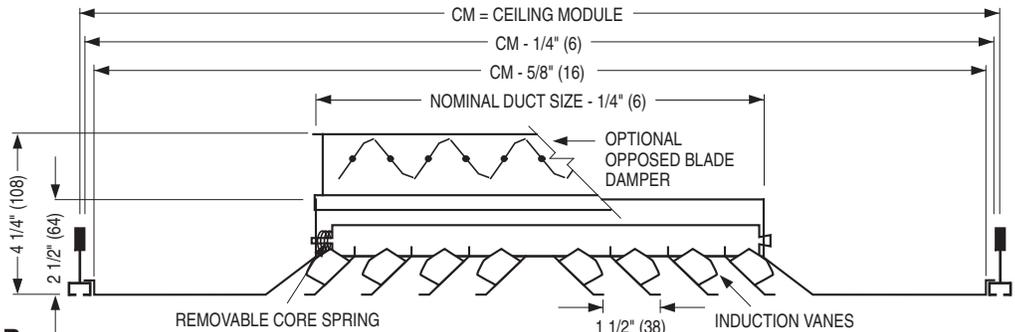


**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6200IV AND 6200IV-O TYPE F

**OFFSET NECK OPTION**



**FOR FINELINE® TYPE CEILING SYSTEMS**



**TYPE F • FINELINE® T-BAR**

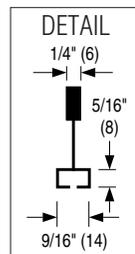
If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.

Minimum duct size: 6 x 6 (152 x 152)

Maximum duct size: see table.

Available in 3" (76) increments only.

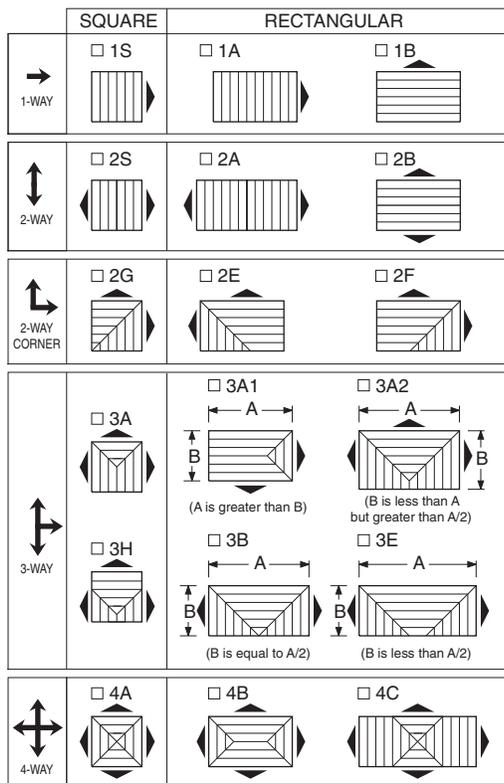
REMOVABLE CORE SPRING



IMPERIAL MODULES (INCHES)	METRIC MODULES (MM)	MAXIMUM DUCT SIZE
12 x 12	300 x 300	6 x 6 (152 x 152)
24 x 12	600 x 300	18 x 6 (457 x 152)
24 x 24	600 x 600	18 x 18 (457 x 457)

FineLine® is a registered trademark of USG Interiors Inc..

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. The induction vanes consist of a set of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser eminently suitable for VAV applications as the possibility of downdrafts (dumping) are eliminated.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6200IV-O.
- Aluminum opposed blade damper. Model 6200IV-OA.
- ONA Offset neck adaptor. Fits outside duct (if a damper is required, order separately for remote mount. See Model OBDD).

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Dimensions are in inches (mm).

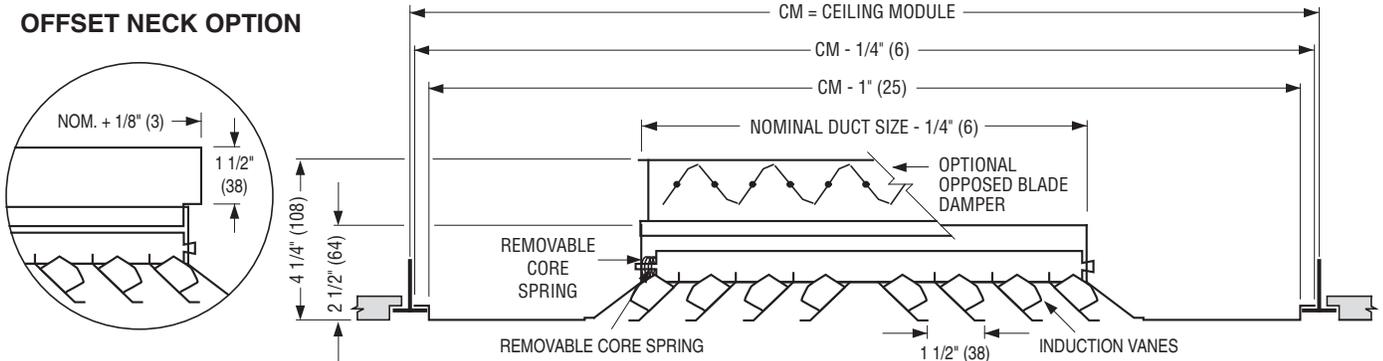
DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 8 - 18	6200	1 - 16 - 17	6200IV-4



# PATTERN CEILING DIFFUSERS WITH IV INDUCTION VANES

## ALUMINUM • SQUARE, RECT. OR ROUND NECK MODELS: 6200IV AND 6200IV-O TYPE TL

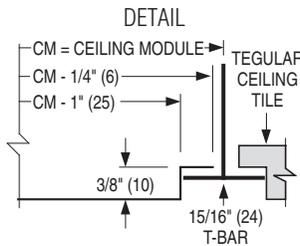
### OFFSET NECK OPTION



### TYPE TL • TEGULAR LAY-IN

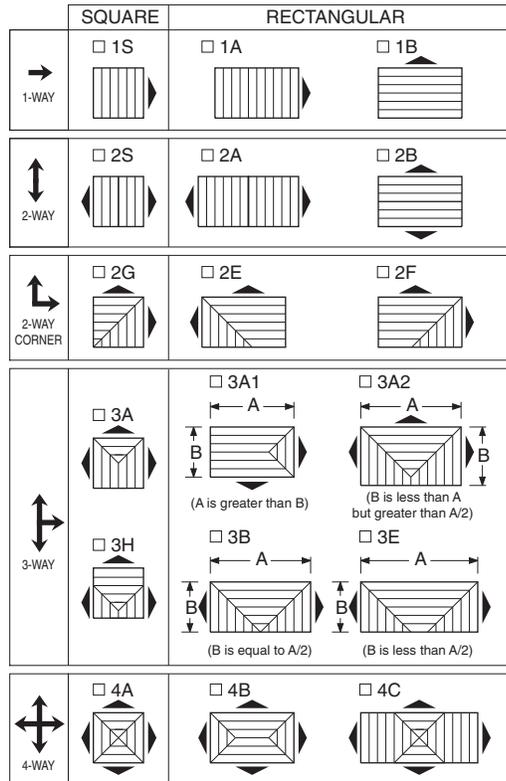
The diffuser is supplied in a steel module sized extended panel which drops the diffuser face below the T-bar so that it is flush with the tegular ceiling panels.

Minimum duct size: 6 x 6 (152 x 152)  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.



IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457

### CORE STYLE SELECTION



Patterns are shown in plan view (looking down into inlet).

### DESCRIPTION:

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. The induction vanes consist of a set of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser eminently suitable for VAV applications as the possibility of downdrafts (dumping) are eliminated.
3. Spring-loaded removable core.
4. Standard finish is AW Applique White.

### OPTIONS:

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK
- Steel opposed blade damper. Model 6200IV-O.
- Aluminum opposed blade damper. Model 6200IV-OA.
- ONA Offset neck adaptor. Fits outside duct (if a damper is required, order separately for remote mount. See Model OBDD).

### ROUND NECK

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

### EXTERNAL INSULATION

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

### OPTIONAL FINISH:

- SP Special. Specify \_\_\_\_\_.

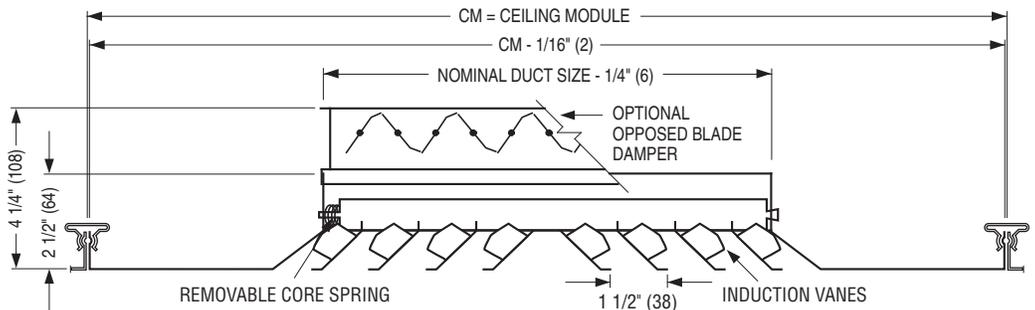
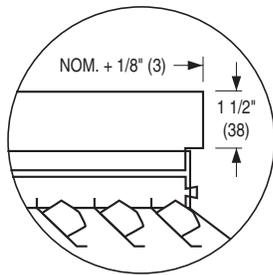
Dimensions are in inches (mm).

<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	1 - 16 - 17	6200	2 - 12 - 16	6200IV-5



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6200IV AND 6200IV-O TYPE M

**OFFSET NECK OPTION**



**TYPE M • METAL PAN (SNAP-IN)**

If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.

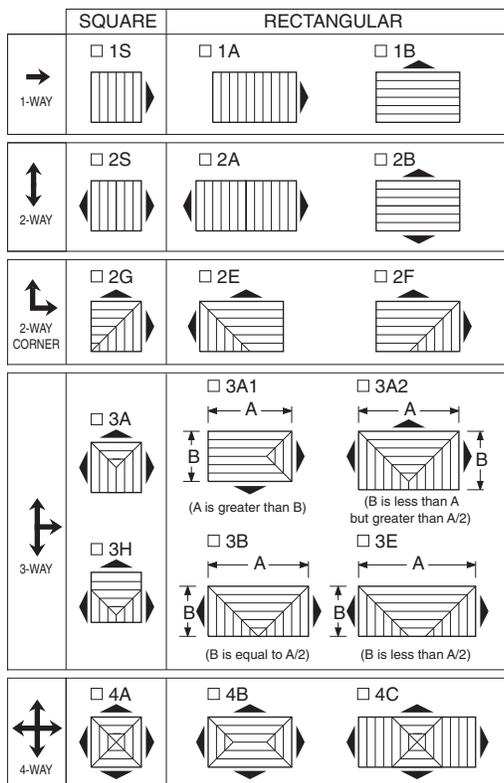
Minimum duct size: 6 x 6 (152 x 152)

Maximum duct size: see table.

Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6200IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. The induction vanes consist of a set of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser eminently suitable for VAV applications as the possibility of downdrafts (dumping) are eliminated.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6200IV-O.
  - Aluminum opposed blade damper. Model 6200IV-OA.
  - ONA Offset neck adaptor. Fits outside duct (if a damper is required, order separately for remote mount. See Model OBDD).

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

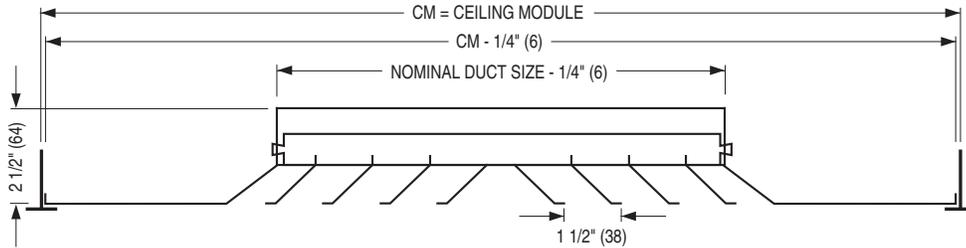
- SP Special. Specify \_\_\_\_\_ .

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6200	11 - 24 - 16	6200IV-6



**PATTERN CEILING DIFFUSERS**  
 100% ALUMINUM • SQUARE NECK  
 SUITABLE FOR MRI  
**MODEL: 6200-MRI TYPE L**

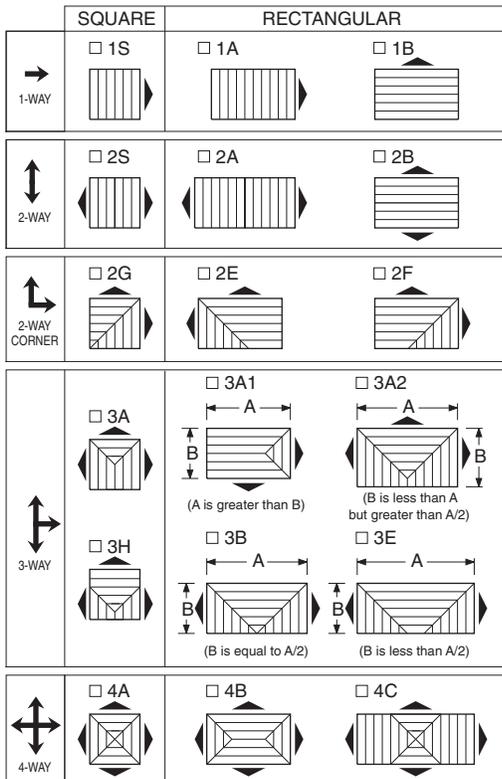
**TYPE L LAY-IN T-BAR**



If the ceiling module is not 3" (76) or 6" (152) larger than the neck size of the diffuser in both dimensions, an aluminum module sized extended panel will be added.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
20 x 20	15 x 15	508 x 508	381 x 381	500 x 500	381 x 381
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457
48 x 24	45 x 21	1219 x 610	1143 x 533	1200 x 600	1067 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: 100% Aluminum. Extended panel where required. Suitable for MRI.
2. Model 6200-MRI is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Fixed core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

EXTERNAL INSULATION

- EX External Foil-Back Insulation, installed -R-4.2.

OPTIONAL FINISH:

- SP Special. Specify \_\_\_\_\_.

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Dimensions are in inches (mm).

**DATE**

**B SERIES**

**SUPERSEDES**

**DRAWING NO.**

2 - 8 - 18

6200

5 - 11 - 15

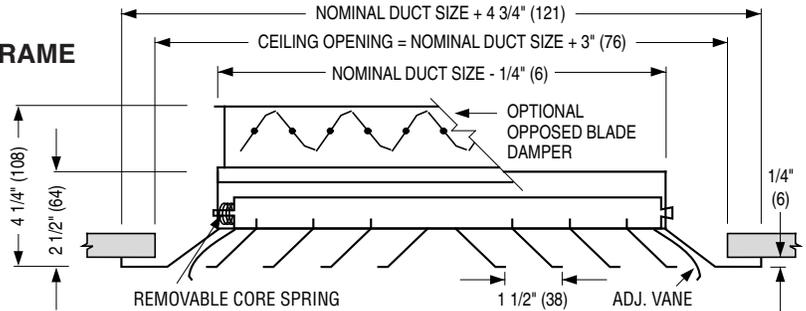
6200-MRI



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • ALUMINUM**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6250 AND 6250-O TYPES S & B**

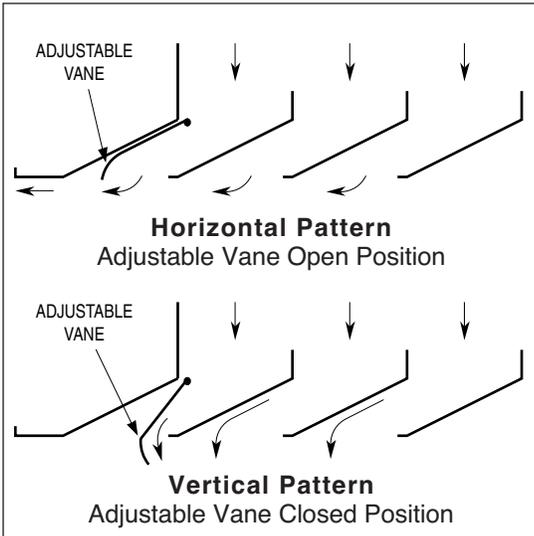
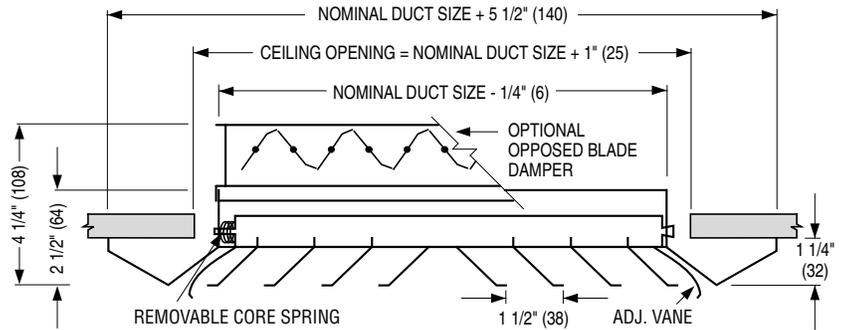
**TYPE S • SURFACE MOUNT • FLAT FRAME**

Minimum duct size: 6 x 6 (152 x 152)  
 Maximum duct size: 24 x 24 (610 x 610)  
 Available in 3" (76) increments only.



**TYPE B • BEVELED DROP FACE**  
**• SURFACE MOUNT**

Minimum duct size: 6 x 6 (152 x 152)  
 Maximum duct size: 24 x 24 (610 x 610)  
 Available in 3" (76) increments only.



**DESCRIPTION:**

1. Material: Aluminum.
2. Model 6250 is a high capacity ceiling diffuser available with a square 4-way blow pattern as standard (optional core styles are available). The unit is supplied with independent movable vanes on all four sides to provide a horizontal to vertical throw adjustable discharge. In the horizontal setting, the diffuser provides a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

**SQUARE AND RECTANGULAR NECK**

- Steel opposed blade damper. Model 6250-O.
- Aluminum opposed blade damper. Model 6250-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

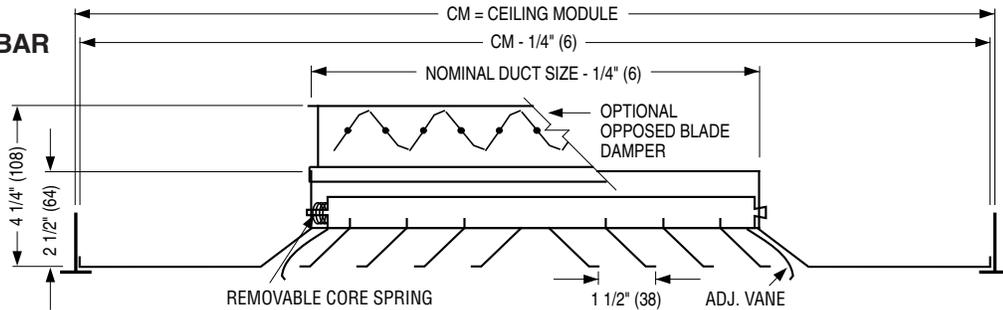
- SP Special. Specify \_\_\_\_\_ .

<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).			
<b>PROJECT:</b>					
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	11 - 24 - 16	6250	5 - 11 - 15	6250-1	



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • ALUMINUM**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6250 AND 6250-O TYPE L**

**TYPE L**  
**LAY-IN T-BAR**



If the ceiling module is not 3" (76) or 6" (152) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
20 x 20	15 x 15	508 x 508	381 x 381	500 x 500	381 x 381
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457
48 x 24	18 x 18	1219 x 610	457 x 457	1200 x 600	457 x 457

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6250 is a high capacity ceiling diffuser available with a square 4-way blow pattern as standard (optional core styles are available). The unit is supplied with independent movable vanes on all four sides to provide a horizontal to vertical throw adjustable discharge. In the horizontal setting, the diffuser provides a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6250-O.
- Aluminum opposed blade damper. Model 6250-OA.

**ROUND NECK**

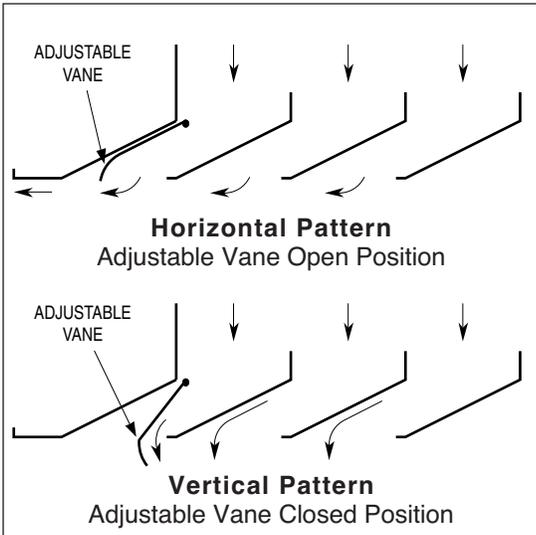
- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

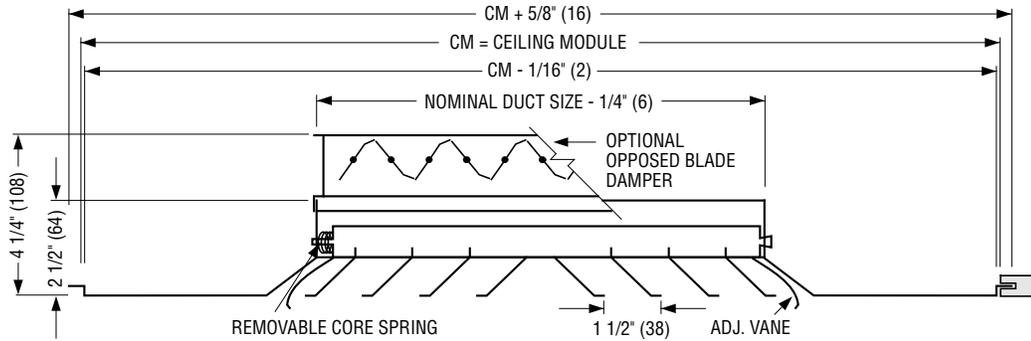


<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).						
<b>PROJECT:</b>								
<b>ENGINEER:</b>	<b>DATE</b>					<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18					6250	1 - 16 - 17	6250-2



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • ALUMINUM**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6250 AND 6250-O TYPE SP**

**TYPE SP SPLINE**



The diffuser is supplied in a steel module sized extended panel.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457

Spline Type Diffuser for one-directional exposed T-bar lay-in grid or for concealed T-bar grid (splines on two opposite sides - steel lift brackets on other two sides).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6250 is a high capacity ceiling diffuser available with a square 4-way blow pattern as standard (optional core styles are available). The unit is supplied with independent movable vanes on all four sides to provide a horizontal to vertical throw adjustable discharge. In the horizontal setting, the diffuser provides a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6250-O.
- Aluminum opposed blade damper. Model 6250-OA.

**ROUND NECK**

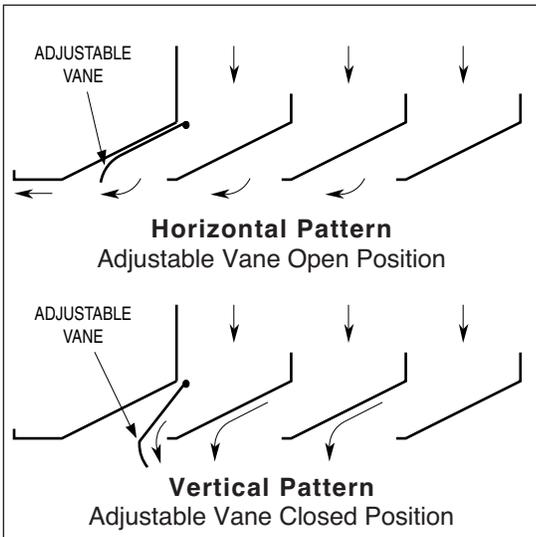
- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_ .



**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Dimensions are in inches (mm).

**DATE**

**B SERIES**

**SUPERSEDES**

**DRAWING NO.**

11 - 24 - 16

6250

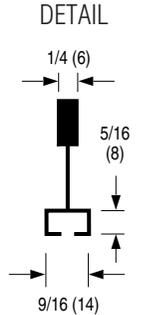
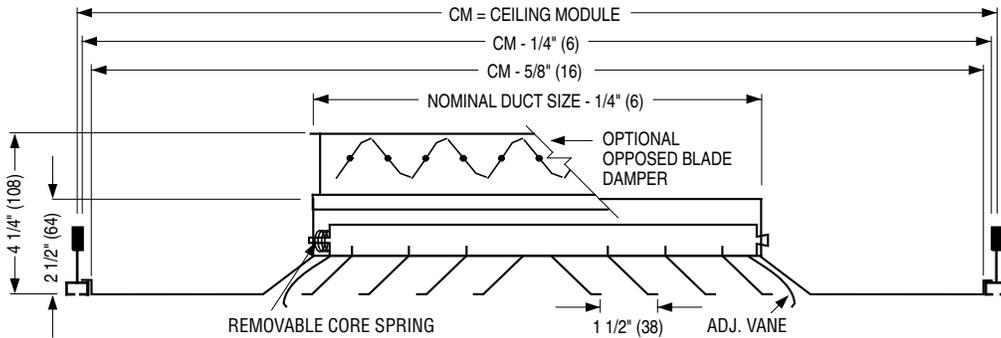
5 - 11 - 15

6250-3



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • ALUMINUM**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6250 AND 6250-O TYPE F**

**TYPE F FINELINE® T-BAR FOR FINELINE® TYPE CEILING SYSTEMS**



The diffuser is supplied in a steel module sized extended panel.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6250 is a high capacity ceiling diffuser available with a square 4-way blow pattern as standard (optional core styles are available). The unit is supplied with independent movable vanes on all four sides to provide a horizontal to vertical throw adjustable discharge. In the horizontal setting, the diffuser provides a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6250-O.
- Aluminum opposed blade damper. Model 6250-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

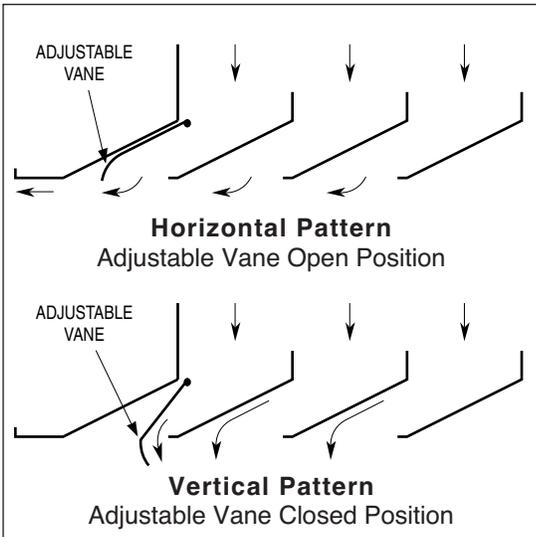
- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

**OTHER CORE STYLE:**

- Specify \_\_\_\_\_.



**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

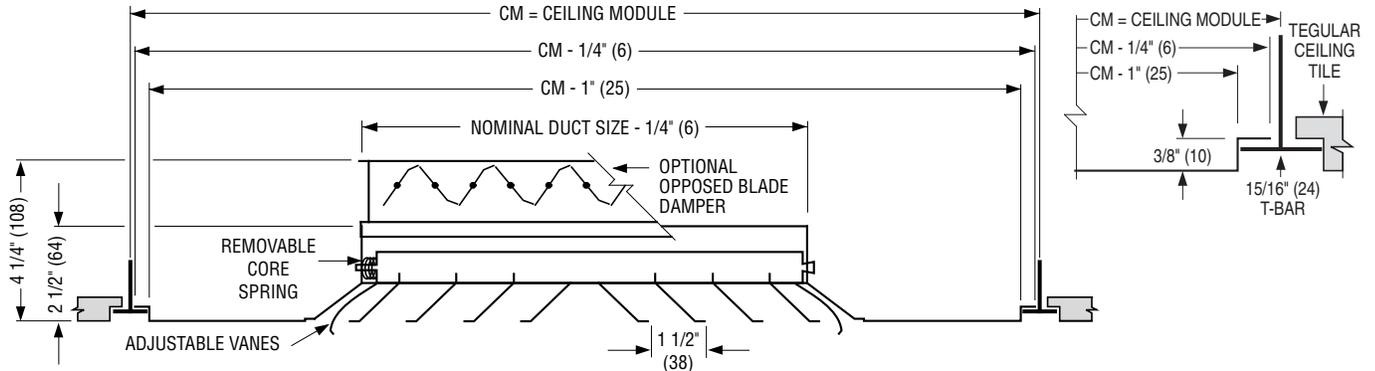
Fineline® is a registered trademark of USG Interiors Inc.  
 Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
1 - 16 - 17	6250	5 - 11 - 15	6250-4



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • ALUMINUM**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6250 AND 6250-O TYPE TL**

**TYPE TL TEGULAR LAY-IN**



Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6250 is a high capacity ceiling diffuser available with a square 4-way blow pattern (core style 4A) as standard (optional core styles are available). The unit is supplied with independent movable vanes on all four sides to provide a horizontal to vertical throw adjustable discharge. In the horizontal setting, the diffuser provides a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.  
The diffuser is supplied in a module sized extended panel which drops the diffuser face below the T-bar so that it is flush with the tegular ceiling panels.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6250-O.
- Aluminum opposed blade damper. Model 6250-OA.

**ROUND NECK**

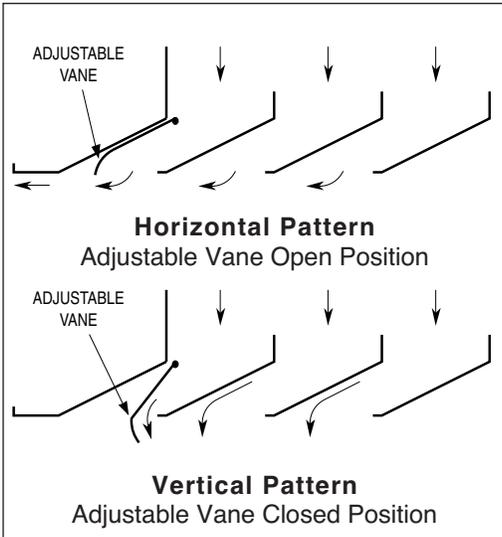
- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.



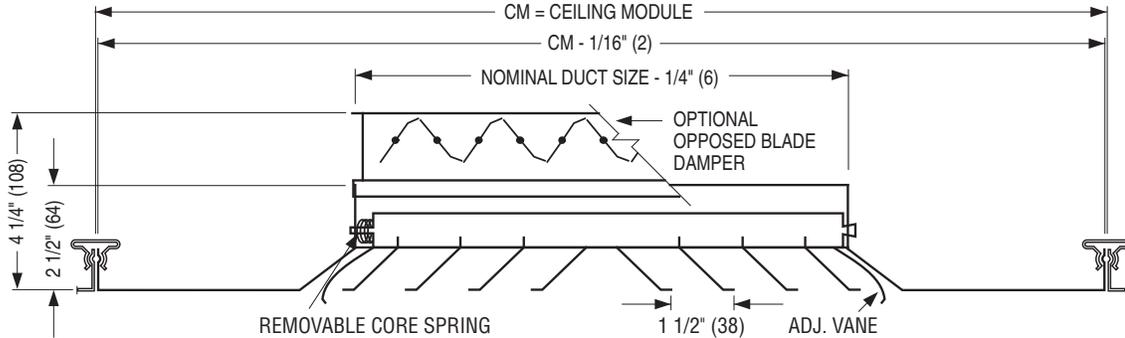
Dimensions are in inches (mm).

<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	1 - 16 - 17	6250	5 - 11 - 15	6250-5



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • ALUMINUM**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6250 AND 6250-O TYPE M**

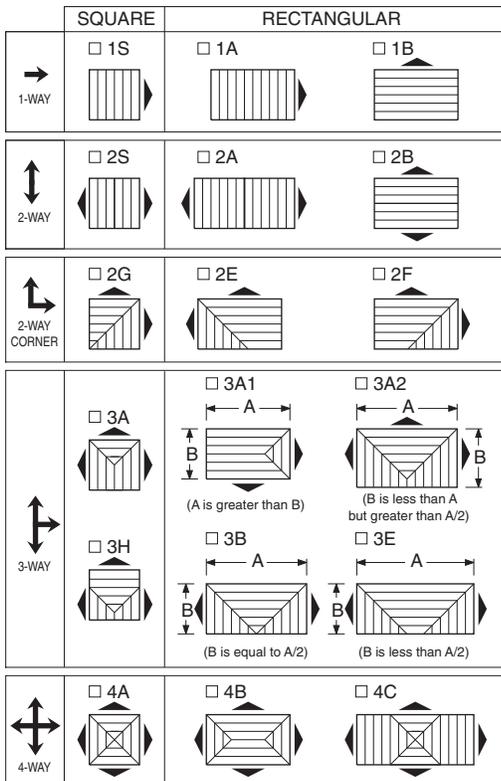
**TYPE M METAL PAN (SNAP-IN)**



If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6250 is a high capacity ceiling diffuser available with a square 4-way blow pattern as standard (optional core styles are available). The unit is supplied with independent movable vanes on all four sides to provide a horizontal to vertical throw adjustable discharge. In the horizontal setting, the diffuser provides a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- Steel opposed blade damper. Model 6250-O.
- Aluminum opposed blade damper. Model 6250-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

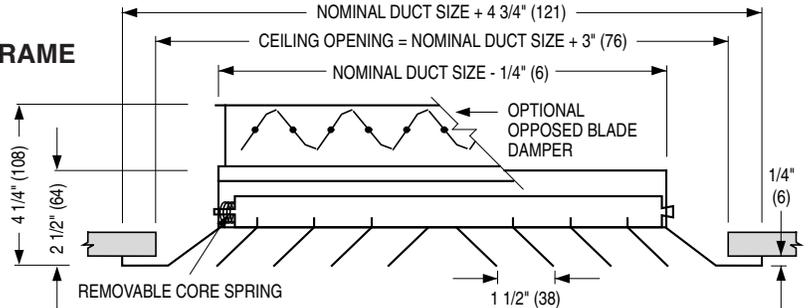
<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6250	11 - 24 - 16	6250-6



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6400 AND 6400-O TYPES S & B**

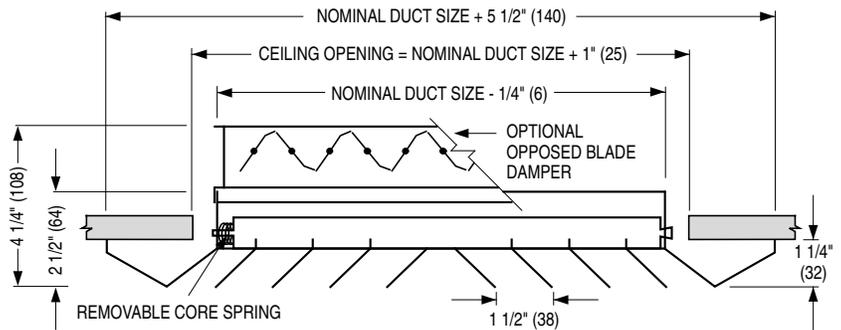
**TYPE S • SURFACE MOUNT • FLAT FRAME**

Minimum duct size: 6 x 6 (152 x 152)  
 Maximum duct size: 36 x 36 (914 x 914)  
 or 36 x 24 (914 x 610) with O.B.D.  
 Available in 3" (76) increments only.



**TYPE B • BEVELED DROP FACE**  
**• SURFACE MOUNT**

Minimum duct size: 6 x 6 (152 x 152)  
 Maximum duct size: 36 x 36 (914 x 914)  
 or 36 x 24 (914 x 610) with O.B.D.  
 Available in 3" (76) increments only.



**CORE STYLE SELECTION**

	SQUARE	RECTANGULAR	
→ 1-WAY	<input type="checkbox"/> 1S	<input type="checkbox"/> 1A	<input type="checkbox"/> 1B
↕ 2-WAY	<input type="checkbox"/> 2S	<input type="checkbox"/> 2A	<input type="checkbox"/> 2B
↖ 2-WAY CORNER	<input type="checkbox"/> 2G	<input type="checkbox"/> 2E	<input type="checkbox"/> 2F
↕ 3-WAY	<input type="checkbox"/> 3A	<input type="checkbox"/> 3A1 A > B	<input type="checkbox"/> 3A2 B < A but > A/2
		<input type="checkbox"/> 3B B = A/2	<input type="checkbox"/> 3E B < A/2
↕ 4-WAY	<input type="checkbox"/> 4A	<input type="checkbox"/> 4B	<input type="checkbox"/> 4C

Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum.
2. Model 6400 is an extra high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns. The diffusers are designed to create an induction effect which causes rapid mixing of room air and primary air and reduces discharge velocity. These diffusers rely upon the ceiling coanda effect in order to maintain the horizontal air pattern and catalogued throws. Suitable for normal ceiling heights of 9 – 10 feet.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

**SQUARE AND RECTANGULAR NECK**

- Steel opposed blade damper. Model 6400-O.
- Aluminum opposed blade damper. Model 6400-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

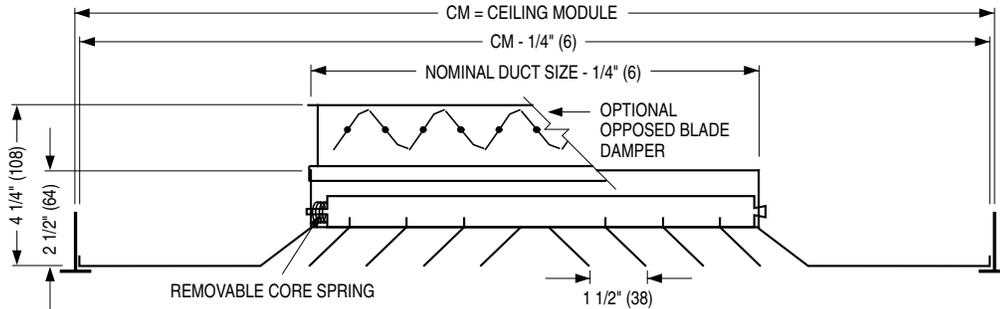
- SP Special. Specify \_\_\_\_\_.

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	11 - 24 - 16	6400	5 - 11 - 15	6400-1



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6400 AND 6400-O TYPE L**

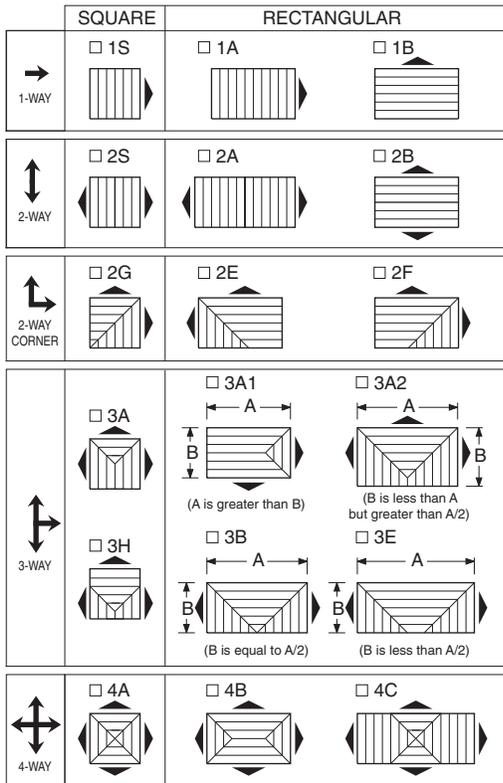
**TYPE L LAY-IN T-BAR**



If the ceiling module is not 3" (76) or 6" (152) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
20 x 20	15 x 15	508 x 508	381 x 381	500 x 500	381 x 381
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457
48 x 24	45 x 21	1219 x 610	1143 x 533	1200 x 600	1067 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400 is an extra high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns. The diffusers are designed to create an induction effect which causes rapid mixing of room air and primary air and reduces discharge velocity. These diffusers rely upon the ceiling coanda effect in order to maintain the horizontal air pattern and catalogued throws. Suitable for normal ceiling heights of 9 – 10 feet.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK
- Steel opposed blade damper. Model 6400-O.
- Aluminum opposed blade damper. Model 6400-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' is available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_ .

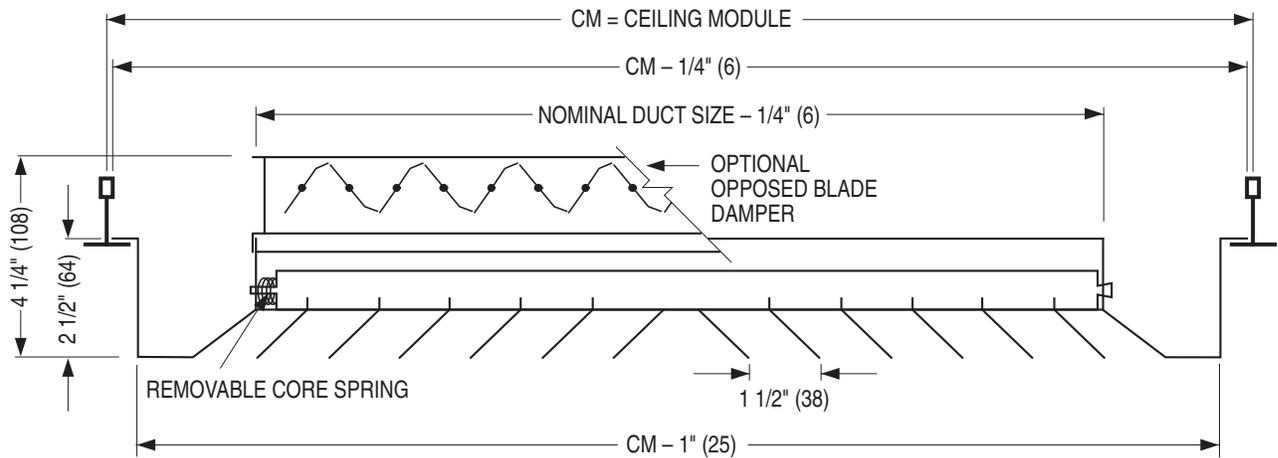
Dimensions are in inches (mm).

<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6400	1 - 16 - 17	6400-2

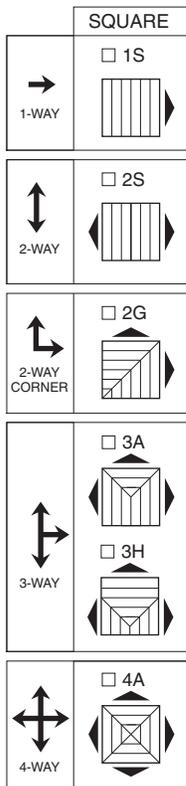


**PATTERN CEILING DIFFUSER**  
**ALUMINUM • SQUARE OR ROUND NECK**  
**MODELS: 6400 AND 6400-O TYPE DL**

**TYPE DL DROPPED FACE LAY-IN T-BAR MOUNT**



**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**AVAILABLE SIZES:**

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457
48 x 48	42 x 42	1219 x 1219	1067 x 1067	1200 x 1200	1067 x 1067

Minimum duct (neck) size: 6" x 6" (152 x 152).  
 Maximum duct (neck) size: see table.  
 Available in 3" (76) increments only.

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400 is an extra high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns. The diffusers are designed to create an induction effect which causes rapid mixing of room air and primary air and reduces discharge velocity. These diffusers rely upon the ceiling coanda effect in order to maintain the horizontal air pattern and catalogued throws. Suitable for normal ceiling heights of 9 – 10 feet.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6400-O.
  - Aluminum opposed blade damper. Model 6400-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed-R-4.2.

**OPTIONAL FINISH:**

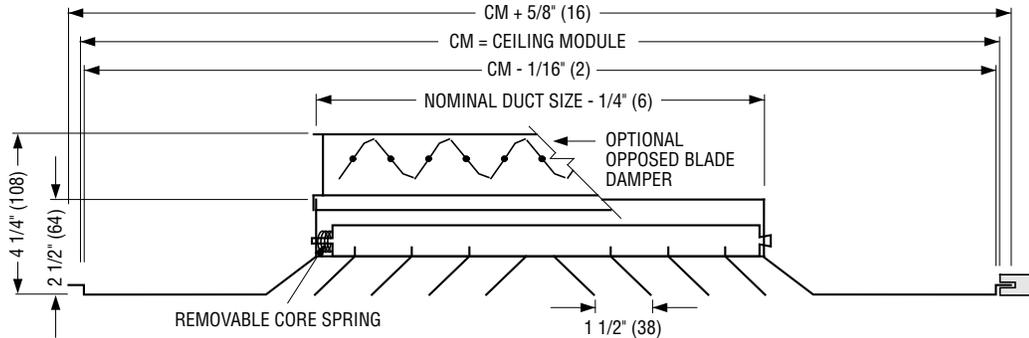
- SP Special. Specify \_\_\_\_\_ .

<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).			
<b>PROJECT:</b>					
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	11 - 24 - 16	6400	5 - 11 - 15	6400-2A	



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6400 AND 6400-O TYPE SP**

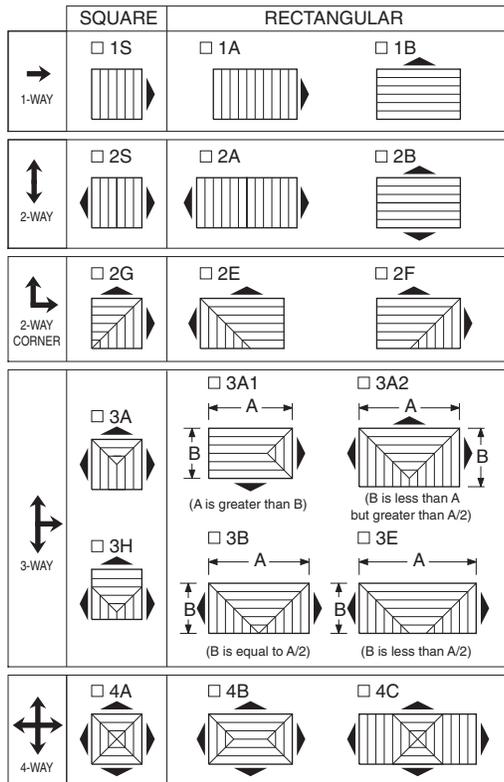
**TYPE SP SPLINE**



If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

Spline Type Diffuser for one-directional exposed T-bar lay-in grid or for concealed T-bar grid (splines on two opposite sides - steel lift brackets on other two sides).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400 is an extra high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns. The diffusers are designed to create an induction effect which causes rapid mixing of room air and primary air and reduces discharge velocity. These diffusers rely upon the ceiling coanda effect in order to maintain the horizontal air pattern and catalogued throws. Suitable for normal ceiling heights of 9 – 10 feet.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6400-O.
- Aluminum opposed blade damper. Model 6400-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed-R-4.2.

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

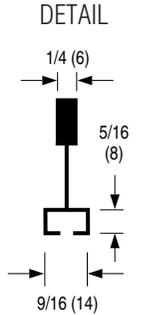
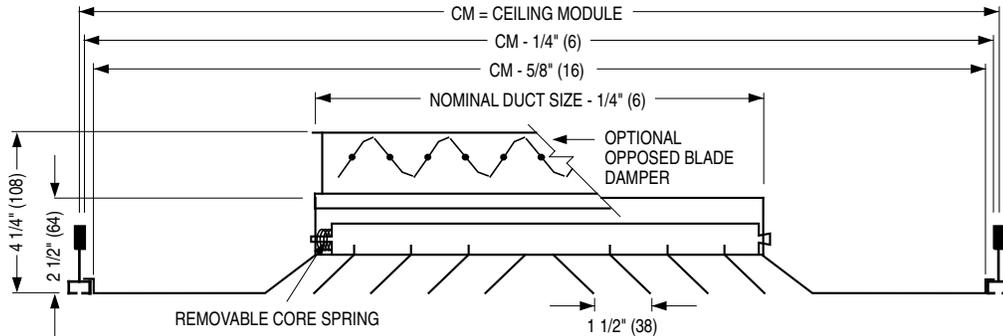
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 8 - 18	6400	11 - 24 - 16	6400-3



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6400 AND 6400-O TYPE F**

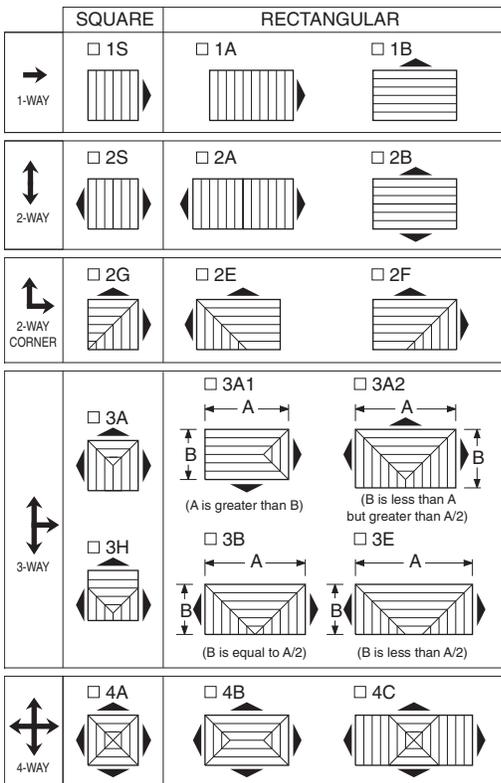
**TYPE F FINELINE® T-BAR FOR FINELINE® TYPE CEILING SYSTEMS**



The diffuser is supplied in a steel module sized extended panel.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400 is an extra high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns. The diffusers are designed to create an induction effect which causes rapid mixing of room air and primary air and reduces discharge velocity. These diffusers rely upon the ceiling coanda effect in order to maintain the horizontal air pattern and cataloged throws. Suitable for normal ceiling heights of 9 – 10 feet.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK
- Steel opposed blade damper. Model 6400-O.
- Aluminum opposed blade damper. Model 6400-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed-R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' is available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

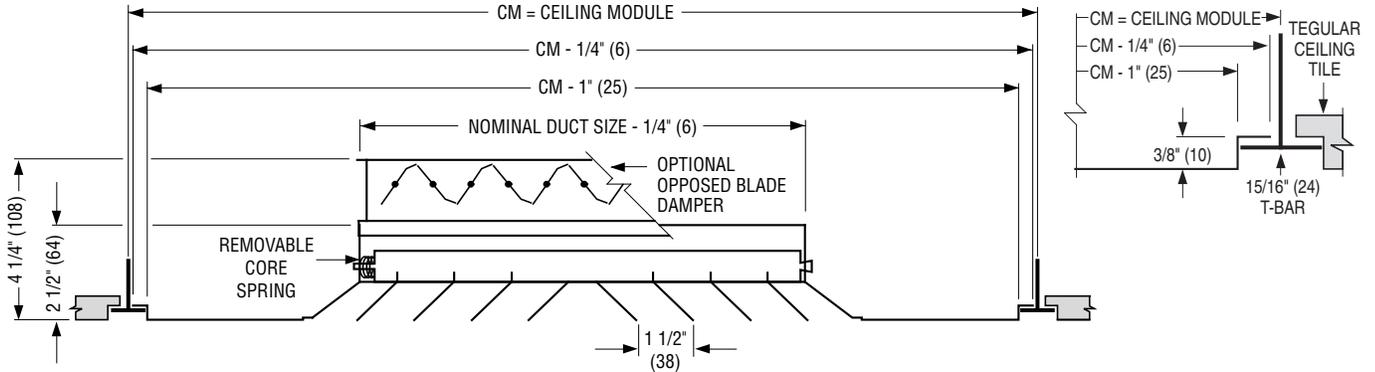
Fineline® is a registered trademark of USG Corporation.

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	1 - 16 - 17	6400	8 - 17 - 16	6400-4



**PATTERN CEILING DIFFUSERS**  
**ALUMINUM • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6400 AND 6400-O TYPE TL**

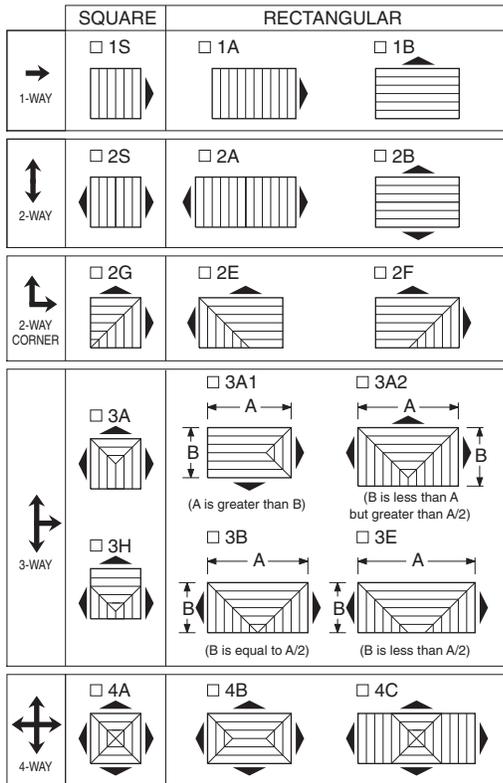
**TYPE TL TEGULAR LAY-IN**



Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400 is an extra high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns. The diffusers are designed to create an induction effect which causes rapid mixing of room air and primary air and reduces discharge velocity. These diffusers rely upon the ceiling coanda effect in order to maintain the horizontal air pattern and catalogued throws. Suitable for normal ceiling heights of 9 – 10 feet.  
 The diffuser is supplied in a module sized extended panel which drops the diffuser face below the T-bar so that it is flush with the tegular ceiling panels.

3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6400-O.
- Aluminum opposed blade damper. Model 6400-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' is available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

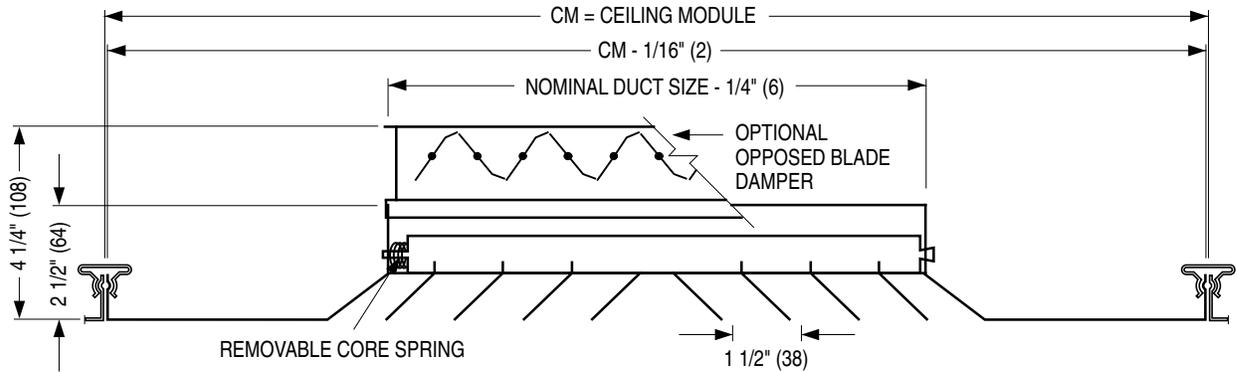
- SP Special. Specify \_\_\_\_\_.

<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).			
<b>PROJECT:</b>					
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	1 - 16 - 17	6400	8 - 17 - 16	6400-5	



**PATTERN CEILING DIFFUSERS**  
 ALUMINUM • SQUARE, RECTANGULAR OR  
 ROUND NECK  
**MODELS: 6400 AND 6400-O TYPE M**

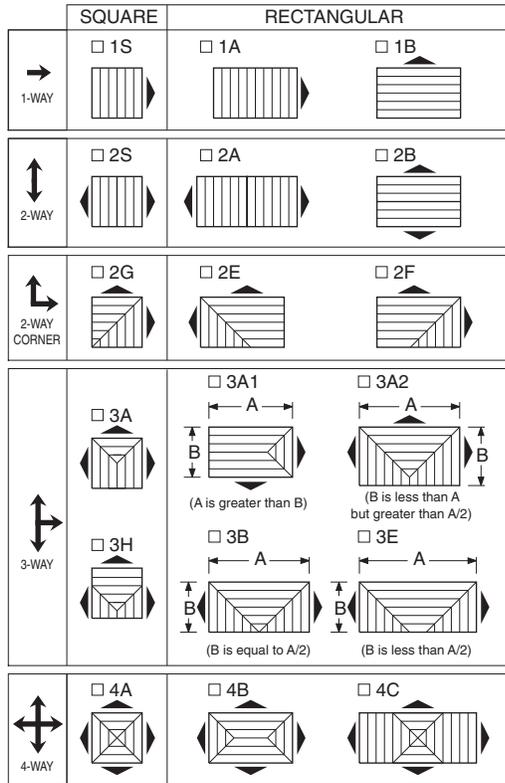
**TYPE M METAL PAN (SNAP-IN)**



If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
 Minimum duct size: 6 x 6 (152 x 152).  
 Maximum duct size: see table.  
 Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400 is an extra high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns. The diffusers are designed to create an induction effect which causes rapid mixing of room air and primary air and reduces discharge velocity. These diffusers rely upon the ceiling coanda effect in order to maintain the horizontal air pattern and catalogued throws. Suitable for normal ceiling heights of 9 – 10 feet.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- Steel opposed blade damper. Model 6400-O.
- Aluminum opposed blade damper. Model 6400-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

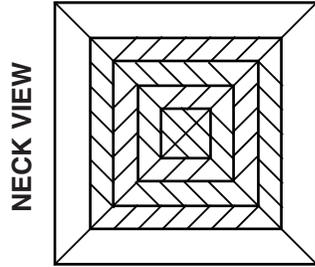
<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6400	11 - 24 - 16	6400-6



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6400IV AND 6400IV-O TYPES S & B

**TYPE S • SURFACE MOUNT • FLAT FRAME**

Minimum duct size: 6 x 6 (152 x 152)  
Maximum duct size: 36 x 36 (914 x 914)  
or 36 x 24 (914 x 610) with O.B.D.  
Available in 3" (76) increments only.



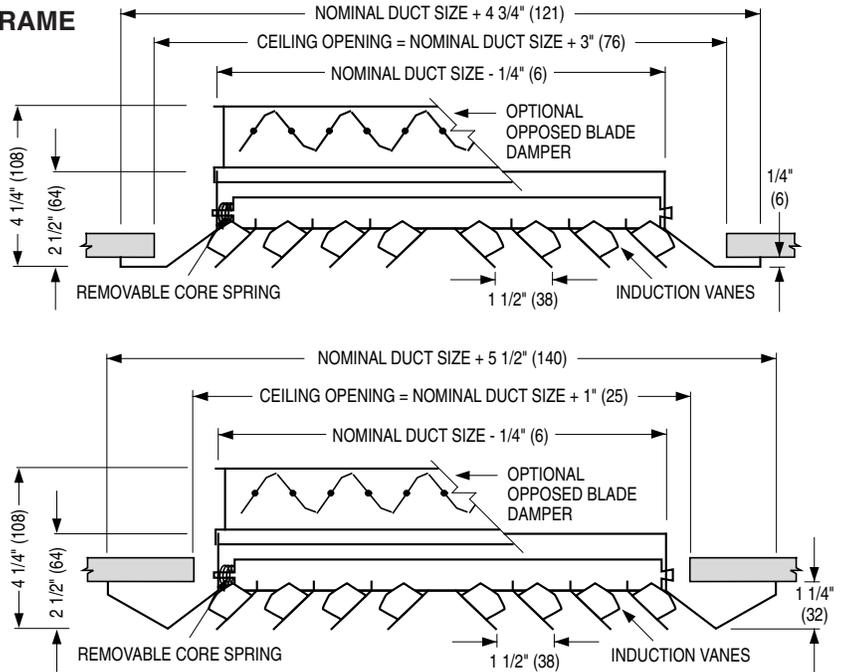
**TYPE B • BEVELED DROP FACE  
• SURFACE MOUNT**

Minimum duct size: 6 x 6 (152 x 152)  
Maximum duct size: 36 x 36 (914 x 914)  
or 36 x 24 (914 x 610) with O.B.D.  
Available in 3" (76) increments only.

**CORE STYLE SELECTION**

	SQUARE	RECTANGULAR	
→ 1-WAY	□ 1S 	□ 1A 	□ 1B 
↕ 2-WAY	□ 2S 	□ 2A 	□ 2B 
↙ 2-WAY CORNER	□ 2G 	□ 2E 	□ 2F 
↕ 3-WAY	□ 3A 	□ 3A1  (A is greater than B)	□ 3A2  (B is less than A but greater than A/2)
		□ 3B  (B is equal to A/2)	□ 3E  (B is less than A/2)
↔ 4-WAY	□ 4A 	□ 4B 	□ 4C 

Patterns are shown in plan view (looking down into inlet).



**DESCRIPTION:**

1. Material: Extruded aluminum.
2. Model 6400IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns especially designed for optimum performance in heating and cooling applications. The induction vanes consist of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser highly suitable for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

**SQUARE AND RECTANGULAR NECK**

- Steel opposed blade damper. Model 6400IV-O.
- Aluminum opposed blade damper. Model 6400IV-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed - R-4.2.

**OPTIONAL FINISH:**

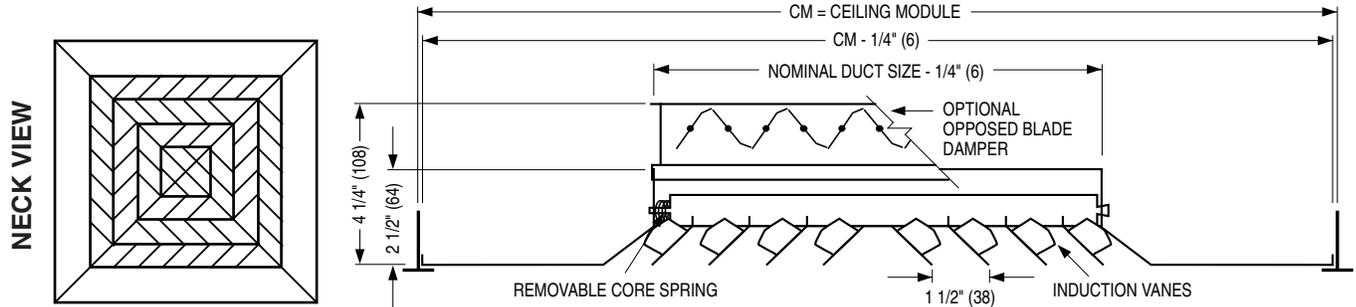
- SP Special. Specify \_\_\_\_\_ .

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	11 - 24 - 16	6400	5 - 11 - 15	6400IV-1



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6400IV AND 6400IV-O TYPE L

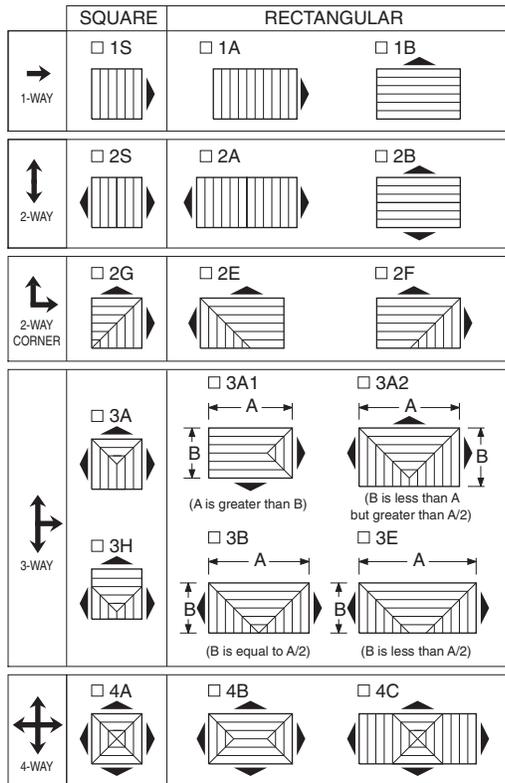
**TYPE L LAY-IN T-BAR**



If the ceiling module is not 3" (76) or 6" (152) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
Minimum duct size: 6 x 6 (152 x 152).  
Maximum duct size: see table.  
Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
20 x 20	15 x 15	508 x 508	381 x 381	500 x 500	381 x 381
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457
48 x 24	45 x 21	1219 x 610	1143 x 533	1200 x 600	1067 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Extruded aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns especially designed for optimum performance in heating and cooling applications. The induction vanes consist of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser highly suitable for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK
- Steel opposed blade damper. Model 6400IV-O.
- Aluminum opposed blade damper. Model 6400IV-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' is available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

Dimensions are in inches (mm).

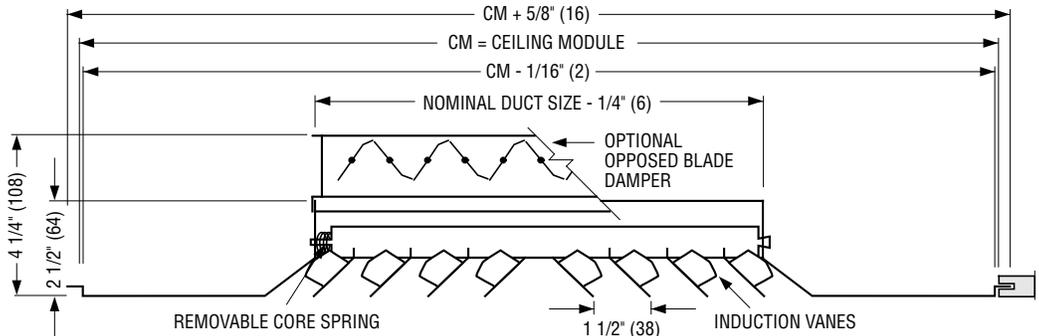
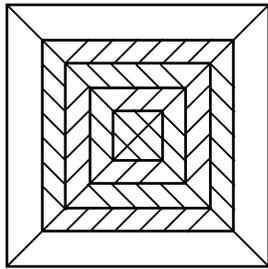
<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6400	1 - 16 - 17	6400IV-2



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6400IV AND 6400IV-O TYPE SP

**TYPE SP SPLINE**

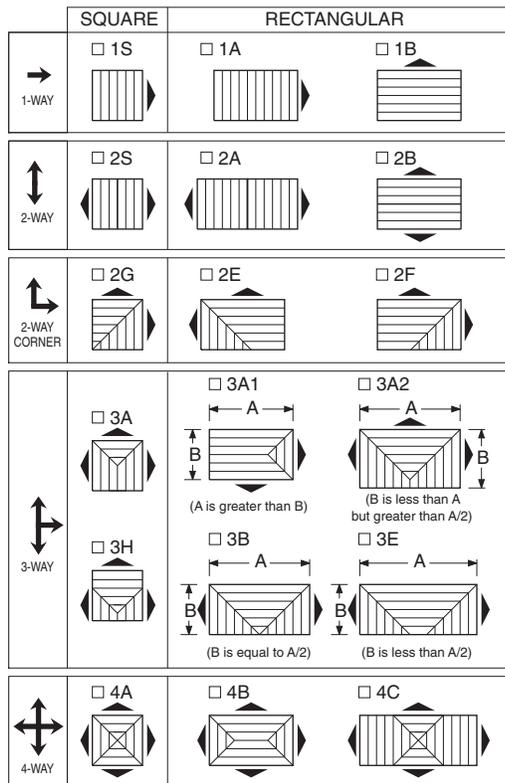
NECK VIEW



If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
Minimum duct size: 6 x 6 (152 x 152).  
Maximum duct size: see table.  
Available in 3" (76) increments only.

IMPERIAL MODULES (INCHES)	METRIC MODULES (MM)	MAXIMUM DUCT SIZE
12 x 12	300 x 300	6 x 6 (152 x 152)
24 x 12	600 x 300	18 x 6 (457 x 152)
24 x 24	600 x 600	18 x 18 (457 x 457)

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

Spline Type Diffuser for one-directional exposed T-bar lay-in grid or for concealed T-bar grid (splines on two opposite sides - steel lift brackets on other two sides).

**DESCRIPTION:**

1. Material: Extruded aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns especially designed for optimum performance in heating and cooling applications. The induction vanes consist of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser highly suitable for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- Steel opposed blade damper. Model 6400IV-O.
- Aluminum opposed blade damper. Model 6400IV-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed - R-4.2.

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).			
<b>PROJECT:</b>					
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	2 - 8 - 18	6400	11 - 24 - 16	6400IV-3	

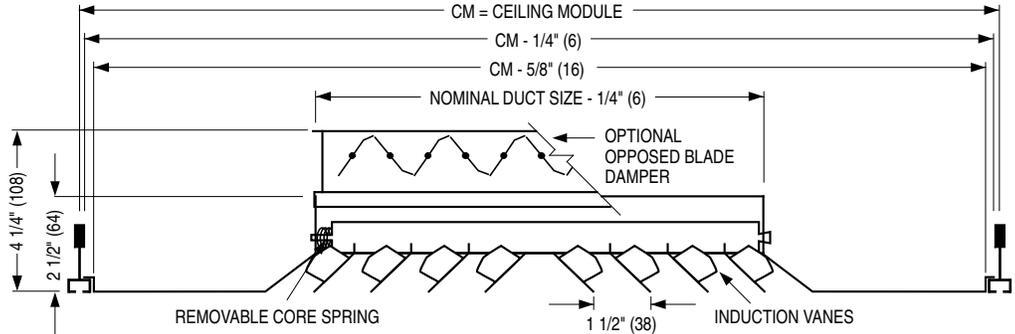
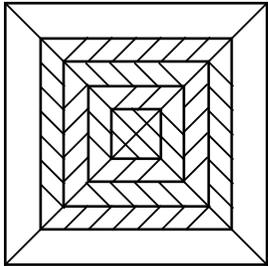


**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6400IV AND 6400IV-O TYPE F

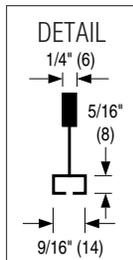
**TYPE F FINELINE® T-BAR**

**FOR FINELINE® TYPE CEILING SYSTEMS**

NECK VIEW



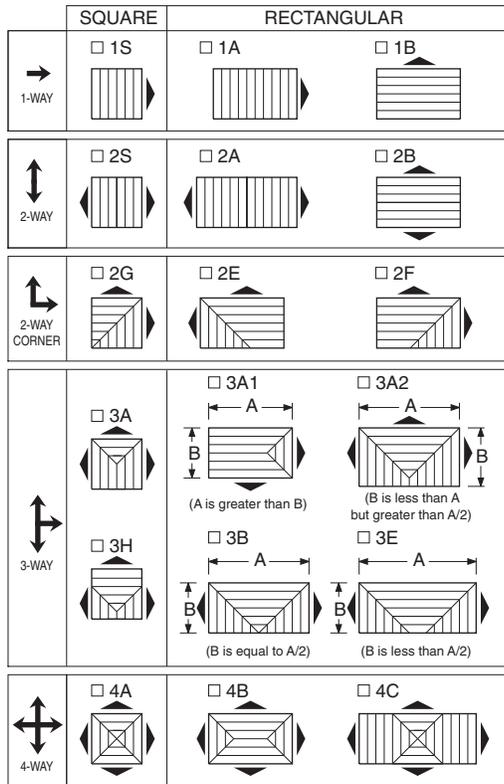
If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added. Minimum duct size: 6 x 6 (152 x 152). Maximum duct size: see table. Available in 3" (76) increments only.



IMPERIAL MODULES (INCHES)	METRIC MODULES (MM)	MAXIMUM DUCT SIZE
12 x 12	300 x 300	6 x 6 (152 x 152)
24 x 12	600 x 300	18 x 6 (457 x 152)
24 x 24	600 x 600	18 x 18 (457 x 457)

Fineline® is a registered trademark of USG Interiors Inc..

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Extruded aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns especially designed for optimum performance in heating and cooling applications. The induction vanes consist of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser highly suitable for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6400IV-O.
  - Aluminum opposed blade damper. Model 6400IV-OA.
- ROUND NECK**
- SR Square to round transition collar
  - SR-O Square to round transition collar for use over O.B.D.
  - 4275 Radial Opposed Blade Damper (round)
  - 4250 Radial Sliding Blade Damper (round)
- EXTERNAL INSULATION**
- EX External Foil-Back Insulation, installed - R-4.2.
  - MIB Molded Insulation Blanket, - R-6.0. ('MIB' is available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_ .

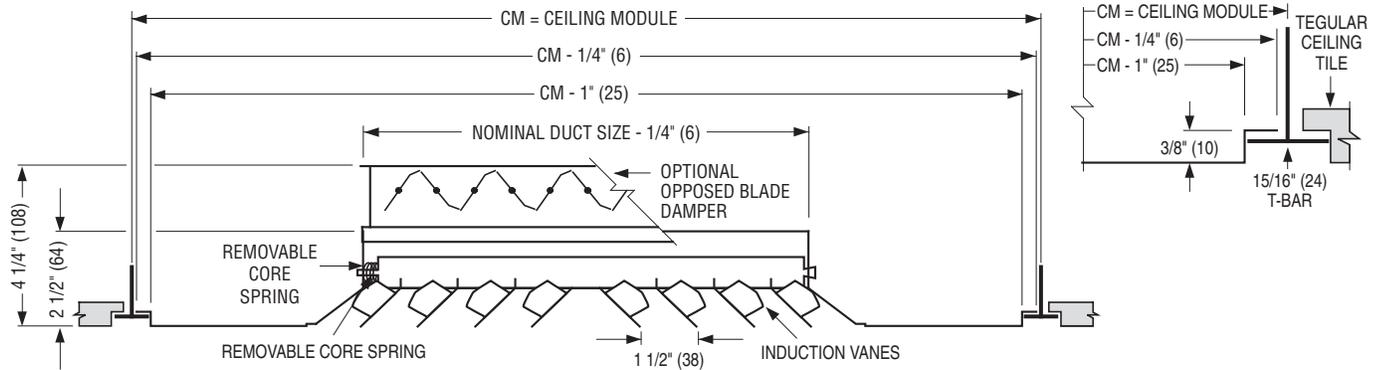
Dimensions are in inches (mm).

<b>SCHEDULE TYPE:</b>				
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6400	1 - 16 - 17	6400IV-4



**PATTERN CEILING DIFFUSERS WITH IV  
INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6400IV AND 6400IV-O TYPE TL

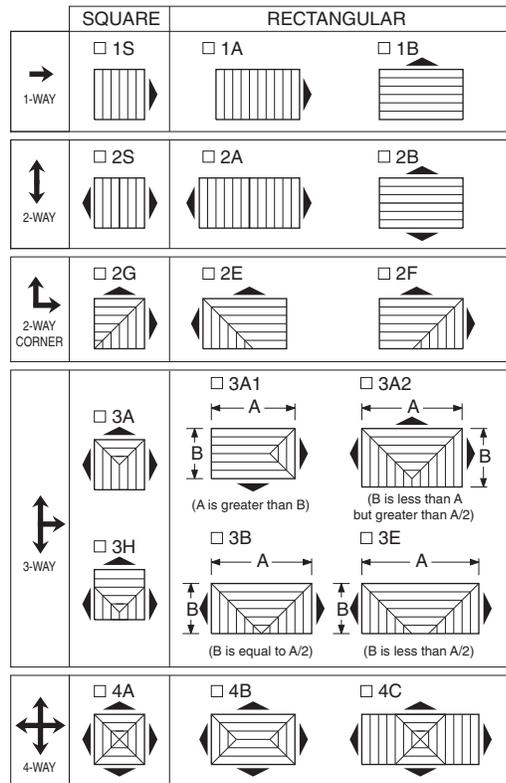
**TYPE TL TEGULAR LAY-IN**



The diffuser is supplied in a steel module sized extended panel which drops the diffuser face below the T-bar so that it is flush with the tegular ceiling panels.  
Minimum duct size: 6 x 6 (152 x 152).  
Maximum duct size: see table.  
Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	6 x 6	305 x 305	152 x 152	300 x 300	152 x 152
24 x 12	18 x 6	610 x 305	457 x 152	600 x 300	457 x 152
24 x 24	18 x 18	610 x 610	457 x 457	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Extruded aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns especially designed for optimum performance in heating and cooling applications. The induction vanes consist of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser highly suitable for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6400IV-O.
- Aluminum opposed blade damper. Model 6400IV-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R- 4.2.
- MIB Molded Insulation Blanket, -R- 6.0. ('MIB' is available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

**OPTIONAL FINISH:**

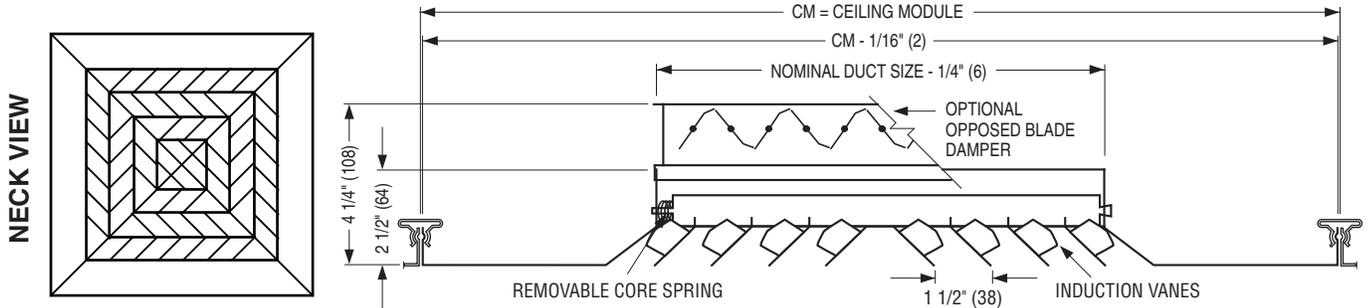
- SP Special. Specify \_\_\_\_\_.

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	1 - 16 - 17	6400	5 - 11 - 15	6400IV-5



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6400IV AND 6400IV-O TYPE M

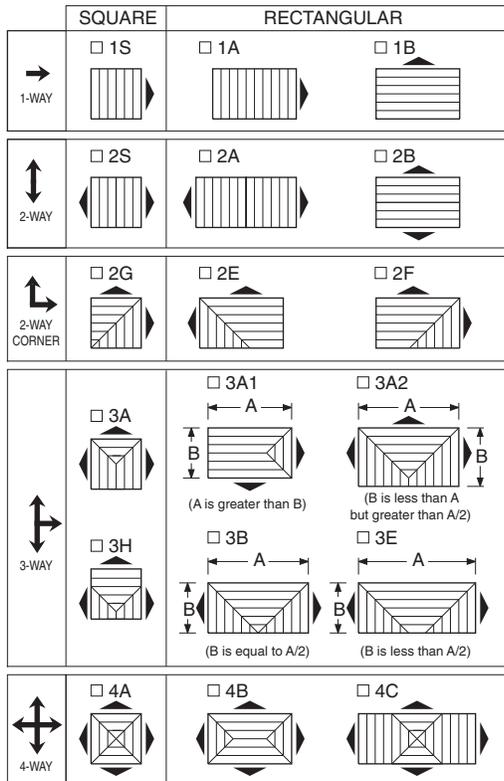
**TYPE METAL PAN (SNAP-IN)**



If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a steel, module sized extended panel will be added.  
Minimum duct size: 6 x 6 (152 x 152).  
Maximum duct size: see table.  
Available in 3" (76) increments only.

IMPERIAL MODULES				METRIC MODULES	
Imperial Units (in.)		Metric Units (mm)		Metric Units (mm)	
CM	Maximum Duct Size	CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229	300 x 300	152 x 152
24 x 12	21 x 9	610 x 305	533 x 229	600 x 300	457 x 152
24 x 24	21 x 21	610 x 610	533 x 533	600 x 600	457 x 457

**CORE STYLE SELECTION**



Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Extruded aluminum. Extended panel where required is corrosion-resistant coated steel.
2. Model 6400IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns especially designed for optimum performance in heating and cooling applications. The induction vanes consist of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser highly suitable for VAV applications.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

- PLA Aluminum Extended Panel.
- SQUARE AND RECTANGULAR NECK**
- Steel opposed blade damper. Model 6400IV-O.
- Aluminum opposed blade damper. Model 6400IV-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed - R-4.2.

**OPTIONAL FINISH:**

- SP Special. Specify \_\_\_\_\_.

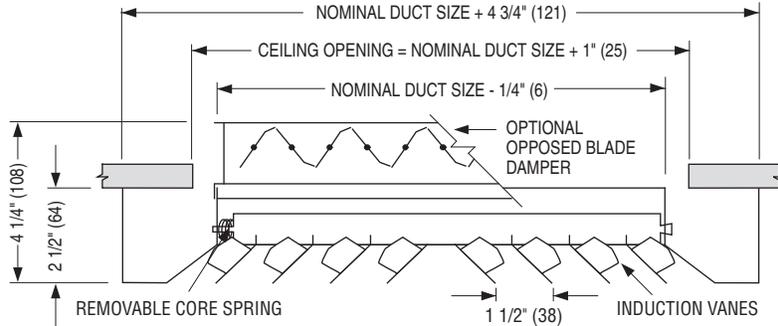
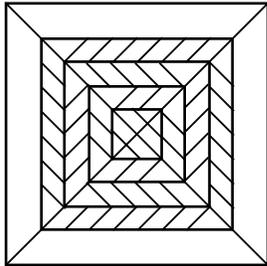
<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6400	1 - 16 - 17	6400IV-6



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
ALUMINUM • SQUARE, RECT. OR ROUND NECK  
MODELS: 6400IV AND 6400IV-O TYPE D

**TYPE D DEEP DROP FACE**

NECK VIEW



Minimum duct size: 6 x 6 (152 x 152).  
Maximum duct size: 36 x 36 (914 x 914) or 36 x 24 (914 x 610)  
with O.B.D.  
Available in 3" (76) increments only.

**CORE STYLE SELECTION**

	SQUARE	RECTANGULAR	
→ 1-WAY	<input type="checkbox"/> 1S	<input type="checkbox"/> 1A	<input type="checkbox"/> 1B
↕ 2-WAY	<input type="checkbox"/> 2S	<input type="checkbox"/> 2A	<input type="checkbox"/> 2B
↙↘ 2-WAY CORNER	<input type="checkbox"/> 2G	<input type="checkbox"/> 2E	<input type="checkbox"/> 2F
↕↔ 3-WAY	<input type="checkbox"/> 3A	<input type="checkbox"/> 3A1 (A is greater than B)	<input type="checkbox"/> 3A2 (B is less than A but greater than A/2)
	<input type="checkbox"/> 3H	<input type="checkbox"/> 3B (B is equal to A/2)	<input type="checkbox"/> 3E (B is less than A/2)
↕↔↕ 4-WAY	<input type="checkbox"/> 4A	<input type="checkbox"/> 4B	<input type="checkbox"/> 4C

Patterns are shown in plan view (looking down into inlet).

**DESCRIPTION:**

1. Material: Extruded aluminum.
2. Model 6400IV is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns especially designed for optimum performance in heating and cooling applications. The induction vanes consist of a set of 45° angled diffusion vanes spaced 1 1/2" (38) apart on the back of each diffuser louver. Vane sets on adjacent parallel louvers run in opposite directions and cause primary air to emerge from each louver at alternating angles. The resulting turbulent discharge air jets produce high induction rates and rapid temperature equalization, making the diffuser eminently suitable for VAV applications as the possibility of downdrafts (dumping) are eliminated.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

**SQUARE AND RECTANGULAR NECK**

- Steel opposed blade damper. Model 6400IV-O.
- Aluminum opposed blade damper. Model 6400IV-OA.

**ROUND NECK**

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)

**EXTERNAL INSULATION**

- EX External Foil-Back Insulation, installed -R- 4.2.

**OPTIONAL FINISH:**

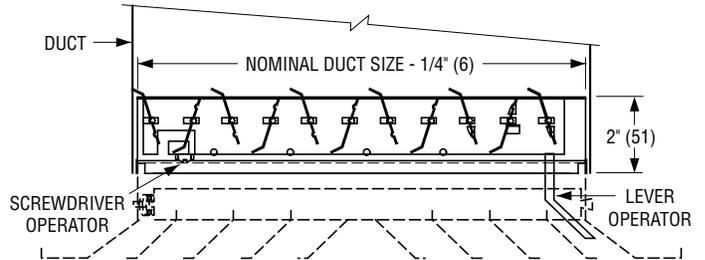
- SP Special. Specify \_\_\_\_\_ .

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	11 - 24 - 16	6400	5 - 11 - 15	6400IV-7

**OPPOSED BLADE DAMPER**

Corrosion-resistant steel. 22 ga. roll-formed frame and blade.

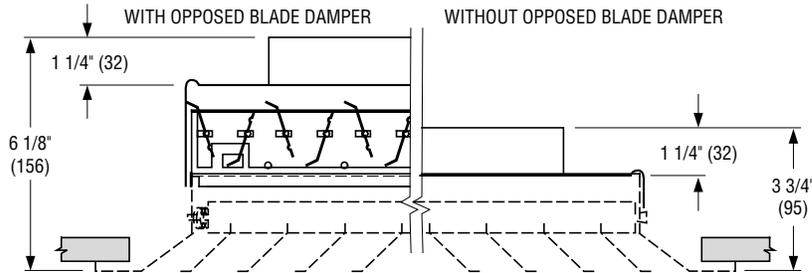
- Model OBD Type SL Screwdriver slot operator
  - Model OBD Type L Lever operator
- Aluminum construction.
- Model OBD-A Type SL Screwdriver slot operator

 Type SL requires diffuser face removal for access.  
 Type L can be adjusted without removing core.

**SQUARE-TO-ROUND TRANSITION COLLAR**

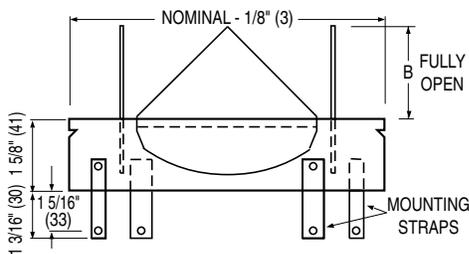
- Model SR (for use with optional round neck damper)
- Model SR-O (for use over opposed blade damper)

**CONSTRUCTION:**  
 22 ga. corrosion-resistant steel.

SQUARE NECK SIZE (INCHES)	ROUND NECK SIZE (INCHES)
6 x 6	4, 5, 6
9 x 9	6, 7, 8, 9
12 x 12	6, 8, 9, 10, 12
15 x 15	6, 8, 10, 12, 14, 15
18 x 18	6, 8, 10, 12, 14, 15, 16, 18
21 x 21	6, 8, 10, 12, 14, 15, 16, 18, 20

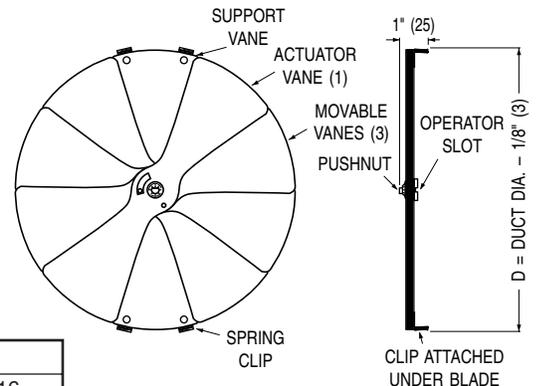

**ROUND NECK DAMPERS**

- Model 4275 Radial Damper



		NOMINAL SIZE						
B		6	8	10	12	14	15	16
4275		1 5/8 (41)	2 1/2 (64)	2 1/4 (57)	2 7/8 (73)	3 3/8 (86)	3 3/4 (95)	4 3/8 (111)

- Model 4250 Radial Sliding Blade Damper


 Available Sizes: 6", 8", 10" and 12"  
 (152, 203, 254 and 305) dia..

**SCHEDULE TYPE:**
**PROJECT:**
**ENGINEER:**
**CONTRACTOR:**

Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 13 - 06	6200	10 - 4 - 00R	6200-7

**OPPOSED BLADE DAMPER**

Corrosion-resistant steel. 22 ga. roll-formed frame and blade.

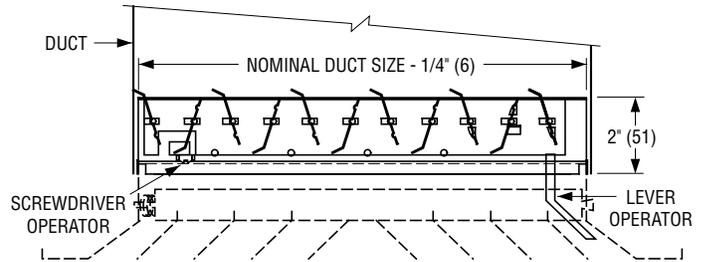
- Model OBD Type SL Screwdriver slot operator
- Model OBD Type L Lever operator

Aluminum construction.

- Model OBD-A Type SL Screwdriver slot operator

Type SL requires diffuser face removal for access.

Type L can be adjusted without removing core.

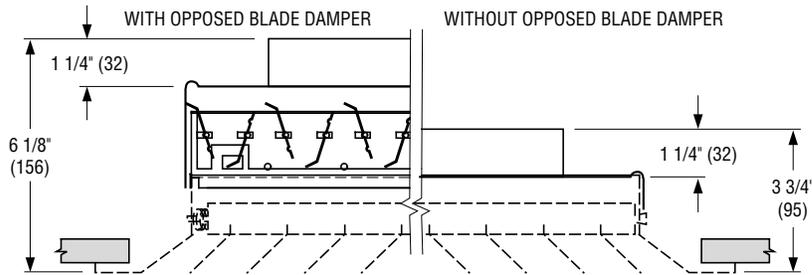

**SQUARE-TO-ROUND TRANSITION COLLAR**

- Model SR (for use with optional round neck damper)
- Model SR-O (for use over opposed blade damper)

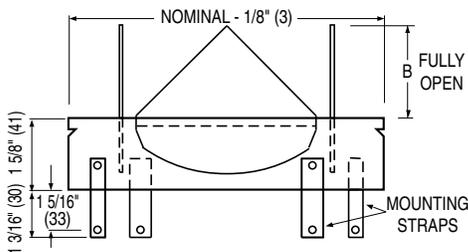
**CONSTRUCTION:**

22 ga. corrosion-resistant steel.

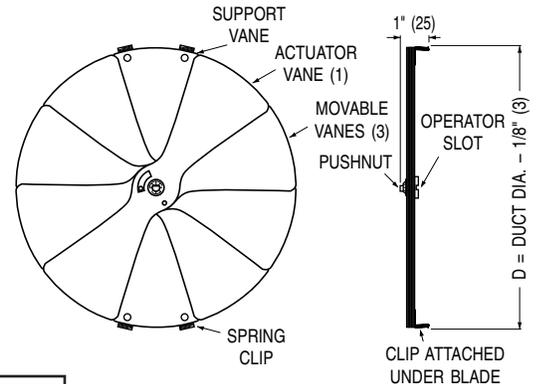
SQUARE NECK SIZE (INCHES)	ROUND NECK SIZE (INCHES)
6 x 6	4, 5, 6
9 x 9	6, 7, 8, 9
12 x 12	6, 8, 9, 10, 12
15 x 15	6, 8, 10, 12, 14, 15
18 x 18	6, 8, 10, 12, 14, 15, 16, 18
21 x 21	6, 8, 10, 12, 14, 15, 16, 18, 20


**ROUND NECK DAMPERS**

- Model 4275 Radial Damper



- Model 4250 Radial Sliding Blade Damper



		NOMINAL SIZE						
B		6	8	10	12	14	15	16
4275		1 5/8 (41)	2 1/2 (64)	2 1/4 (57)	2 7/8 (73)	3 3/8 (86)	3 3/4 (95)	4 3/8 (111)

 Available Sizes: 6", 8", 10" and 12"  
 (152, 203, 254 and 305) dia..

**SCHEDULE TYPE:**
**PROJECT:**
**ENGINEER:**
**CONTRACTOR:**

Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
5 - 11 - 15	6400	2 - 13 - 06R	6400-7



**SQUARE TO ROUND TRANSITION COLLARS**  
**STEEL • DIFFUSER ACCESSORY**  
**MODELS: SR, SR-O**

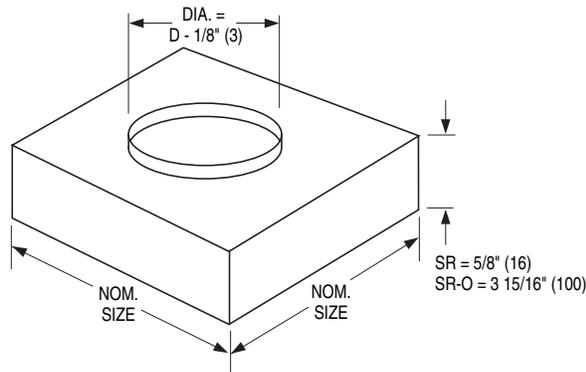
**DESCRIPTION:**

Transition collars are for use with any Nailor square neck diffuser where a round duct connection is desired. Round necks are sized for flexible or hard duct connection. SR's ship loose for field installation and are supplied with barbed S-clips.

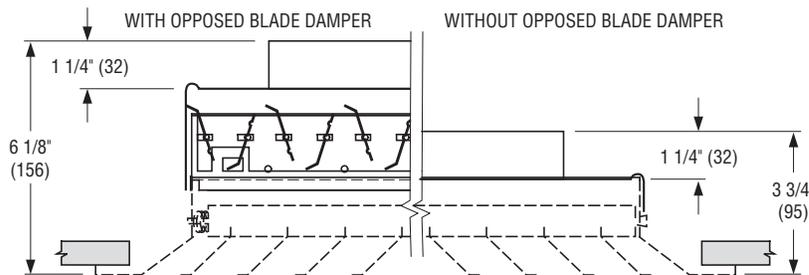
- Model SR  
For direct attachment to diffuser neck. Round dampers may be added to neck.
- Model SR-O  
For use over a square neck opposed blade damper.

**CONSTRUCTION:**

22 ga. corrosion-resistant steel.



Square Neck Size (inches)	Round Neck Size D (inches)
6 x 6	4, 5, 6
8 x 8	4, 5, 6, 7, 8
9 x 9	6, 7, 8, 9
10 x 10	6, 7, 8, 9, 10
12 x 12	6, 8, 9, 10, 12
14 x 14	6, 8, 9, 10, 12, 14
15 x 15	6, 8, 10, 12, 14, 15
16 x 16	6, 8, 10, 12, 14, 15, 16
18 x 18	6, 8, 10, 12, 14, 15, 16, 18
20 x 20	6, 8, 10, 12, 14, 15, 16, 18, 20
21 x 21	6, 8, 10, 12, 14, 15, 16, 18, 20
22 x 22	6, 8, 10, 12, 14, 16, 18, 20
24 x 24	6, 8, 10, 12, 14, 15, 16, 18, 20, 22, 24

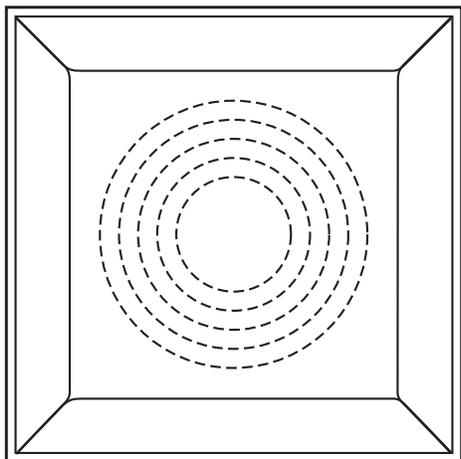
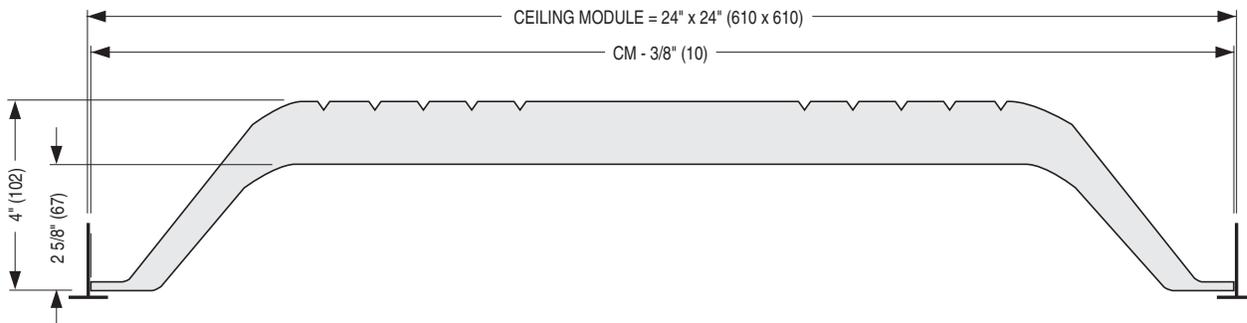


Example illustrated is Model 6500 Pattern Diffuser.

<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).			
<b>PROJECT:</b>					
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	3 - 4 - 16	ACC	10 - 27 - 05	ACC-SR	



**MOLDED INSULATION BLANKET**  
**CEILING DIFFUSER ACCESSORY**  
**24" x 24" MODULE FOR CEILING DIFFUSERS**  
**MODEL/ACCESSORY: MIB**



**DESCRIPTION:**

1. One piece molded fiberglass insulation blanket with foil back vapour barrier. 6.0 R-value.
2. Pre-scored plenum 6", 8", 10", 12" or 14" (152, 203, 254, 305 or 356) dia. for field cutting.
3. The Nailor Model MIB fits over the backpan of most full face 24" x 24" diffusers and provides thermal protection to reduce the risk of condensation forming on the diffuser face.  
Compatible models include RNS, RNS2, RNS3, UNI, 6200, 6400, 6500 and 4320 series.
4. The Nailor Model MIB: resists ageing, thermal shock, is incombustible, immune to rot, corrosion, oxidation and insects.
5. Tested in compliance with surface burning characteristics (ASTM E-84) and erosion test (UL 181).
6. Standard finish has a black interior.

<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).			
<b>PROJECT:</b>					
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	1 - 16 - 17	MIB	2 - 1 - 11	MIB-1	

Nailor offers a selection of standard colors and finishes available on our grilles, registers and diffusers. For painted finishes, our state-of-the-art paint systems provide environmentally friendly finishing solutions with uniform coverage and coating thickness. The result is an exceptionally durable finish that resists scratching, corrosion and general wear. Additional facilities for special requirements, as well as a selection of anodized or brushed finishes, complete our ability to provide unmatched beauty and durability for any application.

**NAILOR POWDER COAT PROPERTIES**

FILM THICKNESS	2.0 to 3.0 mils
HARDNESS	2 H
IMPACT RESISTANCE	Direct: 160 inch - lbs. Reverse 160 inch - lbs.
SALT SPRAY	1000 hours

**ELECTROCOATING PROPERTIES**

FILM THICKNESS	.8 to 1.2 mils
HARDNESS	HB TO H
IMPACT RESISTANCE	80 inch - lbs
SALT SPRAY	100 hours


**POWDER COAT**

Nailor's powder coat is a high-tech thermosetting polyester powder coating with superior physical properties that provide excellent color and gloss retention. The finish offers extreme durability and hardness that resists scratching, chipping and general wear. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse before a final powder coat finish is applied and baked. The environmentally friendly Nailor powder coat system assures uniform coverage and color consistency resulting in a long lasting superior finish. Colors, including simulated anodizing, which is far more economical than color anodizing, can be selected from Nailor's standard color chart or non-standard colors and can be matched from sample chips provided to Nailor.

**ELECTROCOATING**

E-Coat is an environmentally friendly coating that provides complete coverage and a wide range of performance properties, formulated to meet corrosion, durability and other performance specifications. Electrocoating is a highly automated process in which paint is electrically deposited onto a metal foundation. Film build thickness is uniform and overall application efficiencies are in excess of 90%. Paint is consistent on all part-to-part surfaces, preventing sags, runs or drips. E-Coat offers flexibility, better first yield pass and quicker production times compared to other forms of paint applications. Electrocoating is an excellent solution that offers superior properties and uniform finish.

**CLEAR ANODIZING** (Aluminum products only)

Clear anodizing is a clear oxide coating that exemplifies an aluminum surface's natural oxide coating producing a hard, scratch resistant surface that is resistant to general wear and mild chemicals. The process provides a natural looking, virtually maintenance free finish that will endure for many years.

**COLOR ANODIZING** (Aluminum products only)

Color anodizing is an electrolytic process where, after standard anodizing procedures, colored metallic pigments penetrate the oxide surface pores producing a corrosion resistant, colorfast finish. The process results in a natural metallic appearance that requires little maintenance.

**BRUSHED AND CLEAR COAT**

Available on specific aluminum products (consult applicable product page for availability). Surface is brushed to achieve a scratch finish texture before being degreased and chemically cleaned. A clear lacquer coating is then applied to provide a durable protective finish.

**#4 BRUSHED SATIN POLISHED** (Stainless Steel products only)

Surface is polished to ASTM A480 #4 standard to achieve a bright durable finish that is resistant to mild chemicals and corrosion. A final coating is not required due to the inherent anti-corrosion properties of the stainless steel.

**PRIME COAT**

Prime coat provides a stable base for painting in the field. Surface pretreatment includes degreasing and a chemical cleaning before an alkyd prime coat is applied. After a thorough cleaning for dust, etc. that can contaminate the final finish and cause premature flaking or peeling, finish coat should be field applied as soon as possible.

**PAINT PREPARED ALUMINUM** (Aluminum products only)

Allows for field applied paint. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse. Finish coat should be field applied as soon as possible.

**MILL FINISH**

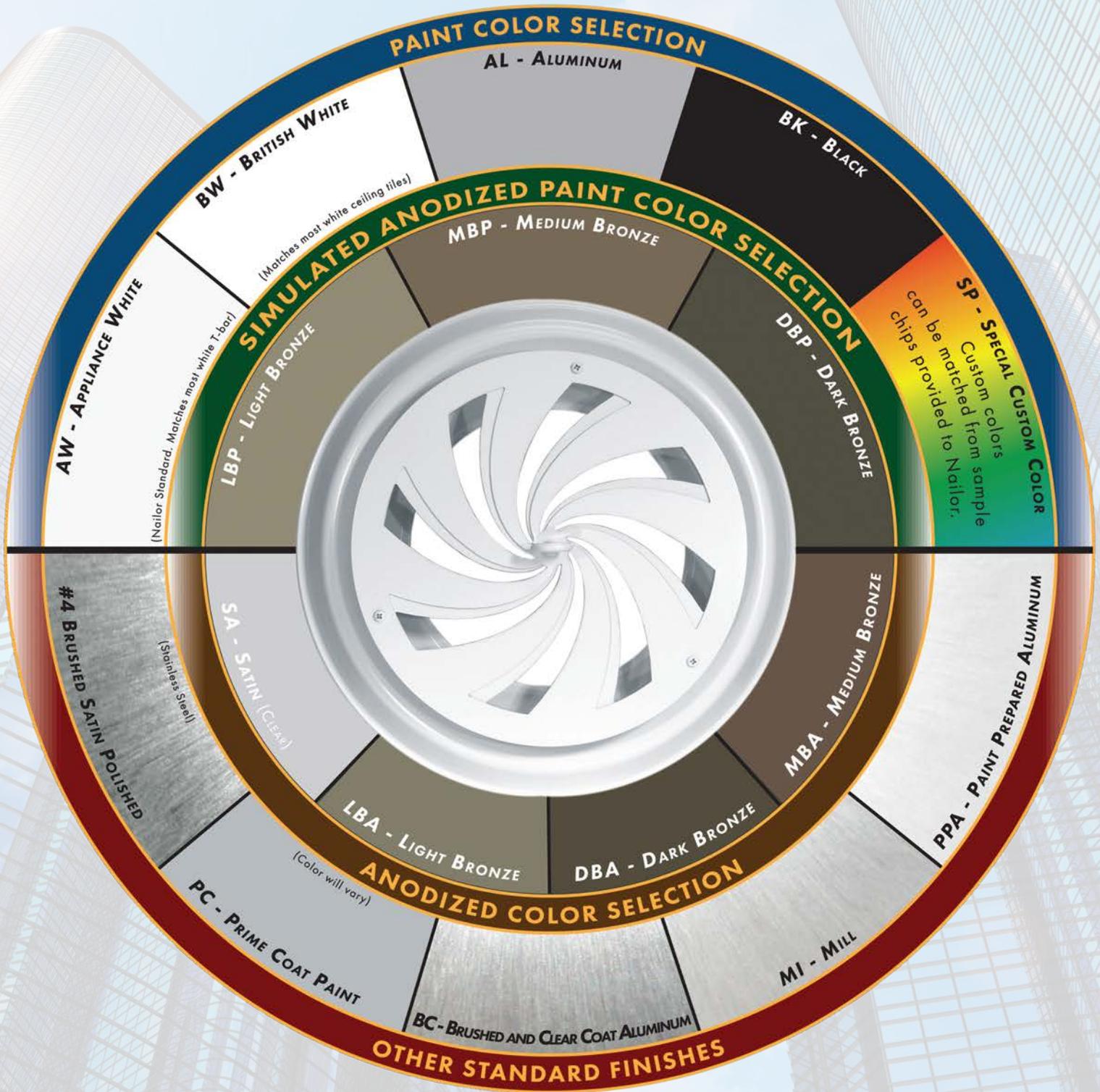
Surface is left untreated and requires cleaning, degreasing, etc. in the field before final finish can be applied if required.



**Nailor**<sup>®</sup>  
Industries Inc.

## STANDARD AND OPTIONAL FINISHES FOR GRILLES AND DIFFUSERS

The following standard colors and finishes are available on applicable Nailor air distribution products. Consult individual product pages for availability



The pictured finishes have been represented as best as possible within printing limitations. However, actual finish may vary. Contact your Nailor representative for a color chip sample on the material specified for a more accurate representation.

**DBK** - Black (for registers ordered with factory mounted dampers) - **BA** - Perforated Diffusers (4300 series only) Appliance White (AW) face with black back pan and pattern controllers.

"Complete Air Control and Distribution Solutions."

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[www.nailor.com](http://www.nailor.com)

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • ROUND NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	400 .026	600 .058	800 .103	900 .130	1000 .161	1200 .231	1400 .315		
6" ROUND	RETURN FACTORS —SP=0.7 TP NC + 0	CFM NC	78 —	118 11	157 19	176 21	196 25	235 30	274 35		
	4A	CFM/SIDE THROW, FT.	20 2-4-6	29 4-7-10	39 6-8-11	44 7-8-12	49 7-8-13	59 8-9-14	69 8-10-15		
	3A	CFM/SIDE THROW, FT.	20 2-4-6	29 2-4-7	39 4-7-10	44 4-8-11	49 6-8-11	59 7-9-12	69 8-9-13	103 8-9-14	
	2S	CFM/SIDE THROW, FT.	39 3-4-9	59 5-6-13	78 6-9-15	88 6-10-16	98 7-11-17	118 8-13-18	137 9-14-20		
	1S	CFM/SIDE THROW, FT.	78 4-7-14	118 6-10-18	157 9-14-21	176 10-15-23	196 11-16-24	235 12-18-26	274 13-19-28		
8" ROUND	RETURN FACTORS —SP=0.8 TP NC + 0	CFM NC	140 —	209 13	279 21	314 23	349 27	419 32	489 37		
	4A	CFM/SIDE THROW, FT.	35 4-8-10	52 6-9-13	70 8-10-15	79 9-11-15	87 9-12-17	105 10-13-19	122 11-14-20		
	3A	CFM/SIDE THROW, FT.	35 4-8-10	52 4-9-11	70 6-9-13	79 7-10-14	87 8-10-15	105 9-11-17	122 10-12-17	183 10-13-19	
	2S	CFM/SIDE THROW, FT.	70 5-17-14	105 6-9-17	140 8-13-20	157 9-14-22	175 10-15-23	209 12-17-25	244 10-13-1		
	1S	CFM/SIDE THROW, FT.	140 7-12-19	209 9-14-24	279 13-19-28	314 14-21-30	349 15-22-32	419 16-24-34	489 17-26-37		
10" ROUND	RETURN FACTORS —SP=0.9 TP NC + 2	CFM NC	218 —	327 16	436 24	491 26	545 30	654 35	763 40		
	4A	CFM/SIDE THROW, FT.	55 4-8-12	82 8-11-17	109 10-13-19	123 11-14-20	136 12-15-21	164 12-16-23	191 13-17-24		
	3A	CFM/SIDE THROW, FT.	55 4-8-12	82 4-9-13	109 8-11-17	164 9-12-19	123 10-13-19	184 11-14-21	136 12-15-22	204 12-16-23	245 13-17-23
	2S	CFM/SIDE THROW, FT.	109 5-7-15	164 7-11-22	218 10-15-25	245 12-17-27	273 13-19-28	327 14-21-30	382 15-23-34		
	1S	CFM/SIDE THROW, FT.	218 7-12-22	327 12-17-31	436 15-23-25	491 17-26-37	545 19-27-39	654 20-29-42	763 22-32-45		
12" ROUND	RETURN FACTORS —SP=1.0 TP NC + 3	CFM NC	314 —	471 18	628 26	707 28	785 32	942 37	1099 42		
	4A	CFM/SIDE THROW, FT.	79 6-9-15	118 8-11-18	157 10-15-23	177 13-17-24	196 14-18-25	236 15-20-28	275 17-21-30		
	3A	CFM/SIDE THROW, FT.	79 6-9-15	118 7-10-17	157 8-11-18	236 9-12-20	177 10-15-23	265 11-17-25	196 13-17-24	294 14-19-26	
	2S	CFM/SIDE THROW, FT.	157 6-9-19	236 9-14-26	314 11-16-29	353 14-21-32	393 15-23-34	471 16-24-38	550 18-27-40		
	1S	CFM/SIDE THROW, FT.	314 9-14-28	471 14-21-37	628 19-28-42	707 21-32-45	785 23-34-47	942 24-36-51	1099 27-39-55		
14" ROUND	RETURN FACTORS —SP=1.1 TP NC + 4	CFM NC	427 —	641 20	854 28	961 30	1068 34	1282 39	1495 44		
	4A	CFM/SIDE THROW, FT.	107 7-10-19	160 10-15-23	214 14-19-26	240 15-20-29	267 17-21-30	320 19-23-32	374 21-26-38		
	3A	CFM/SIDE THROW, FT.	107 7-10-19	160 8-11-21	214 10-15-23	320 11-17-25	240 14-19-26	360 15-21-29	267 17-22-32	401 19-23-33	
	2S	CFM/SIDE THROW, FT.	214 7-11-22	320 11-16-31	427 14-22-36	481 16-24-38	534 18-27-40	641 19-28-43	748 21-31-47		
	1S	CFM/SIDE THROW, FT.	427 11-16-32	641 16-24-42	854 24-33-50	961 24-37-52	1068 27-39-55	1282 29-42-60	1495 33-45-65		
16" ROUND	RETURN FACTORS —SP=1.3 TP NC + 6	CFM NC	558 —	837 22	1116 30	1256 32	1395 36	1674 41	1953 46		
	4A	CFM/SIDE THROW, FT.	140 8-12-21	209 12-19-26	279 17-21-31	314 19-23-32	349 20-25-35	419 22-28-42	488 24-30-48		
	3A	CFM/SIDE THROW, FT.	140 8-12-21	209 9-13-23	279 12-19-26	419 13-21-29	314 17-21-31	471 19-23-34	349 20-25-35	523 22-28-39	
	2S	CFM/SIDE THROW, FT.	279 8-13-25	419 13-19-35	558 16-25-41	628 19-28-43	698 20-30-45	837 23-34-49	977 26-37-54		
	1S	CFM/SIDE THROW, FT.	558 13-19-38	837 19-28-49	1116 25-38-57	1256 28-42-60	1395 31-44-63	1674 36-48-69	1953 42-52-75		

For performance notes, see page D37.

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	1800 18	2400 25	3000 31	3600 36	4200 40	4800 43	5400 46						
36 x 24 6.0 SQ. FT.	RETURN FACTORS —SP=3.3 TP NC + 8	CFM NC	1800 18	2400 25	3000 31	3600 36	4200 40	4800 43	5400 46							
	4B  4C	CFM/SIDE THROW, FT.	600 300 29-37-51 19-22-31	800 400 34-41-58 22-25-37	1000 500 39-48-66 25-29-41	1200 600 41-51-70 27-31-44	1400 700 44-54-75 29-32-48	1600 800 49-59-80 31-37-51	1800 900 53-63-85 32-37-54							
	4E	CFM/SIDE THROW, FT.	450 450 25-31-42 24-31-42	600 600 29-37-51 29-37-51	750 750 32-41-58 32-41-58	900 900 35-44-61 35-44-61	1050 1050 37-48-66 37-48-66	1200 1200 41-51-71 41-51-71	1350 1350 42-54-75 42-54-75							
	3A1	CFM/SIDE THROW, FT.	750 300 31-37-54 19-22-31	1000 400 37-42-61 22-25-37	1250 500 41-49-70 25-29-41	1500 600 44-54-75 27-31-44	1750 700 48-58-80 29-32-48	2000 800 51-61-85 31-37-51	2250 900 54-65-90 32-37-54							
	3A2	CFM/SIDE THROW, FT.	676 562 27-32-48 24-29-41	900 750 34-37-54 27-32-48	1125 937 34-42-61 31-37-54	1350 1125 37-48-66 32-39-58	1575 1312 39-51-71 35-42-61	1800 1500 42-54-75 37-44-66	2025 1687 48-58-80 41-49-70							
	2A	CFM/SIDE THROW, FT.	900 32-41-56	1200 37-48-65	1500 42-54-73	1800 48-58-78	2100 51-61-85	2400 54-66-90	2700 58-70-97							
	2B	CFM/SIDE THROW, FT.	900 32-41-56	1200 37-48-65	1500 42-54-73	1800 48-58-78	2100 51-61-85	2400 54-66-90	2700 58-70-97							
	2C  2D	CFM/SIDE THROW, FT.	1200 600 37-42-63 25-31-42	1600 800 41-51-71 29-37-51	2000 1000 48-58-82 32-41-58	2400 1200 51-61-87 35-44-61	2800 1400 54-66-95 37-48-66	3200 1600 58-71-99 41-51-71	3600 1800 63-75-107 42-54-75							
	2E	CFM/SIDE THROW, FT.	1200 600 37-42-63 25-31-42	1600 800 41-51-71 29-37-51	2000 1000 48-58-82 32-41-58	2400 1200 51-61-87 35-44-61	2800 1400 54-66-95 37-48-66	3200 1600 58-71-99 41-51-71	3600 1800 63-75-107 42-54-75							
	1A  1B	CFM/SIDE THROW, FT.	1800 41-51-70	2400 48-58-80	3000 54-66-90	3600 58-70-99	4200 61-75-105	4800 66-80-114	5400 70-85-122							
36 x 30 7.5 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	2250 19	3000 26	3750 32	4500 37	5250 41	6000 44	6750 47							
	4B  4C	CFM/SIDE THROW, FT.	657 468 29-37-51 20-25-34	875 625 34-41-58 24-29-39	1093 782 39-48-66 27-32-44	1313 937 41-51-70 29-37-49	1532 1093 44-54-75 31-37-53	1750 1250 49-59-80 32-41-56	1969 1406 53-63-85 37-42-59							
	3A1	CFM/SIDE THROW, FT.	890 468 32-41-56 20-25-34	1187 625 37-48-65 24-29-39	1484 782 42-54-73 27-32-44	1781 937 48-58-78 29-37-49	2078 1093 51-61-85 31-37-53	2375 1250 54-66-90 32-41-56	2672 1406 58-70-97 37-42-59							
	3A2	CFM/SIDE THROW, FT.	787 675 31-37-54 22-27-37	1050 900 37-42-61 25-31-42	1312 1125 41-49-70 29-34-49	1575 1350 44-54-75 31-37-54	1837 1575 48-58-80 32-39-58	2100 1800 51-61-85 37-42-61	2362 2025 54-65-90 37-48-65							
	2A	CFM/SIDE THROW, FT.	1125 34-42-59	1500 39-49-68	1875 44-56-76	2250 49-59-83	2625 53-65-88	3000 56-68-97	3375 59-73-102							
	2B	CFM/SIDE THROW, FT.	1125 34-42-59	1500 39-49-68	1875 44-56-76	2250 49-59-83	2625 53-65-88	3000 56-68-97	3375 59-73-102							
	2C  2D	CFM/SIDE THROW, FT.	1312 938 37-42-63 29-37-51	1750 1250 41-51-71 34-41-58	2188 1562 48-58-82 39-48-66	2625 1875 51-61-87 41-51-70	3063 2187 54-66-95 44-54-75	3500 2500 58-71-99 49-59-80	3938 2812 63-75-107 53-63-85							
	2E	CFM/SIDE THROW, FT.	1312 938 37-42-63 29-37-51	1750 1250 41-51-71 34-41-58	2188 1562 48-58-82 39-48-66	2625 1875 51-61-87 41-51-70	3063 2187 54-66-95 44-54-75	3500 2500 58-71-99 49-59-80	3938 2812 63-75-107 53-63-85							
	1A  1B	CFM/SIDE THROW, FT.	2250 48-60-82	3000 56-68-94	3750 64-78-106	4500 68-82-116	5250 72-88-124	6000 78-94-134	6750 82-100-144							

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

- CFM** - cubic feet per minute  
**TP** - total pressure - inches w.g.  
**T** - throw in feet  
**NC** - Noise Criteria (values) based on 10 dB room absorption, re  $10^{-12}$  watts.  
**Neck Velocity** – feet per minute

#### Performance Notes:

1. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 25%.
2. Sound levels in performance tables are for steel construction – **Model 6500**. Apply the following corrections for aluminum construction – **Model 6200**.  
 TP = Listed value x 1.25.  
 NC = Listed value + 4.
3. Performance data as tabulated is for supply air conditions. Correction factors for return air application - see next page.
4. Correction factors for adjustable models - see next page.
5. Correction factors for round inlets - see next page.
6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

## PERFORMANCE DATA CORRECTIONS:

### MODELS 6500 AND 6200

#### CORRECTION FACTORS FOR RETURN INLET

If the unit is used as a return inlet, the performance data is obtained by applying the return corrections, as follows:

- Add the NC correction at the left side of the table to the NC value listed in the performance table.
- Multiply the listed SP factor at the left side of the table by the total pressure (TP) listed at the top of the table.

#### CORRECTION FACTORS FOR MODELS 6550 AND 6250 (ADJUSTABLE PATTERN CONTROLLERS) – TABLE 2

Refer to the performance data for the **Models 6500 and 6200**. Apply the corrections from Table 2 to the data for square, 4-way core styles, as follows:

- NC = listed + correction
- Total Pressure = listed x factor
- Horizontal Throw = listed
- Vertical Throw = listed x factor

Apply the throw factor to the 50 fpm terminal velocity throw only.

#### Example:

18" x 18", **Model 6500**, 1350 cfm, 20°F temperature difference heating, vertical projection, (Page D23).

- NC = 31 + 6 = 37
- TP = .13 x 2.1 = .273
- Throw = 36 x .9 = 32.4 feet @ 50 fpm terminal velocity.

#### CORRECTION FACTORS WITH SQUARE TO ROUND INLET ADAPTOR – TABLE 3

- Add the NC correction factor from Table 3 and the NC value listed in the performance tables.
- Multiply the correction factor from Table 3 by the listed total pressure in the performance tables.
- Multiply the correction factor from Table 3 by the listed throws in the performance tables.

#### Example:

12" x 12" unit with 10" round adaptor handling 500 cfm supply air. (Page D23).

- NC = 23 + 7 = 30
- Total Pressure = .09 x 1.65 = 0.149
- Throw = 21 x 1.15 = 24.15 feet @ 50 fpm terminal velocity.

#### Example:

12" x 12" unit handling 600 cfm of return air. (Page D23).

- Return NC = 28 + 4 = 32.
- Return negative SP = 1.3 x (-.13) = -.169.

**TABLE 2** Correction Factors 6550/6250 Adjustable

NECK SIZE	NC (add)		TOTAL PRESSURE (multiply)		VERTICAL THROW (multiply)			
					COOLING, ΔT		HEATING, ΔT	
	H	V	H	V	20°F	0°F	20°F	40°F
6 x 6	2	6	1.2	1.5	1.3	1.1	0.8	0.6
9 x 9	2	6	1.4	2.1	1.5	1.2	0.9	0.6
12 x 12	2	6	1.4	2.1	1.6	1.3	1.0	0.6
15 x 15	2	6	1.4	2.1	1.7	1.3	1.0	0.6
18 x 18	2	6	1.4	2.1	1.7	1.3	0.9	0.6
21 x 21	2	6	1.4	2.1	1.7	1.3	0.8	0.5
24 x 24	2	6	1.6	2.2	1.5	1.1	0.7	0.3

**TABLE 3** Correction Factors for SR Adaptors

SQUARE INLET	ROUND INLET	NC (add)	TP (multiply)	THROW (multiply)		
				150	100	50
6 x 6	5	7	1.65	1.10	1.10	1.15
9 x 9	6	17	3.50	1.15	1.15	1.20
9 x 9	8	4	1.40	1.10	1.10	1.10
12 x 12	8	17	3.50	1.15	1.15	1.20
12 x 12	10	7	1.65	1.10	1.10	1.15
15 x 15	10	17	3.50	1.15	1.15	1.20
15 x 15	12	9	1.90	1.10	1.10	1.15
15 x 15	14	3	1.25	1.05	1.05	1.10
18 x 18	12	17	3.50	1.15	1.15	1.20
18 x 18	14	10	2.00	1.10	1.10	1.15
18 x 18	16	5	1.45	1.10	1.10	1.10
21 x 21	14	17	3.70	1.15	1.15	1.20
21 x 21	16	11	2.25	1.10	1.10	1.15
21 x 21	18	6	1.60	1.10	1.10	1.10
21 x 21	20	3	1.20	1.05	1.05	1.10
24 x 24	16	17	3.50	1.15	1.15	1.20
24 x 24	18	12	2.35	1.10	1.10	1.15
24 x 24	20	7	1.65	1.10	1.10	1.15
24 x 24	22	4	1.33	1.05	1.05	1.10

## PERFORMANCE DATA:

### MODELS 6500IV AND 6200IV • SQUARE NECK • INDUCTION VANES

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .035	400 .062	500 .097	600 .140	700 .191	800 .249	900 .316
6 x 6  .25 SQ. FT.	RETURN FACTORS —SP=1.1 TP NC + 1	CFM NC	75 —	100 14	125 21	150 26	175 30	200 35	225 39
	4A	CFM/SIDE THROW, FT.	19 3-4-6	25 3-5-8	31 5-6-8	37 5-6-9	44 6-7-10	50 6-7-10	56 7-8-10
	3A	CFM/SIDE THROW, FT.	19 28 3-4-6 4-6-9	25 38 3-5-8 5-7-10	31 47 5-6-8 6-8-11	37 56 5-6-9 6-9-12	44 66 6-7-10 7-10-13	50 75 6-7-10 7-10-14	56 85 7-8-10 8-10-14
	2S  2G	CFM/SIDE THROW, FT.	37 6-7-10	50 7-8-11	62 8-9-13	75 9-10-14	88 10-10-14	100 10-10-15	113 10-11-16
	1S	CFM/SIDE THROW, FT.	75 7-9-12	100 8-10-14	125 9-11-15	150 10-12-18	175 10-13-18	200 11-14-19	225 12-14-20
9 x 9  .56 SQ. FT.	RETURN FACTORS —SP=1.2 TP NC + 2	CFM NC	170 —	225 18	280 24	340 30	395 35	450 39	505 42
	4A	CFM/SIDE THROW, FT.	42 5-6-10	56 6-8-11	70 8-9-12	84 8-10-13	98 9-10-14	112 9-11-15	126 10-12-16
	3A	CFM/SIDE THROW, FT.	42 63 5-6-10 7-9-11	56 85 6-8-11 8-10-14	70 106 8-9-12 9-10-15	84 127 8-10-13 10-11-16	98 148 9-10-14 10-12-17	112 169 9-11-15 10-13-18	126 190 10-12-16 11-14-19
	2S  2G	CFM/SIDE THROW, FT.	84 7-8-12	112 9-10-14	141 10-12-16	169 10-13-18	197 11-14-18	225 12-14-20	253 13-15-22
	1S	CFM/SIDE THROW, FT.	169 10-12-16	225 11-14-18	282 13-15-21	338 14-18-23	394 14-18-25	450 15-19-26	507 18-20-28
12 x 12  1.0 SQ. FT.	RETURN FACTORS —SP=1.3 TP NC + 4	CFM NC	300 14	400 21	500 27	600 32	700 37	800 40	900 43
	4A	CFM/SIDE THROW, FT.	75 6-10-12	100 9-11-14	125 10-12-17	150 11-14-18	175 11-14-19	200 12-16-20	225 14-17-22
	3A	CFM/SIDE THROW, FT.	75 112 6-10-12 9-11-15	100 150 9-11-14 11-13-17	125 187 10-12-17 11-14-19	150 225 11-14-18 12-15-21	175 262 11-14-19 13-16-22	200 300 12-16-20 14-17-24	225 338 14-17-22 15-18-25
	2S  2G	CFM/SIDE THROW, FT.	150 10-12-16	200 12-14-20	250 14-15-22	300 14-16-23	350 15-17-25	400 16-20-27	450 17-20-29
	1S	CFM/SIDE THROW, FT.	300 13-16-22	400 14-18-26	500 17-20-30	600 18-21-31	700 18-22-33	800 20-23-33	900 22-26-38
15 x 15  1.56 SQ. FT.	RETURN FACTORS —SP=1.8 TP NC + 4	CFM NC	465 14	625 23	780 29	935 34	1090 37	1250 43	1400 45
	4A	CFM/SIDE THROW, FT.	117 10-13-17	156 11-14-19	195 13-15-22	234 14-17-23	273 15-18-24	312 16-19-26	350 17-21-28
	3A	CFM/SIDE THROW, FT.	117 175 10-13-17 11-14-18	156 234 11-14-19 14-18-23	195 292 13-15-22 15-18-25	234 351 14-17-23 17-18-27	273 409 15-18-24 18-20-29	312 468 16-19-26 18-23-31	350 527 17-21-28 20-23-34
	2S  2G	CFM/SIDE THROW, FT.	234 13-16-22	312 15-18-25	390 17-20-29	468 18-22-32	546 19-23-34	625 22-25-36	700 22-28-38
	1S	CFM/SIDE THROW, FT.	467 17-20-29	625 18-23-34	780 21-26-38	935 23-29-41	1090 24-31-44	1250 26-34-46	1400 29-35-49
18 x 18  2.25 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 6	CFM NC	675 16	900 25	1125 31	1350 35	1575 40	1800 43	2025 46
	4A	CFM/SIDE THROW, FT.	168 12-15-20	225 14-16-23	281 15-19-26	337 16-20-29	394 18-22-30	450 19-23-33	506 20-25-34
	3A	CFM/SIDE THROW, FT.	168 253 12-15-20 14-18-23	225 338 14-16-23 16-20-26	281 422 15-19-26 18-22-30	337 506 16-20-29 20-26-34	394 590 18-22-30 21-26-36	450 675 19-23-33 22-28-38	506 760 20-25-34 26-29-41
	2S  2G	CFM/SIDE THROW, FT.	337 15-18-26	450 18-21-30	562 19-24-34	675 21-25-37	787 24-27-39	900 24-28-42	1012 26-31-44
	1S	CFM/SIDE THROW, FT.	675 20-26-36	900 24-29-41	1125 27-34-46	1350 29-36-49	1575 31-38-53	1800 34-42-56	2025 37-44-60

For performance notes, see D44.

D  
CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODELS 6500IV AND 6200IV • SQUARE NECK • INDUCTION VANES

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .035	400 .062	500 .097	600 .140	700 .191	800 .249	900 .316
21 x 21 3.06 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 8	CFM NC	915 18	1225 26	1530 32	1835 36	2140 41	2450 44	2750 47
			A B	A B	A B	A B	A B	A B	A B
	4A	CFM/SIDE THROW, FT.	230 14-17-24	306 15-20-27	382 17-22-31	460 18-24-33	535 20-27-35	612 21-27-37	688 22-31-41
	3A	CFM/SIDE THROW, FT.	230 345 12-15-21 16-20-27	306 460 14-18-23 18-22-31	382 573 15-20-27 21-25-36	460 688 16-21-29 22-27-40	535 802 18-22-31 23-29-42	612 918 18-23-32 27-31-45	688 1030 20-27-36 27-34-47
2S	2G	CFM/SIDE THROW, FT.	458 18-22-31	612 20-25-36	765 22-28-40	917 25-31-44	1070 27-34-47	1225 27-36-50	1375 31-38-48
1S		CFM/SIDE THROW, FT.	917 23-30-41	1225 27-34-47	1530 31-40-54	1835 34-42-57	2140 37-45-62	2450 40-48-66	2750 42-51-70
24 x 24 4.0 SQ. FT.	RETURN FACTORS —SP=2.7 TP NC + 8	CFM NC	1200 19	1600 27	2000 33	2400 37	2800 41	3200 45	3600 48
			A B	A B	A B	A B	A B	A B	A B
	4A	CFM/SIDE THROW, FT.	300 16-19-26	400 19-22-32	500 22-25-35	600 23-26-38	700 25-28-41	800 26-32-44	900 28-32-46
	3A	CFM/SIDE THROW, FT.	300 450 16-19-26 18-22-31	400 600 19-22-32 19-25-37	500 750 22-25-35 23-29-42	600 900 23-26-38 25-30-45	700 1050 25-28-41 29-33-47	800 1200 26-32-44 29-34-51	900 1350 28-32-46 31-38-54
2S	2G	CFM/SIDE THROW, FT.	600 20-26-36	800 24-29-41	1000 27-34-46	1200 29-36-49	1400 31-38-53	1600 34-42-56	1800 37-44-60
1S		CFM/SIDE THROW, FT.	1200 28-32-47	1600 30-38-54	2000 36-43-62	2400 38-46-66	2800 41-50-72	3200 43-54-74	3600 47-56-81
30 x 30 6.25 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	1875 20	2500 28	3125 34	3750 39	4375 43	5000 46	5625 50
			A B	A B	A B	A B	A B	A B	A B
	4A	CFM/SIDE THROW, FT.	469 20-25-34	625 23-29-38	782 27-32-44	937 29-35-49	1093 30-37-52	1250 32-40-55	1406 37-42-58
	3A	CFM/SIDE THROW, FT.	469 703 20-25-34 22-27-39	625 938 23-29-38 26-31-46	782 1172 27-32-44 28-35-51	937 1405 29-35-49 31-39-55	1093 1640 30-37-52 33-39-59	1250 1875 32-40-55 35-46-62	1406 2110 37-42-58 39-48-66
2S	2G	CFM/SIDE THROW, FT.	937 26-32-44	1250 30-38-50	1562 34-42-58	1875 38-46-62	2187 40-48-66	2500 42-52-70	2812 46-54-76
1S		CFM/SIDE THROW, FT.	1875 34-42-58	2500 39-48-66	3125 45-55-74	3750 48-58-82	4375 50-62-87	5000 55-66-117	5625 58-70-98
36 x 36 9.0 SQ. FT.	RETURN FACTORS —SP=3.6 TP NC + 9	CFM NC	2700 22	3600 29	4500 35	5400 40	6300 44	7200 48	8100 52
			A B	A B	A B	A B	A B	A B	A B
	4A	CFM/SIDE THROW, FT.	675 24-30-41	900 27-33-46	1125 31-37-54	1350 33-41-59	1575 35-42-62	1800 41-46-66	2025 41-51-70
	3A	CFM/SIDE THROW, FT.	675 1010 24-30-41 27-35-46	900 1350 27-33-46 32-38-54	1125 1687 31-37-54 37-45-62	1350 2025 33-41-59 38-48-66	1575 2362 35-42-62 42-51-70	1800 2700 41-46-66 46-56-75	2025 3038 41-51-70 50-59-80
2S	2G	CFM/SIDE THROW, FT.	1350 32-36-54	1800 34-43-61	2250 40-49-69	2700 43-52-74	3150 46-56-81	3600 49-61-83	4050 54-63-90
1S		CFM/SIDE THROW, FT.	2700 39-49-68	3600 47-56-79	4500 53-64-91	5400 58-68-98	6300 61-73-105	7200 66-78-114	8100 70-85-120

D  
CEILING DIFFUSERS

CFM - cubic feet per minute  
 Neck Velocity - feet per minute  
 TP - total pressure - inches w.g.  
 NC - Noise Criteria (values) based on 10 dB room absorption, re 10<sup>-12</sup> watts.

#### Performance Notes:

- Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 25%.
- Sound levels in performance tables are for steel construction – **Model 6500IV**. Apply the following corrections for aluminum construction – **Model 6200IV**.  
 TP = Listed value x 1.25.  
 NC = Listed value + 4.

- Performance data as tabulated is for supply air conditions. Correction factors for return air application - see next page.
- Correction factors for round inlets - see next page.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

## PERFORMANCE DATA CORRECTIONS :

### MODEL SERIES 6500IV AND 6200IV

#### CORRECTION FACTORS FOR RETURN INLET

If the unit is used as a return inlet, the performance data is obtained by applying the return corrections, as follows:

- Add the NC correction at the left side of the table to the NC value listed in the performance table.
- Multiply the listed SP factor at the left side of the table by the total pressure (TP) listed at the top of the table.

#### Example:

12" x 12" unit handling 600 cfm of return air. (Page D43).

- Return NC = 32 + 4 = 36.
- Return negative SP = 1.3 x (- .14) = - .182.

#### CORRECTION FACTORS WITH SQUARE TO ROUND INLET ADAPTOR

- Add the NC correction factor from Table 2 and the NC value listed in the performance tables.
- Multiply the correction factor from Table 2 by the listed total pressure in the performance tables.
- Multiply the correction factor from Table 2 by the listed throws in the performance tables.

#### Example:

12" x 12" unit with 10" round adaptor handling 500 cfm supply air. (Page D43).

- NC = 27 + 7 = 34
- Total Pressure = .097 x 1.65 = 0.160
- Throw = 17 x 1.15 = 19.55 feet @ 50 fpm terminal velocity.

TABLE 2 Correction Factors for SR Adaptors

SQUARE INLET	ROUND INLET	NC (add)	TP (multiply)	THROW (multiply)		
				150	100	50
6 x 6	5	7	1.65	1.10	1.10	1.15
9 x 9	6	17	3.50	1.15	1.15	1.20
9 x 9	8	4	1.40	1.10	1.10	1.10
12 x 12	8	17	3.50	1.15	1.15	1.20
12 x 12	10	7	1.65	1.10	1.10	1.15
15 x 15	10	17	3.50	1.15	1.15	1.20
15 x 15	12	9	1.90	1.10	1.10	1.15
15 x 15	14	3	1.25	1.05	1.05	1.10
18 x 18	12	17	3.50	1.15	1.15	1.20
18 x 18	14	10	2.00	1.10	1.10	1.15
18 x 18	16	5	1.45	1.10	1.10	1.10
21 x 21	14	17	3.70	1.15	1.15	1.20
21 x 21	16	11	2.25	1.10	1.10	1.15
21 x 21	18	6	1.60	1.10	1.10	1.10
21 x 21	20	3	1.20	1.05	1.05	1.10
24 x 24	16	17	3.50	1.15	1.15	1.20
24 x 24	18	12	2.35	1.10	1.10	1.15
24 x 24	20	7	1.65	1.10	1.10	1.15
24 x 24	22	4	1.33	1.05	1.05	1.10

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	— —	A	B	A	B	A	B	A	B	A	B	A	B
9 x 6  .375 SQ. FT.	RETURN FACTORS —SP=1.2 TP NC + 0	CFM NC	110 —	—	150 14	—	185 20	—	225 25	—	260 29	—	300 33	—	335 37	—
	4B	CFM/SIDE THROW, FT.	37 18 7-11-13 5-6-10	50 25 10-12-16 6-7-11	62 31 11-13-18 7-10-12	75 37 12-14-19 7-10-13	87 44 12-16-20 10-11-14	100 50 13-17-22 10-12-15	112 56 14-18-23 11-12-16							
	3A1	CFM/SIDE THROW, FT.	47 18 10-11-14 5-6-10	62 25 11-12-17 6-7-11	78 31 12-13-19 7-10-12	94 37 13-14-20 7-10-13	109 44 14-16-22 10-11-14	125 50 14-17-23 10-12-15	140 56 16-18-26 11-12-16							
	3A2	CFM/SIDE THROW, FT.	42 35 8-12-14 6-8-13	55 47 10-13-17 8-10-14	70 58 12-14-19 10-12-16	84 70 13-16-21 10-13-17	98 82 13-17-22 12-13-18	112 94 14-18-23 12-14-19	126 105 16-19-25 13-16-21							
	2A 2B	CFM/SIDE THROW, FT.	56 11-12-16	75 12-14-19	93 13-16-22	112 14-18-23	131 16-19-24	150 17-20-26	168 18-22-29							
	2C 2E	CFM/SIDE THROW, FT.	75 37 12-14-19 8-12-14	100 50 13-16-22 10-13-17	125 62 14-18-25 12-14-19	150 75 16-19-29 13-16-21	175 87 17-21-29 13-17-25	200 100 18-22-31 14-18-23	225 112 20-23-33 16-20-25							
1A 1B	CFM/SIDE THROW, FT.	112 14-17-23	150 17-19-29	187 19-22-31	225 21-23-34	262 22-25-36	300 23-29-39	337 25-29-42								
12 x 6  .50 SQ. FT.	RETURN FACTORS —SP=1.6 TP NC + 1	CFM NC	150 —	—	200 14	—	250 20	—	300 26	—	350 31	—	400 35	—	450 39	—
	4B	CFM/SIDE THROW, FT.	56 18 11-13-17 5-6-10	75 25 12-14-19 6-7-11	94 31 13-17-22 7-10-12	113 37 14-18-23 7-10-13	131 44 16-19-26 10-11-14	150 50 17-20-26 10-11-14	169 56 18-22-29 11-12-16							
	3A1	CFM/SIDE THROW, FT.	66 18 11-13-18 5-6-10	87 25 12-14-20 6-7-11	109 31 13-17-23 7-10-12	131 37 14-18-26 7-10-13	153 44 16-19-26 10-11-14	175 50 17-20-29 10-11-14	197 56 18-22-30 11-12-16							
	3B	CFM/SIDE THROW, FT.	75 37 11-16-20 8-12-14	100 50 14-18-23 10-13-17	126 62 16-20-27 12-14-19	150 75 18-22-29 13-16-21	176 87 18-23-31 13-17-25	200 100 20-25-32 14-18-23	226 112 22-27-34 16-20-25							
	2A 2B	CFM/SIDE THROW, FT.	75 11-13-18	100 12-14-20	125 13-17-23	150 14-18-26	175 16-19-26	200 17-20-29	225 18-22-30							
	2C 2E	CFM/SIDE THROW, FT.	112 37 14-17-23 8-12-14	150 50 17-19-29 10-13-17	188 62 19-22-31 12-14-19	225 75 21-23-34 13-16-21	263 87 22-25-36 13-17-25	300 100 23-29-39 14-18-23	338 112 25-29-42 16-20-25							
1A 1B	CFM/SIDE THROW, FT.	150 14-17-23	200 17-19-29	250 19-22-31	300 21-23-34	350 22-25-36	400 23-29-39	450 25-29-42								
15 x 6  .625 SQ. FT.	RETURN FACTORS —SP=1.9 TP NC + 1	CFM NC	190 —	—	250 15	—	310 21	—	375 27	—	440 32	—	500 36	—	565 40	—
	4B	CFM/SIDE THROW, FT.	75 18 11-13-18 5-6-10	100 25 12-14-20 6-7-11	125 31 13-17-23 7-10-12	150 37 14-18-26 7-10-13	175 44 16-19-26 10-11-14	200 50 17-20-29 10-11-14	225 56 18-22-30 11-12-16							
	4E	CFM/SIDE THROW, FT.	56 37 11-12-16 10-11-14	75 50 12-14-19 11-12-17	94 62 12-17-22 12-13-19	113 75 14-18-23 13-14-20	131 87 16-19-26 14-16-22	150 100 16-20-26 14-17-23	169 112 18-22-29 16-18-26							
	3A1	CFM/SIDE THROW, FT.	84 18 12-13-19 5-6-10	112 25 13-16-22 6-7-11	140 31 14-18-24 7-10-12	169 37 16-19-26 7-10-13	197 44 17-20-28 10-11-14	225 50 18-22-30 10-11-14	253 56 19-23-34 11-12-16							
	2A 2B	CFM/SIDE THROW, FT.	94 12-14-20	125 13-16-23	156 14-19-26	187 16-20-28	219 17-22-30	250 18-23-31	281 19-26-35							
	2C 2E	CFM/SIDE THROW, FT.	150 37 14-17-23 8-12-14	200 50 17-19-29 10-13-17	250 62 19-22-31 12-14-19	300 75 21-23-34 13-16-21	350 87 22-25-36 13-17-22	400 100 23-29-39 14-18-23	450 112 25-29-42 16-20-25							
1A 1B	CFM/SIDE THROW, FT.	188 16-19-26	250 18-22-30	312 21-25-34	375 22-29-38	438 23-29-40	500 25-31-43	563 29-32-45								

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

For performance notes, see page D37.

D  
CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	—	A	B	A	B	A	B	A	B	A	B	A	B
18 x 6  .75 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 2	CFM NC	225	—	300	16	375	22	450	28	525	33	600	37	675	41
	4B  4C	CFM/SIDE THROW, FT.	94	18	125	25	156	31	188	37	218	44	250	50	281	56
	4E	CFM/SIDE THROW, FT.	56	56	75	75	94	94	113	113	131	131	150	150	169	169
	3A1	CFM/SIDE THROW, FT.	103	18	137	25	172	31	206	37	240	44	275	50	309	56
	2A  2B	CFM/SIDE THROW, FT.	112	—	150	—	187	—	225	—	262	—	300	—	337	—
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	187	37	250	50	313	62	375	75	438	87	500	100	563	112
	1A  1B	CFM/SIDE THROW, FT.	225	—	300	—	375	—	450	—	525	—	600	—	675	—
21 x 6  .875 SQ. FT.	RETURN FACTORS —SP=3.2 TP NC + 3	CFM NC	260	—	350	16	435	22	525	29	610	33	700	38	785	41
	4B  4C	CFM/SIDE THROW, FT.	112	18	150	25	187	31	225	37	262	44	300	50	337	56
	4E	CFM/SIDE THROW, FT.	75	56	100	75	125	94	150	113	175	131	200	150	225	169
	3A1	CFM/SIDE THROW, FT.	122	18	162	25	203	31	244	37	284	44	325	50	365	56
	2A  2B	CFM/SIDE THROW, FT.	131	—	175	—	218	—	262	—	306	—	350	—	393	—
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	225	37	300	50	375	62	450	75	525	87	600	100	675	112
	1A  1B	CFM/SIDE THROW, FT.	262	—	350	—	437	—	525	—	612	—	700	—	787	—
24 x 6  1.0 SQ. FT.	RETURN FACTORS —SP=3.9 TP NC + 4	CFM NC	300	—	400	16	500	23	600	30	700	34	800	39	900	42
	4B  4C	CFM/SIDE THROW, FT.	131	18	175	25	219	31	263	37	306	44	350	50	394	56
	4E	CFM/SIDE THROW, FT.	75	75	100	100	125	125	150	150	175	175	200	200	225	225
	3A1	CFM/SIDE THROW, FT.	141	18	187	25	234	31	281	37	328	44	375	50	422	56
	2A  2B	CFM/SIDE THROW, FT.	150	—	200	—	250	—	300	—	350	—	400	—	450	—
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	260	37	350	50	438	62	525	75	613	87	700	100	788	112
	1A  1B	CFM/SIDE THROW, FT.	300	—	400	—	500	—	600	—	700	—	800	—	900	—

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

For performance notes, see page D37.

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A
30 x 6 1.25 SQ. FT.	RETURN FACTORS —SP=3.2 TP NC + 3	CFM NC	375 —		500 17		625 24		750 30		875 35		1000 40		1125 43	
	4B  4C	CFM/SIDE THROW, FT.	169	18	225	25	281	31	338	37	393	44	450	50	506	56
	4E	CFM/SIDE THROW, FT.	94	94	125	125	156	156	188	188	219	219	250	250	282	282
	3A1	CFM/SIDE THROW, FT.	178	18	237	25	297	31	356	37	415	44	475	50	534	56
	2A 2B	CFM/SIDE THROW, FT.	187		250		312		375		437		500		562	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	337	37	450	50	563	62	675	75	788	87	900	100	1013	112
1A 1B	CFM/SIDE THROW, FT.	375		500		625		750		875		1000		1125		
12 x 9 .75 SQ. FT.	RETURN FACTORS —SP=3.9 TP NC + 4	CFM NC	225 —		300 17		375 23		450 28		525 33		600 36		675 40	
	4B  4C	CFM/SIDE THROW, FT.	70	42	94	56	117	70	141	84	164	98	188	112	211	126
	3A1	CFM/SIDE THROW, FT.	91	42	121	56	152	70	183	84	213	98	244	112	274	126
	3A2	CFM/SIDE THROW, FT.	75	75	100	100	125	125	150	150	175	175	200	200	225	225
	2A 2B	CFM/SIDE THROW, FT.	112		150		187		225		262		300		337	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	141	84	188	112	234	141	281	169	328	197	375	225	422	253
1A 1B	CFM/SIDE THROW, FT.	225		300		375		450		525		600		675		
15 x 9 .93 SQ. FT.	RETURN FACTORS —SP=1.7 TP NC + 3	CFM NC	280 —		375 18		470 24		565 29		655 34		750 37		845 41	
	4B  4C	CFM/SIDE THROW, FT.	98	42	131	56	165	70	198	84	230	98	263	112	296	126
	4E	CFM/SIDE THROW, FT.	70	70	94	94	117	117	141	141	164	164	188	188	211	211
	3A1	CFM/SIDE THROW, FT.	120	42	159	56	200	70	240	84	279	98	319	112	359	126
	3A2	CFM/SIDE THROW, FT.	117	82	155	110	196	137	233	165	272	192	312	219	351	247
	2A 2B	CFM/SIDE THROW, FT.	140		187		235		281		328		375		422	
2C  2D 2E  2F	CFM/SIDE THROW, FT.	197	84	263	112	329	141	394	169	459	197	525	225	592	253	
1A 1B	CFM/SIDE THROW, FT.	281		375		470		563		656		750		845		

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D37.

**D**  
CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293										
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A	B								
18 x 9  1.125 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 3	CFM NC	335 —		450 19		560 25		675 30		790 35		900 38		1010 42										
	4B  4C	CFM/SIDE THROW, FT.	126 42	169 56	211 70	254 84	296 98	338 112	380 126	14-17-23	6-8-13	17-19-29	8-10-14	19-22-31	10-12-16	21-23-34	10-13-17	22-25-36	12-13-18	23-27-39	12-14-19	25-29-42	13-16-21		
	4E	CFM/SIDE THROW, FT.	99 70	132 94	164 117	197 141	230 164	263 188	296 211	13-16-22	12-14-19	14-18-25	13-16-22	16-21-29	14-18-25	17-22-30	16-19-29	18-23-32	17-21-29	19-25-34	18-22-31	21-29-38	19-23-32		
	3A1	CFM/SIDE THROW, FT.	147 42	197 56	246 70	295 84	345 98	394 112	443 126	14-17-23	6-8-13	17-19-29	8-10-14	19-22-31	10-12-16	21-23-34	10-13-17	22-25-36	12-13-18	23-27-39	12-14-19	25-29-42	13-16-21		
	3B	CFM/SIDE THROW, FT.	168 84	225 112	281 141	337 169	394 197	450 225	506 253	17-21-28	13-15-20	19-23-32	14-17-22	21-27-36	15-20-25	23-28-40	17-21-27	25-30-42	18-22-31	27-32-46	20-24-31	28-34-47	21-25-34		
	2A  2B	CFM/SIDE THROW, FT.	163	225	281	337	394	450	506	16-19-26		18-22-30		21-25-34		22-29-38		23-29-40		25-31-43		29-32-45			
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	253 84	338 112	421 141	506 169	591 197	675 225	759 253	18-22-31	13-15-20	21-25-35	14-17-22	24-28-41	15-20-25	25-31-45	17-21-27	27-32-48	18-22-31	29-35-50	20-24-31	31-39-53	21-25-34		
1A  1B	CFM/SIDE THROW, FT.	337	450	562	675	788	900	1012	20-24-34		22-27-39		25-31-45		27-32-48		29-35-50		31-36-55		34-41-57				
21 x 9  1.125 SQ. FT.	RETURN FACTORS —SP=2.5 TP NC + 4	CFM NC	395 —		525 19		655 25		785 31		915 36		1050 38		1180 42										
	4B  4C	CFM/SIDE THROW, FT.	154 42	206 56	258 70	309 84	360 98	413 112	464 126	16-19-26	6-8-13	18-22-30	8-10-14	21-25-34	10-12-16	22-29-38	10-13-17	23-29-40	12-13-18	25-31-43	12-14-19	29-32-45	13-16-21		
	4E	CFM/SIDE THROW, FT.	98 98	131 131	163 163	196 196	229 229	261 261	294 294	13-16-22	13-16-22	14-18-25	14-18-25	16-21-29	16-21-29	17-22-30	17-22-30	18-23-32	18-23-32	19-25-34	19-25-34	21-29-38	21-29-38		
	3A1	CFM/SIDE THROW, FT.	175 42	234 56	292 70	351 84	410 98	468 112	527 126	16-19-26	6-8-13	18-22-30	8-10-14	21-25-34	10-12-16	22-29-38	10-13-17	23-29-40	12-13-18	25-31-43	12-14-19	29-32-45	13-16-21		
	2A  2B	CFM/SIDE THROW, FT.	196	262	327	393	458	525	590	16-19-26		18-22-30		21-25-34		22-27-38		23-29-40		25-31-43		29-32-45			
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	308 84	412 112	514 141	617 169	720 197	825 225	927 253	20-24-34	13-15-20	22-27-39	14-17-22	25-31-45	15-20-25	27-32-48	17-21-27	27-32-48	18-22-29	31-35-50	18-22-29	31-36-55	20-24-31	34-41-57	21-25-34
	1A  1B	CFM/SIDE THROW, FT.	393	524	655	786	917	1050	1180	21-25-35		24-31-42		27-34-48		29-36-50		31-39-55		34-42-59		35-45-62			
24 x 9  1.5 SQ. FT.	RETURN FACTORS —SP=2.9 TP NC + 4	CFM NC	450 —		600 19		750 25		900 31		1050 36		1200 38		1350 43										
	4B  4C	CFM/SIDE THROW, FT.	183 42	244 56	305 70	366 84	427 98	488 112	549 126	17-21-28	7-8-14	20-24-32	8-11-15	22-27-36	11-13-17	24-29-41	11-14-18	25-31-43	13-14-20	27-34-46	13-15-21	31-35-49	14-17-22		
	4E	CFM/SIDE THROW, FT.	126 99	169 132	211 164	253 197	295 230	337 263	379 296	15-18-25	14-17-24	18-21-31	15-20-27	21-24-34	17-22-31	22-25-36	18-24-32	24-27-39	20-25-35	25-31-42	21-27-36	27-31-45	22-31-41		
	3A1	CFM/SIDE THROW, FT.	204 42	272 56	340 70	408 84	476 98	544 112	612 126	17-21-28	7-8-14	20-24-32	8-11-15	22-27-36	11-13-17	24-29-41	11-14-18	25-31-43	13-14-20	27-34-46	13-15-21	31-35-49	14-17-22		
	2A  2B	CFM/SIDE THROW, FT.	225	300	375	450	525	600	675	18-22-31		21-25-35		24-28-41		25-31-45		27-32-48		29-35-50		31-39-53			
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	365 84	488 112	609 141	731 169	853 197	975 225	1097 253	21-25-35	13-15-20	24-31-42	14-17-22	27-34-48	15-20-25	29-36-50	17-21-27	31-39-55	18-22-29	34-42-59	20-24-31	35-45-62	21-25-34		
	1A  1B	CFM/SIDE THROW, FT.	450	600	750	900	1050	1200	1350	21-25-35		24-31-42		27-34-48		29-36-50		31-39-55		34-42-59		35-45-62			

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D37.

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC													
30 x 9 1.875 SQ. FT.	RETURN FACTORS —SP=3.9 TP NC + 5	CFM NC	560 —		750 20		935 26		1125 32		1310 37		1500 39		1685 44	
	4B  4C	CFM/SIDE THROW, FT.	238 42	7-8-14	319 56	8-11-15	398 70	11-13-17	478 84	11-14-18	557 98	13-14-20	638 112	13-15-21	716 126	14-17-22
	4E	CFM/SIDE THROW, FT.	155 126	15-18-25	206 169	20-24-32	258 211	22-27-36	310 253	24-31-41	361 295	25-31-42	413 337	27-34-46	465 379	27-31-45
	3A1	CFM/SIDE THROW, FT.	259 42	7-8-14	347 56	8-11-15	433 70	11-13-17	520 84	11-14-18	606 98	13-14-20	694 112	13-15-21	779 126	14-17-22
	2A  2B	CFM/SIDE THROW, FT.	281	20-24-34	375	22-27-39	468	25-31-45	562	27-32-48	655	29-35-50	750	31-36-55	842	34-41-57
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	476 84	13-15-20	638 112	14-17-22	796 141	15-20-25	956 169	17-21-27	1113 197	18-22-31	1275 225	20-24-31	1432 253	21-25-34
	1A  1B	CFM/SIDE THROW, FT.	562	22-27-39	750	25-31-45	937	28-35-50	1125	31-39-55	1310	32-42-59	1500	35-45-62	1685	39-48-66
36 x 9 2.25 SQ. FT.	RETURN FACTORS —SP=5.0 TP NC + 6	CFM NC	675 —		900 21		1125 27		1350 33		1575 38		1800 40		2025 44	
	4B  4C	CFM/SIDE THROW, FT.	295 42	7-8-14	394 56	8-11-15	492 70	11-13-17	591 84	11-14-18	689 98	13-14-20	788 112	13-15-21	886 126	14-17-22
	4E	CFM/SIDE THROW, FT.	183 155	17-21-28	244 206	20-24-32	305 258	22-27-36	366 310	24-31-41	427 361	25-31-42	488 413	27-34-46	549 465	31-35-49
	3A1	CFM/SIDE THROW, FT.	316 42	7-8-14	422 56	8-11-15	527 70	11-13-17	633 84	11-14-18	738 98	13-14-20	844 112	13-15-21	949 126	14-17-22
	2A  2B	CFM/SIDE THROW, FT.	337	20-24-34	450	22-27-39	562	25-31-45	675	27-32-48	787	29-35-50	900	31-36-55	1012	34-41-57
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	590 84	13-15-20	788 112	14-17-22	984 141	15-20-25	1181 169	17-21-27	1378 197	18-22-29	1575 225	20-24-31	1772 253	21-25-34
	1A  1B	CFM/SIDE THROW, FT.	675	24-31-42	900	28-34-48	1125	32-39-55	1350	34-42-57	1575	36-45-62	1800	41-49-66	2025	43-52-70
15 x 12 1.25 SQ. FT.	RETURN FACTORS —SP=1.6 TP NC + 2	CFM NC	375 —		500 19		625 25		750 30		875 34		1000 38		1125 41	
	4B  4C	CFM/SIDE THROW, FT.	112 75	8-13-15	150 100	11-14-18	187 125	13-15-21	225 150	14-17-22	262 175	14-18-24	300 200	15-20-25	337 225	17-21-27
	3A1	CFM/SIDE THROW, FT.	150 75	8-13-15	200 100	18-21-31	250 125	11-14-18	300 150	14-17-22	350 175	14-18-24	400 200	15-20-25	450 225	17-21-27
	3A2	CFM/SIDE THROW, FT.	117 129	14-15-22	156 172	13-15-21	195 215	14-17-24	234 258	15-18-25	273 301	18-22-31	312 344	17-21-29	351 387	18-22-31
	2A  2B	CFM/SIDE THROW, FT.	187	17-21-28	250	20-24-32	312	22-27-36	375	24-29-41	437	25-31-43	500	27-34-46	567	31-35-49
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	225 150	14-17-24	300 200	15-20-27	375 250	17-22-31	450 300	18-24-32	525 350	20-25-35	600 400	21-27-36	675 450	22-31-41
	1A  1B	CFM/SIDE THROW, FT.	375	21-25-35	500	24-31-42	625	27-34-48	750	29-36-50	875	31-39-55	1000	34-42-59	1125	35-45-62

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D37.

D

CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033	400 .058	500 .090	600 .130	700 .177	800 .231	900 .293
18 x 12  1.5 SQ. FT.	RETURN FACTORS —SP=1.9 TP NC + 3	CFM NC	450 —	600 20	750 26	900 31	1050 35	1200 39	1350 42
		CFM/SIDE THROW, FT.	150 75 15-18-25 8-13-15	200 100 18-21-31 11-14-18	250 125 21-24-34 13-15-21	300 150 22-25-36 14-17-22	350 175 24-27-39 14-18-24	400 200 25-31-42 15-20-25	450 225 27-31-45 17-21-27
		CFM/SIDE THROW, FT.	187 75 17-21-28 8-13-15	250 100 20-24-32 11-14-18	312 125 22-27-36 13-15-21	375 150 24-31-41 14-17-22	437 175 25-31-43 14-18-24	500 200 27-34-46 15-20-25	562 225 31-35-49 17-21-27
		CFM/SIDE THROW, FT.	168 141 14-17-24 13-15-21	225 187 15-20-27 14-17-24	281 234 17-22-31 15-20-27	337 281 18-24-32 17-21-31	394 328 20-25-35 18-22-31	450 375 21-27-36 20-24-34	506 422 22-31-41 21-25-35
		CFM/SIDE THROW, FT.	225 18-22-31	300 21-25-35	375 24-28-41	450 25-31-45	525 27-32-48	600 29-35-50	675 31-39-53
		CFM/SIDE THROW, FT.	300 150 20-24-34 14-17-24	400 200 22-27-39 15-20-27	500 250 25-31-45 17-22-31	600 300 27-32-48 18-24-32	700 350 29-35-50 20-25-35	800 400 31-36-55 21-27-36	900 450 34-41-57 22-31-41
		CFM/SIDE THROW, FT.	450 21-25-35	600 24-31-42	750 27-34-48	900 29-36-50	1050 31-39-55	1200 34-42-59	1350 35-45-62
21 x 12  1.75 SQ. FT.	RETURN FACTORS —SP=2.2 TP NC + 5	CFM NC	525 —	700 20	875 26	1050 31	1225 35	1400 39	1575 42
		CFM/SIDE THROW, FT.	187 75 17-21-28 8-13-15	250 100 20-24-32 11-14-18	312 125 22-27-36 13-15-21	375 150 24-31-41 14-17-22	437 175 25-32-43 14-18-24	500 200 27-34-46 15-20-25	562 225 31-35-49 17-21-27
		CFM/SIDE THROW, FT.	150 112 15-18-25	200 150 18-21-31 15-18-25	250 187 21-24-34	300 225 22-25-36	350 262 24-27-39	400 300 25-31-42 22-25-36	450 337 27-31-45
		CFM/SIDE THROW, FT.	225 75 18-22-31 8-13-15	300 100 21-25-35 11-14-18	375 125 24-28-41 13-15-21	450 150 25-31-45 14-17-22	525 175 27-32-48 14-18-24	600 200 29-35-50 15-20-25	675 225 31-39-53 17-21-27
		CFM/SIDE THROW, FT.	230 148 14-17-24 13-15-21	306 197 15-20-27 14-17-24	382 246 17-22-31 15-20-27	460 295 18-24-32 17-21-31	535 345 20-25-35 18-22-31	612 394 21-27-36 20-24-34	688 443 22-31-41 21-25-35
		CFM/SIDE THROW, FT.	262 18-22-31	350 21-25-35	437 24-28-41	525 25-31-45	612 27-32-48	700 29-35-50	787 31-39-53
		CFM/SIDE THROW, FT.	375 150 21-25-35 14-17-24	500 200 24-31-42 15-20-27	625 250 27-34-48 17-22-31	750 300 29-36-50 18-24-32	875 350 31-39-55 20-25-35	1000 400 34-42-59 21-27-36	1125 450 35-45-62 22-31-41
24 x 12  2.0 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 5	CFM NC	600 12	800 21	1000 27	1200 32	1400 36	1600 40	1800 43
		CFM/SIDE THROW, FT.	225 75 18-22-31 8-13-15	300 100 21-25-35 11-14-18	375 125 24-28-41 13-15-21	450 150 25-31-45 14-17-22	525 175 27-32-48 14-18-24	600 200 31-35-50 15-20-25	675 225 31-39-53 17-21-27
		CFM/SIDE THROW, FT.	150 150 15-18-25 15-18-25	200 200 18-21-31 18-21-31	250 250 21-24-34 21-24-34	300 300 22-25-36 22-25-36	350 350 24-27-39 24-27-39	400 400 25-31-42 25-31-42	450 450 27-31-45 27-31-45
		CFM/SIDE THROW, FT.	262 75 18-22-31 8-13-15	350 100 21-25-35 11-14-18	437 175 24-28-41 13-15-21	525 150 25-31-45 14-17-22	612 175 27-32-48 14-18-24	700 200 29-35-50 15-20-25	787 225 31-39-53 17-21-27
		CFM/SIDE THROW, FT.	300 150 15-18-25 14-17-24	400 200 18-21-31 15-20-27	500 250 21-24-34 17-22-31	600 300 22-25-36 18-24-32	700 350 24-27-39 20-25-35	800 400 25-31-42 21-27-36	900 450 27-31-45 22-31-41
		CFM/SIDE THROW, FT.	300 20-24-34	400 22-27-39	500 25-31-45	600 27-32-48	700 29-35-50	800 31-36-55	900 34-41-57
		CFM/SIDE THROW, FT.	450 150 21-25-35 14-17-24	600 200 24-31-42 15-20-27	750 250 27-34-48 17-22-31	900 300 29-36-50 18-24-32	1050 350 31-39-55 20-25-35	1200 400 34-42-59 21-27-36	1350 450 35-45-62 22-31-41

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

For performance notes, see page D37.

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293								
			CFM NC	750 15	1000 23	1250 29	1500 33	1750 37	2000 41	2250 43	A	B	A	B	A	B	A	B					
30 x 12  2.5 SQ. FT.	RETURN FACTORS —SP=3.3 TP NC + 6	CFM NC	750 15		1000 23		1250 29		1500 33		1750 37		2000 41		2250 43								
	4B  4C	CFM/SIDE THROW, FT.	300 75	400 100	500 125	600 150	700 175	800 200	900 225	20-24-34	8-13-15	22-27-39	11-14-18	25-31-45	13-15-21	27-32-48	14-17-22	29-35-50	14-18-24	31-36-55	15-20-25	34-41-57	17-21-27
	4E	CFM/SIDE THROW, FT.	183 183	250 250	313 313	375 375	437 437	500 500	562 562	17-21-28	17-21-28	20-24-32	20-24-32	22-27-36	22-27-36	24-31-41	24-31-41	25-31-43	25-31-43	27-34-46	27-34-46	31-35-49	31-35-49
	3A1	CFM/SIDE THROW, FT.	337 75	450 100	562 125	675 150	787 175	900 200	1012 225	20-24-34	8-13-15	22-27-39	11-14-18	25-31-45	13-15-21	27-32-48	14-17-22	29-35-50	14-18-24	31-36-55	15-20-25	34-41-57	17-21-27
	2A  2B	CFM/SIDE THROW, FT.	375 21-25-35	500 24-31-42	625 27-34-48	750 29-36-50	875 31-39-55	1000 34-42-59	1125 35-45-62														
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	600 150	800 200	1000 250	1200 300	1400 350	1600 400	1800 450	24-31-41	14-17-24	28-34-48	15-20-27	32-39-55	17-22-31	34-42-57	18-24-32	36-45-62	20-25-35	41-49-66	21-27-36	43-52-70	22-31-41
1A  1B	CFM/SIDE THROW, FT.	750 25-31-45	1000 31-35-50	1250 34-41-57	1500 36-45-62	1750 39-48-66	2000 42-50-70	2250 45-53-74															
36 x 12  3.0 SQ. FT.	RETURN FACTORS —SP=4.0 TP NC + 7	CFM NC	900 16		1200 25		1500 30		1800 34		2100 38		2400 42		2700 44								
	4B  4C	CFM/SIDE THROW, FT.	375 75	500 100	625 125	750 150	875 175	1000 200	1125 225	21-25-35	8-13-15	24-31-42	11-14-18	27-34-48	13-15-21	29-36-50	14-17-22	31-39-55	14-18-24	34-42-59	15-20-25	35-45-62	17-21-27
	4E	CFM/SIDE THROW, FT.	225 225	300 300	375 375	450 450	525 525	600 600	675 675	18-22-31	18-22-31	21-25-35	21-25-35	24-28-41	24-28-41	25-31-45	25-31-45	27-32-48	27-32-48	29-35-50	29-35-50	31-39-53	31-39-53
	3A1	CFM/SIDE THROW, FT.	412 75	550 100	687 125	825 150	962 175	1100 200	1237 225	21-25-35	8-13-15	24-31-42	11-14-18	27-34-48	13-15-21	29-36-50	14-17-22	31-39-55	14-18-24	34-42-59	15-20-25	35-45-62	17-21-27
	2A  2B	CFM/SIDE THROW, FT.	450 21-25-35	600 24-31-42	750 27-34-48	900 29-36-50	1050 31-39-55	1200 34-42-59	1350 35-45-62														
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	750 150	1000 200	1250 250	1500 300	1750 350	2000 400	2250 450	25-31-45	14-17-24	31-35-50	15-20-27	34-41-57	17-22-31	36-45-62	18-24-32	39-48-66	20-25-35	42-50-70	21-27-36	45-53-74	22-31-41
1A  1B	CFM/SIDE THROW, FT.	900 27-34-46	1200 31-39-53	1500 35-45-60	1800 39-48-64	2100 42-50-70	2400 45-55-74	2700 48-57-80															
18 x 15  1.875 SQ. FT.	RETURN FACTORS —SP=2.0 TP NC + 4	CFM NC	560 14		750 21		935 28		1125 32		1310 36		1500 39		1685 43								
	4B  4C	CFM/SIDE THROW, FT.	164 117	219 156	273 195	328 234	383 273	438 312	492 351	14-17-24	11-14-18	15-20-27	13-15-21	17-22-31	14-17-24	18-24-32	15-18-25	20-25-35	17-20-27	21-27-36	17-21-31	22-31-41	18-22-31
	3A1	CFM/SIDE THROW, FT.	222 117	297 156	371 195	445 234	519 273	594 312	668 351	18-22-31	11-14-18	21-25-35	13-15-21	24-28-41	14-17-24	25-31-45	15-18-25	31-39-55	17-20-27	31-35-50	17-21-31	31-39-53	18-22-31
	3A2	CFM/SIDE THROW, FT.	168 197	225 262	281 328	337 394	394 459	450 525	506 590	13-16-22	18-22-30	15-18-25	21-25-34	16-21-28	24-28-39	18-22-33	25-33-43	19-24-33	27-33-46	21-25-36	28-36-49	22-27-37	33-37-52
	2A  2B	CFM/SIDE THROW, FT.	281 20-24-34	375 22-27-39	468 25-31-45	562 27-32-48	656 29-35-50	750 31-36-55	843 34-41-57														
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	329 234	438 312	547 390	657 468	766 546	876 624	985 702	25-33-45	18-22-30	30-36-51	21-25-34	34-42-58	24-28-39	36-45-61	25-31-43	39-48-66	27-33-46	43-52-70	28-36-49	46-55-75	33-37-52
1A  1B	CFM/SIDE THROW, FT.	562 24-28-42	750 27-33-48	937 30-37-54	1125 33-42-58	1312 34-45-63	1500 37-48-66	1687 42-51-70															

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

For performance notes, see page D37.

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A
21 x 15  2.185 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 5	CFM NC	655 14		875 21		1090 28		1310 33		1530 36		1750 39		1970 43	
	4B  4C	CFM/SIDE THROW, FT.	210	117	281	156	361	195	422	234	493	273	563	312	634	351
	4E	CFM/SIDE THROW, FT.	164	164	218	218	273	273	327	327	382	382	437	437	491	491
	3A1	CFM/SIDE THROW, FT.	269	117	359	156	448	195	539	234	629	273	719	312	809	351
	3A2	CFM/SIDE THROW, FT.	230	213	306	284	382	355	460	426	535	498	612	569	688	641
	2A 2B	CFM/SIDE THROW, FT.	327		437		596		656		766		875		985	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	422	234	563	312	702	390	844	468	966	546	1126	624	1268	702
	1A 1B	CFM/SIDE THROW, FT.	655		875		1092		1312		1532		1750		1970	
24 x 15  2.5 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 6	CFM NC	750 14		1000 22		1250 29		1500 34		1750 37		2000 39		2250 44	
	4B  4C	CFM/SIDE THROW, FT.	258	117	344	156	430	195	516	234	602	273	688	312	774	351
	4E	CFM/SIDE THROW, FT.	164	211	218	281	273	352	327	422	382	492	437	563	491	633
	3A1	CFM/SIDE THROW, FT.	316	117	422	156	527	195	633	234	738	273	844	312	949	351
	3A2	CFM/SIDE THROW, FT.	300	225	400	300	500	375	600	450	700	525	800	600	900	675
	2A 2B	CFM/SIDE THROW, FT.	375		500		625		750		875		1000		1125	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	516	234	688	312	860	390	1032	468	1204	546	1376	624	1548	702
	1A 1B	CFM/SIDE THROW, FT.	750		1000		1250		1500		1750		2000		2250	
30 x 15  3.125 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 7	CFM NC	935 14		1250 23		1565 30		1875 36		2190 39		2500 40		2810 45	
	4B  4C	CFM/SIDE THROW, FT.	351	117	469	156	587	195	703	234	822	273	938	312	1054	351
	4E	CFM/SIDE THROW, FT.	258	211	344	281	430	352	516	422	602	492	688	583	775	633
	3A1	CFM/SIDE THROW, FT.	410	117	547	156	685	195	820	234	958	273	1094	312	1224	351
	3B	CFM/SIDE THROW, FT.	468	234	625	312	782	391	937	469	1095	547	1250	625	1406	702
	2A 2B	CFM/SIDE THROW, FT.	468		625		782		937		1095		1250		1405	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	702	234	938	312	1175	390	1407	468	1644	546	1876	624	2108	702
	1A 1B	CFM/SIDE THROW, FT.	937		1250		1565		1875		2190		2500		2810	

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D37.

D

CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	CFM NC	CFM NC	CFM NC	CFM NC	CFM NC	CFM NC	CFM NC	CFM NC	CFM NC	CFM NC	CFM NC	CFM NC	CFM NC
36 x 15 3.75 SQ. FT.	RETURN FACTORS —SP=3.8 TP NC + 7	CFM NC	1125 13	1500 23	1875 31	2250 37	2625 40	3000 41	3375 46							
	4B  4C	CFM/SIDE THROW, FT.	446 117 22-27-37 12-15-19	594 156 25-33-45 13-16-22	742 195 28-36-51 15-18-25	891 234 33-39-54 16-19-27	1039 273 33-45-58 18-21-28	1188 312 36-45-63 18-22-30	1336 351 37-48-66 19-24-33							
	4E	CFM/SIDE THROW, FT.	306 258 21-25-36 19-24-33	408 344 24-28-42 22-27-37	510 430 27-33-48 25-30-43	612 516 28-34-51 27-33-48	714 602 33-37-54 28-34-51	816 688 33-39-58 33-37-54	918 775 36-43-61 33-42-57							
	3A1	CFM/SIDE THROW, FT.	504 117 24-28-42 12-15-19	672 156 27-33-48 13-16-22	840 195 30-37-54 15-18-25	1008 234 33-45-58 16-19-27	1176 273 34-45-63 18-21-28	1344 312 37-48-66 18-22-30	1512 351 42-51-70 19-24-33							
	2A  2B	CFM/SIDE THROW, FT.	562 24-28-42	750 27-33-48	937 30-37-54	1125 33-42-58	1312 34-45-63	1500 37-48-66	1682 42-51-70							
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	890 234 28-36-49 18-22-30	1188 312 33-42-49 21-25-34	1485 390 37-48-64 24-28-39	1782 468 42-51-69 25-33-43	2079 546 45-54-75 27-33-46	2376 624 48-58-79 28-36-49	2873 702 51-61-85 33-37-52							
1A  1B	CFM/SIDE THROW, FT.	1125 30-37-52	1500 34-43-60	1875 39-48-67	2250 42-52-73	2625 46-57-78	3000 49-60-85	3375 52-64-90								
21 x 18 2.625 SQ. FT.	RETURN FACTORS —SP=2.2 TP NC + 5	CFM NC	785 14	1050 21	1310 27	1575 32	1840 36	2100 40	2360 43							
	4B  4C	CFM/SIDE THROW, FT.	225 169 16-19-27 13-16-22	300 225 19-22-33 15-18-25	375 280 22-25-36 16-21-28	450 337 24-27-40 18-22-30	526 394 25-28-42 19-24-33	600 450 27-33-45 21-25-36	674 506 28-33-48 22-27-37							
	3A1	CFM/SIDE THROW, FT.	309 169 21-25-36 13-16-22	412 225 24-28-42 15-18-25	514 281 27-33-48 16-21-28	619 337 28-34-51 18-22-30	723 394 33-37-54 19-24-33	825 450 33-39-58 21-25-36	927 506 36-43-61 22-27-37							
	3A2	CFM/SIDE THROW, FT.	279 230 21-25-36 15-18-25	372 306 24-28-42 16-21-28	464 382 27-33-48 18-24-33	557 460 28-34-51 19-25-34	652 535 33-37-54 21-27-37	744 612 33-39-58 22-28-39	836 688 36-43-61 24-33-43							
	2A  2B	CFM/SIDE THROW, FT.	393 22-27-37	525 25-33-42	655 28-36-46	787 30-39-54	920 33-42-58	1050 36-45-63	1180 37-48-66							
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	450 338 22-27-37 19-24-33	600 450 25-33-42 22-27-37	750 560 28-36-46 25-30-43	900 675 30-39-54 27-33-48	1060 790 33-42-58 28-34-51	1200 900 36-45-63 33-37-54	1350 1010 37-48-66 33-42-57							
1A  1B	CFM/SIDE THROW, FT.	787 29-35-51	1050 35-40-58	1310 38-46-66	1575 42-51-70	1840 45-54-75	2100 48-58-80	2360 51-61-85								
24 x 18 3.0 SQ. FT.	RETURN FACTORS —SP=2.5 TP NC + 6	CFM NC	900 15	1200 22	1500 28	1800 33	2100 37	2400 40	2700 43							
	4B  4C	CFM/SIDE THROW, FT.	281 169 22-27-38 14-18-24	375 225 26-30-45 16-19-27	469 281 29-35-51 18-22-30	563 337 30-37-54 19-24-33	656 394 33-40-58 21-26-35	750 450 35-42-62 22-27-38	844 506 38-46-66 24-29-40							
	4E	CFM/SIDE THROW, FT.	225 225 21-26-35 21-26-35	300 300 24-29-40 24-29-40	375 375 27-32-46 27-32-46	450 450 29-35-51 29-35-51	525 525 30-37-54 30-37-54	600 600 33-40-58 33-40-58	675 675 35-45-61 35-45-61							
	3A1	CFM/SIDE THROW, FT.	366 169 24-29-40 14-18-24	487 225 27-35-48 16-19-27	609 281 30-38-54 18-22-30	731 337 35-42-58 19-24-33	853 394 35-45-62 21-26-35	975 450 38-48-67 22-27-38	1098 506 40-51-70 24-29-40							
	3A2	CFM/SIDE THROW, FT.	300 300 25-31-43 20-23-32	400 400 29-34-50 23-27-40	500 500 32-40-58 27-31-43	600 600 34-41-61 29-32-47	700 700 40-45-65 31-34-50	800 800 40-47-70 32-40-54	900 900 43-52-74 34-40-58							
	2A  2B	CFM/SIDE THROW, FT.	450 24-29-40	600 27-35-48	750 30-38-54	900 35-42-58	1050 35-45-62	1200 38-48-67	1350 40-51-70							
2C  2D  2E  2F	CFM/SIDE THROW, FT.	562 338 26-30-45 21-26-35	750 450 29-35-51 24-29-40	938 562 32-40-58 27-32-46	1125 675 35-45-62 29-35-51	1313 787 37-48-67 30-37-54	1500 900 40-51-70 33-40-58	1688 1012 45-54-75 35-45-61								
1A  1B	CFM/SIDE THROW, FT.	900 30-38-53	1200 35-45-61	1500 40-51-69	1800 45-54-74	2100 48-58-80	2400 51-62-85	2700 54-66-91								

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D37.

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	A B	A B	A B	A B	A B	A B	A B	A B	A B				
30 x 18 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 7	CFM NC	1125 15		1500 23		1875 29		2250 34		2625 38		3000 42		3375 45	
	4B  4C	CFM/SIDE THROW, FT.	394 169	525 225	657 281	788 337	918 394	1050 450	1181 506	24-29-40 14-18-24	27-35-48 16-19-27	30-38-54 18-22-30	35-42-58 19-24-35	35-45-62 21-26-35	38-48-67 22-27-38	40-51-70 24-29-40
	4E	CFM/SIDE THROW, FT.	281 281	375 375	469 469	563 563	657 657	750 750	845 845	22-27-38 22-27-38	26-30-45 26-30-45	29-35-51 29-35-51	30-37-54 30-37-54	32-40-58 32-40-58	35-42-62 35-42-62	38-46-66 38-46-66
	3A1	CFM/SIDE THROW, FT.	478 169	637 225	797 281	956 337	1115 394	1275 450	1434 506	26-30-45 14-18-24	29-35-51 16-19-27	32-40-58 18-22-30	35-45-62 19-24-35	37-48-67 21-26-35	40-51-70 22-27-38	45-54-75 24-29-40
	3A2	CFM/SIDE THROW, FT.	469 327	625 437	782 546	937 656	1093 766	1250 875	1406 984	22-27-38 19-24-32	26-30-45 22-27-37	29-35-51 26-30-42	30-37-54 27-35-46	32-40-58 29-35-50	35-42-62 30-38-53	38-46-66 35-40-56
	2A 2B	CFM/SIDE THROW, FT.	562	750	937	1125	1312	1500	1687	26-30-45	29-35-51	32-40-58	35-45-62	37-48-67	40-51-70	45-54-75
	2C 2E  2D 2F	CFM/SIDE THROW, FT.	787 337	1050 450	1313 562	1575 675	1838 787	2100 900	2363 1012	29-35-51 21-26-35	35-40-58 24-29-40	38-46-66 27-32-46	42-51-70 29-35-51	45-54-75 30-37-54	48-58-80 33-40-58	51-61-85 35-45-61
1A 1B	CFM/SIDE THROW, FT.	1125	1500	1875	2250	2625	3000	3375	32-40-56	37-46-62	42-53-72	46-56-78	50-61-83	53-64-91	56-69-96	
36 x 18 SQ. FT.	RETURN FACTORS —SP=3.6 TP NC + 8	CFM NC	1350 16		1800 24		2250 30		2700 35		3150 39		3600 42		4050 45	
	4B  4C	CFM/SIDE THROW, FT.	506 169	675 225	844 281	1013 337	1181 394	1350 450	1519 506	26-30-45 14-18-24	29-35-51 16-19-27	33-40-58 18-22-30	35-45-62 19-24-35	37-48-67 21-26-35	40-51-70 22-27-38	45-54-75 24-29-40
	4E	CFM/SIDE THROW, FT.	339 339	452 452	565 565	678 678	791 791	904 904	1020 1020	22-27-38 22-27-38	26-30-45 26-30-45	29-35-51 29-35-51	30-37-54 30-37-54	33-40-58 33-40-58	35-42-62 35-42-62	38-46-66 38-46-66
	3A1	CFM/SIDE THROW, FT.	591 169	787 225	984 281	1181 337	1378 394	1575 450	1772 506	27-35-48 14-18-24	32-38-54 16-19-27	37-45-62 18-22-30	38-48-66 19-24-35	42-51-70 21-26-35	46-56-75 22-27-38	50-59-80 24-29-40
	3B	CFM/SIDE THROW, FT.	675 337	900 450	1125 562	1350 675	1575 787	1800 900	2025 1012	27-35-48 21-26-35	32-38-54 24-29-40	37-45-62 27-32-46	38-48-66 29-35-51	42-51-70 30-37-54	46-56-75 33-40-58	50-59-80 35-45-61
	2A 2B	CFM/SIDE THROW, FT.	675	900	1125	1350	1575	1800	2025	27-35-48	32-38-54	37-45-62	38-48-66	42-51-70	46-56-75	50-59-80
	2C 2E  2D 2F	CFM/SIDE THROW, FT.	1010 337	1350 450	1688 562	2025 675	2363 787	2700 900	3038 1012	32-40-56 21-26-35	37-46-64 24-29-40	42-53-72 27-32-46	46-56-78 29-35-51	50-61-83 30-37-54	53-64-91 33-40-58	56-69-96 35-45-61
1A 1B	CFM/SIDE THROW, FT.	1350	1800	2250	2700	3150	3600	4050	35-40-59	38-48-67	45-54-77	48-58-82	51-62-90	54-67-93	59-70-101	
24 x 21 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 7	CFM NC	1050 15		1400 22		1750 28		2100 33		2450 37		2800 41		3150 44	
	4B  4C	CFM/SIDE THROW, FT.	295 230	394 306	493 382	590 460	690 535	788 612	887 688	20-25-34 17-20-29	24-29-39 19-24-32	27-32-44 20-27-37	29-37-49 22-29-39	31-37-53 24-31-42	32-41-56 25-32-44	37-42-59 27-37-49
	3A1	CFM/SIDE THROW, FT.	410 230	547 306	684 382	820 460	957 535	1094 612	1231 688	25-31-42 17-20-29	29-37-51 19-24-32	32-41-58 20-27-37	37-44-61 22-29-39	37-48-66 24-31-42	41-51-71 25-32-44	42-54-75 27-37-49
	3A2	CFM/SIDE THROW, FT.	375 300	500 400	625 500	750 600	875 700	1000 800	1125 900	25-31-42 19-22-31	29-37-51 22-25-37	32-41-58 25-29-41	37-44-61 27-31-44	37-48-66 29-32-48	41-51-71 31-37-51	42-54-75 32-37-54
	2A 2B	CFM/SIDE THROW, FT.	525	700	875	1050	1225	1400	1575	27-32-48	31-37-54	34-42-61	37-48-66	39-51-71	42-54-75	48-58-80
	2C 2E  2D 2F	CFM/SIDE THROW, FT.	591 459	788 612	986 764	1180 920	1380 1070	1576 1224	1774 1376	29-37-51 24-29-41	34-41-58 27-32-48	39-48-66 31-37-54	41-51-70 32-39-58	44-54-75 37-42-61	49-59-80 37-44-66	53-63-85 41-49-70
	1A 1B	CFM/SIDE THROW, FT.	1050	1400	1750	2100	2450	2800	3150	34-42-59	39-49-68	44-56-76	49-59-83	53-65-88	56-68-87	59-73-102

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D37.

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293									
			CFM NC	1310 16	A	B	1750 23	A	B	2185 29	A	B	2625 34	A	B	3060 38	A	B	3500 41	A	B	3935 44	A	B
30 x 21 4.375 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	1310 16	A	B	1750 23	A	B	2185 29	A	B	2625 34	A	B	3060 38	A	B	3500 41	A	B	3935 44	A	B	
			CFM/SIDE THROW, FT.	425 230	25-31-42	230 17-20-29	569 306	24-37-51	306 19-24-32	710 382	32-41-58	382 20-27-37	852 460	37-44-61	460 22-29-39	995 535	37-48-66	535 24-31-42	1138 612	41-51-71	612 25-32-44	1279 688	42-54-75	688 27-37-49
		CFM/SIDE THROW, FT.	360 295	24-29-41	295 27-32-48	480 394	27-32-48	394 31-37-54	600 492	31-37-54	492 32-39-58	720 591	32-39-58	591 37-42-61	840 690	37-42-61	690 37-44-66	960 788	37-44-66	788 41-49-70	1080 887	41-49-70	887 41-49-70	
		CFM/SIDE THROW, FT.	540 230	27-32-48	230 17-20-29	722 306	31-37-54	306 19-24-32	901 382	34-42-61	382 20-27-37	1082 460	37-48-66	460 22-29-39	1262 535	39-51-71	535 24-31-42	1444 612	42-54-75	612 25-32-44	1623 688	48-58-80	688 27-37-49	
		CFM/SIDE THROW, FT.	468 422	25-31-42	422 20-25-34	625 562	29-37-51	562 24-29-39	782 701	32-41-58	701 27-32-44	937 844	37-44-61	844 29-37-49	1093 983	37-48-66	983 31-37-53	1250 1125	41-51-71	1125 32-41-56	1406 1264	42-54-75	1264 37-42-61	
		CFM/SIDE THROW, FT.	655	29-37-51	875	34-41-58	1092	39-48-66	1312	41-51-70	1530	44-54-75	1750	49-59-80	1968	53-63-85	2185	58-68-95	2400	63-73-102	2615	70-85-122	2830	77-95-133
		CFM/SIDE THROW, FT.	853 457	31-37-54	457 24-29-41	1138 612	37-42-61	612 27-32-48	1421 764	41-49-70	764 31-37-54	1705 920	44-54-75	920 32-39-58	1990 1070	48-58-80	1070 37-42-61	2276 1224	51-61-85	1224 37-44-66	2559 1376	54-65-90	1376 41-49-70	
	CFM/SIDE THROW, FT.	1310	37-42-63	1750	41-51-71	2185	48-58-82	2625	51-61-87	3060	54-66-95	3500	58-71-99	3935	63-75-107									
36 x 21 5.25 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	1575 16	A	B	2100 24	A	B	2625 30	A	B	3150 34	A	B	3675 38	A	B	4200 42	A	B	4725 45	A	B	
			CFM/SIDE THROW, FT.	558 230	27-32-48	230 17-20-29	744 306	31-37-54	306 19-24-32	930 382	34-42-61	382 20-27-37	1115 460	37-48-66	460 22-29-39	1306 535	39-51-71	535 24-31-42	1488 612	42-54-75	612 25-32-44	1674 688	48-58-80	688 27-37-49
		CFM/SIDE THROW, FT.	427 360	25-31-42	360 25-31-42	568 480	29-37-61	480 29-37-51	710 600	32-41-58	600 32-41-58	852 720	37-44-61	720 37-44-61	945 840	37-48-66	840 37-48-66	1135 960	41-51-71	960 41-51-71	1280 1080	42-54-75	1080 42-54-75	
		CFM/SIDE THROW, FT.	672 230	29-37-51	230 17-20-29	897 306	34-41-58	306 19-24-32	1121 382	39-48-66	382 20-27-37	1345 460	41-51-70	460 22-29-39	1570 535	44-54-75	535 24-31-42	1794 612	49-59-80	612 25-32-44	2018 688	53-63-85	688 27-37-49	
		CFM/SIDE THROW, FT.	675 450	25-31-42	450 22-27-37	900 600	29-37-51	600 25-31-42	1125 750	32-41-58	750 29-34-49	1350 900	37-44-61	900 31-37-54	1575 1050	37-48-66	1050 32-39-58	1800 1200	41-51-71	1200 34-42-61	2025 1350	42-54-75	1350 37-48-65	
		CFM/SIDE THROW, FT.	787	31-37-54	1050	37-42-61	1312	41-49-70	1575	44-54-75	1837	48-58-80	2100	51-61-85	2362	54-65-90	2615	58-68-95	2876	63-73-102	3137	70-85-122	3400	77-95-133
		CFM/SIDE THROW, FT.	1115 460	34-42-59	460 24-29-41	1488 612	39-49-68	612 27-32-48	1861 764	44-56-76	764 31-37-54	2230 920	49-59-83	920 32-39-58	2605 1070	53-65-88	1070 37-42-61	2976 1224	56-68-97	1224 37-44-66	3349 1376	59-73-102	1376 41-49-70	
	CFM/SIDE THROW, FT.	1575	41-51-70	2100	39-58-80	2625	54-66-90	3150	58-70-99	3675	61-75-105	4200	66-80-114	4725	70-85-122									
30 x 24 5.0 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	1500 17	A	B	2000 25	A	B	2500 30	A	B	3000 35	A	B	3500 39	A	B	4000 43	A	B	4500 46	A	B	
			CFM/SIDE THROW, FT.	450 300	25-31-42	300 19-22-31	600 400	29-37-51	400 22-25-37	750 500	32-41-58	500 25-29-41	900 600	33-44-61	600 27-31-44	1050 700	37-48-66	700 29-32-48	1200 800	41-51-71	800 31-37-51	1350 900	42-54-75	900 32-37-54
		CFM/SIDE THROW, FT.	375 375	25-31-42	375 25-31-42	500 500	29-37-51	500 29-37-51	625 625	32-41-58	625 32-41-58	750 750	33-44-61	750 37-44-61	875 875	37-48-66	875 37-48-66	1000 1000	41-51-71	1000 41-51-71	1125 1125	42-54-75	1125 42-54-75	
		CFM/SIDE THROW, FT.	600 300	29-37-51	300 19-22-31	800 400	34-41-58	400 22-25-37	1000 500	39-48-66	500 25-29-41	1200 600	41-51-70	600 27-31-44	1400 700	44-54-75	700 29-32-48	1600 800	49-59-80	800 31-37-51	1800 900	53-63-85	900 32-37-54	
		CFM/SIDE THROW, FT.	515 470	31-37-54	470 25-31-42	687 625	37-42-61	625 29-37-51	859 782	41-49-70	782 32-41-58	1031 937	44-54-75	937 33-44-61	1203 1093	48-58-80	1093 37-48-66	1375 1250	51-61-85	1250 41-51-71	1548 1406	54-65-90	1406 42-54-75	
		CFM/SIDE THROW, FT.	750	32-41-56	1000	37-48-65	1250	42-54-73	1500	48-58-78	1750	51-61-85	2000	54-66-90	2250	58-70-97	2500	63-73-102	2750	70-85-122	3000	77-95-133	3250	84-101-143
		CFM/SIDE THROW, FT.	900 600	37-42-63	600 29-37-51	1200 800	41-51-71	800 34-41-58	1500 1000	48-58-82	1000 39-48-66	1800 1200	51-61-87	1200 41-51-70	2100 1400	54-66-85	1400 44-54-75	2400 1600	58-71-99	1600 49-59-80	2700 1800	63-75-107	1800 53-63-85	
	CFM/SIDE THROW, FT.	1500	38-47-67	2000	45-54-76	2500	48-61-85	3000	54-65-95	3500	58-72-99	4000	62-76-106	4500	66-79-113									

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D37.

D  
CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	1800 18	2400 25	3000 31	3600 36	4200 40	4800 43	5400 46						
36 x 24 6.0 SQ. FT.	RETURN FACTORS —SP=3.3 TP NC + 8	CFM NC	1800 18	2400 25	3000 31	3600 36	4200 40	4800 43	5400 46							
	4B  4C	CFM/SIDE THROW, FT.	600 300 29-37-51 19-22-31	800 400 34-41-58 22-25-37	1000 500 39-48-66 25-29-41	1200 600 41-51-70 27-31-44	1400 700 44-54-75 29-32-48	1600 800 49-59-80 31-37-51	1800 900 53-63-85 32-37-54							
	4E	CFM/SIDE THROW, FT.	450 450 25-31-42 24-31-42	600 600 29-37-51 29-37-51	750 750 32-41-58 32-41-58	900 900 35-44-61 35-44-61	1050 1050 37-48-66 37-48-66	1200 1200 41-51-71 41-51-71	1350 1350 42-54-75 42-54-75							
	3A1	CFM/SIDE THROW, FT.	750 300 31-37-54 19-22-31	1000 400 37-42-61 22-25-37	1250 500 41-49-70 25-29-41	1500 600 44-54-75 27-31-44	1750 700 48-58-80 29-32-48	2000 800 51-61-85 31-37-51	2250 900 54-65-90 32-37-54							
	3A2	CFM/SIDE THROW, FT.	676 562 27-32-48 24-29-41	900 750 34-37-54 27-32-48	1125 937 34-42-61 31-37-54	1350 1125 37-48-66 32-39-58	1575 1312 39-51-71 35-42-61	1800 1500 42-54-75 37-44-66	2025 1687 48-58-80 41-49-70							
	2A	CFM/SIDE THROW, FT.	900 32-41-56	1200 37-48-65	1500 42-54-73	1800 48-58-78	2100 51-61-85	2400 54-66-90	2700 58-70-97							
	2B	CFM/SIDE THROW, FT.	900 32-41-56	1200 37-48-65	1500 42-54-73	1800 48-58-78	2100 51-61-85	2400 54-66-90	2700 58-70-97							
	2C  2D	CFM/SIDE THROW, FT.	1200 600 37-42-63 25-31-42	1600 800 41-51-71 29-37-51	2000 1000 48-58-82 32-41-58	2400 1200 51-61-87 35-44-61	2800 1400 54-66-95 37-48-66	3200 1600 58-71-99 41-51-71	3600 1800 63-75-107 42-54-75							
	2E	CFM/SIDE THROW, FT.	1200 600 37-42-63 25-31-42	1600 800 41-51-71 29-37-51	2000 1000 48-58-82 32-41-58	2400 1200 51-61-87 35-44-61	2800 1400 54-66-95 37-48-66	3200 1600 58-71-99 41-51-71	3600 1800 63-75-107 42-54-75							
	1A  1B	CFM/SIDE THROW, FT.	1800 41-51-70	2400 48-58-80	3000 54-66-90	3600 58-70-99	4200 61-75-105	4800 66-80-114	5400 70-85-122							
36 x 30 7.5 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	2250 19	3000 26	3750 32	4500 37	5250 41	6000 44	6750 47							
	4B  4C	CFM/SIDE THROW, FT.	657 468 29-37-51 20-25-34	875 625 34-41-58 24-29-39	1093 782 39-48-66 27-32-44	1313 937 41-51-70 29-37-49	1532 1093 44-54-75 31-37-53	1750 1250 49-59-80 32-41-56	1969 1406 53-63-85 37-42-59							
	3A1	CFM/SIDE THROW, FT.	890 468 32-41-56 20-25-34	1187 625 37-48-65 24-29-39	1484 782 42-54-73 27-32-44	1781 937 48-58-78 29-37-49	2078 1093 51-61-85 31-37-53	2375 1250 54-66-90 32-41-56	2672 1406 58-70-97 37-42-59							
	3A2	CFM/SIDE THROW, FT.	787 675 31-37-54 22-27-37	1050 900 37-42-61 25-31-42	1312 1125 41-49-70 29-34-49	1575 1350 44-54-75 31-37-54	1837 1575 48-58-80 32-39-58	2100 1800 51-61-85 37-42-61	2362 2025 54-65-90 37-48-65							
	2A	CFM/SIDE THROW, FT.	1125 34-42-59	1500 39-49-68	1875 44-56-76	2250 49-59-83	2625 53-65-88	3000 56-68-97	3375 59-73-102							
	2B	CFM/SIDE THROW, FT.	1125 34-42-59	1500 39-49-68	1875 44-56-76	2250 49-59-83	2625 53-65-88	3000 56-68-97	3375 59-73-102							
	2C  2D	CFM/SIDE THROW, FT.	1312 938 37-42-63 29-37-51	1750 1250 41-51-71 34-41-58	2188 1562 48-58-82 39-48-66	2625 1875 51-61-87 41-51-70	3063 2187 54-66-95 44-54-75	3500 2500 58-71-99 49-59-80	3938 2812 63-75-107 53-63-85							
	2E	CFM/SIDE THROW, FT.	1312 938 37-42-63 29-37-51	1750 1250 41-51-71 34-41-58	2188 1562 48-58-82 39-48-66	2625 1875 51-61-87 41-51-70	3063 2187 54-66-95 44-54-75	3500 2500 58-71-99 49-59-80	3938 2812 63-75-107 53-63-85							
	1A  1B	CFM/SIDE THROW, FT.	2250 48-60-82	3000 56-68-94	3750 64-78-106	4500 68-82-116	5250 72-88-124	6000 78-94-134	6750 82-100-144							

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

- CFM** - cubic feet per minute  
**TP** - total pressure - inches w.g.  
**T** - throw in feet  
**NC** - Noise Criteria (values) based on 10 dB room absorption, re  $10^{-12}$  watts.  
**Neck Velocity** – feet per minute

#### Performance Notes:

1. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 25%.
2. Sound levels in performance tables are for steel construction – **Model 6500**. Apply the following corrections for aluminum construction – **Model 6200**.  
TP = Listed value x 1.25.  
NC = Listed value + 4.
3. Performance data as tabulated is for supply air conditions. Correction factors for return air application - see next page.
4. Correction factors for adjustable models - see next page.
5. Correction factors for round inlets - see next page.
6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

## PERFORMANCE DATA CORRECTIONS:

### MODELS 6500 AND 6200

#### CORRECTION FACTORS FOR RETURN INLET

If the unit is used as a return inlet, the performance data is obtained by applying the return corrections, as follows:

- Add the NC correction at the left side of the table to the NC value listed in the performance table.
- Multiply the listed SP factor at the left side of the table by the total pressure (TP) listed at the top of the table.

#### CORRECTION FACTORS FOR MODELS 6550 AND 6250 (ADJUSTABLE PATTERN CONTROLLERS) – TABLE 2

Refer to the performance data for the **Models 6500 and 6200**. Apply the corrections from Table 2 to the data for square, 4-way core styles, as follows:

- NC = listed + correction
- Total Pressure = listed x factor
- Horizontal Throw = listed
- Vertical Throw = listed x factor

Apply the throw factor to the 50 fpm terminal velocity throw only.

#### Example:

18" x 18", **Model 6500**, 1350 cfm, 20°F temperature difference heating, vertical projection, (Page D23).

- NC = 31 + 6 = 37
- TP = .13 x 2.1 = .273
- Throw = 36 x .9 = 32.4 feet @ 50 fpm terminal velocity.

#### CORRECTION FACTORS WITH SQUARE TO ROUND INLET ADAPTOR – TABLE 3

- Add the NC correction factor from Table 3 and the NC value listed in the performance tables.
- Multiply the correction factor from Table 3 by the listed total pressure in the performance tables.
- Multiply the correction factor from Table 3 by the listed throws in the performance tables.

#### Example:

12" x 12" unit with 10" round adaptor handling 500 cfm supply air. (Page D23).

- NC = 23 + 7 = 30
- Total Pressure = .09 x 1.65 = 0.149
- Throw = 21 x 1.15 = 24.15 feet @ 50 fpm terminal velocity.

#### Example:

12" x 12" unit handling 600 cfm of return air. (Page D23).

- Return NC = 28 + 4 = 32.
- Return negative SP = 1.3 x (-.13) = -.169.

**TABLE 2 Correction Factors 6550/6250 Adjustable**

NECK SIZE	NC (add)		TOTAL PRESSURE (multiply)		VERTICAL THROW (multiply)			
	H	V	H	V	COOLING, ΔT		HEATING, ΔT	
					20°F	0°F	20°F	40°F
6 x 6	2	6	1.2	1.5	1.3	1.1	0.8	0.6
9 x 9	2	6	1.4	2.1	1.5	1.2	0.9	0.6
12 x 12	2	6	1.4	2.1	1.6	1.3	1.0	0.6
15 x 15	2	6	1.4	2.1	1.7	1.3	1.0	0.6
18 x 18	2	6	1.4	2.1	1.7	1.3	0.9	0.6
21 x 21	2	6	1.4	2.1	1.7	1.3	0.8	0.5
24 x 24	2	6	1.6	2.2	1.5	1.1	0.7	0.3

**TABLE 3 Correction Factors for SR Adaptors**

SQUARE INLET	ROUND INLET	NC (add)	TP (multiply)	THROW (multiply)		
				150	100	50
6 x 6	5	7	1.65	1.10	1.10	1.15
9 x 9	6	17	3.50	1.15	1.15	1.20
9 x 9	8	4	1.40	1.10	1.10	1.10
12 x 12	8	17	3.50	1.15	1.15	1.20
12 x 12	10	7	1.65	1.10	1.10	1.15
15 x 15	10	17	3.50	1.15	1.15	1.20
15 x 15	12	9	1.90	1.10	1.10	1.15
15 x 15	14	3	1.25	1.05	1.05	1.10
18 x 18	12	17	3.50	1.15	1.15	1.20
18 x 18	14	10	2.00	1.10	1.10	1.15
18 x 18	16	5	1.45	1.10	1.10	1.10
21 x 21	14	17	3.70	1.15	1.15	1.20
21 x 21	16	11	2.25	1.10	1.10	1.15
21 x 21	18	6	1.60	1.10	1.10	1.10
21 x 21	20	3	1.20	1.05	1.05	1.10
24 x 24	16	17	3.50	1.15	1.15	1.20
24 x 24	18	12	2.35	1.10	1.10	1.15
24 x 24	20	7	1.65	1.10	1.10	1.15
24 x 24	22	4	1.33	1.05	1.05	1.10

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • SQUARE NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033	400 .058	500 .090	600 .130	700 .177	800 .231	900 .293
6 x 6  .25 SQ. FT.	RETURN FACTORS —SP=1.1 TP NC + 1	CFM NC	75 —	100 10	125 17	150 22	175 26	200 31	225 35
	4A	CFM/SIDE THROW, FT.	19 4-5-8	25 4-6-10	31 6-8-10	37 6-8-11	44 8-9-12	50 8-9-12	56 9-10-13
	3A	CFM/SIDE THROW, FT.	19 28 4-5-8 5-8-11	25 38 4-6-10 6-9-12	31 47 6-8-10 8-10-14	37 56 6-8-11 8-11-15	44 66 8-9-12 9-12-16	50 75 8-9-12 9-12-17	56 85 9-10-13 10-13-18
	2S  2G	CFM/SIDE THROW, FT.	37 8-9-12	50 9-10-14	62 10-11-16	75 11-12-17	88 12-13-18	100 12-13-19	113 12-14-20
1S	CFM/SIDE THROW, FT.	75 9-11-15	100 10-12-17	125 11-14-19	150 12-15-22	175 13-16-22	200 14-17-24	225 15-18-25	
9 x 9  .56 SQ. FT.	RETURN FACTORS —SP=1.2 TP NC + 2	CFM NC	170 —	225 14	280 20	340 26	395 31	450 35	505 38
	4A	CFM/SIDE THROW, FT.	42 6-8-12	56 7-10-14	70 10-11-15	84 10-12-16	98 11-12-17	112 11-14-19	126 12-15-20
	3A	CFM/SIDE THROW, FT.	42 63 6-8-12 9-11-14	56 85 7-10-14 10-12-17	70 106 10-11-15 11-13-19	84 127 10-12-16 12-14-20	98 148 11-12-17 13-15-21	112 169 11-14-19 13-16-22	126 190 12-15-20 14-18-24
	2S  2G	CFM/SIDE THROW, FT.	84 9-10-15	112 11-13-18	141 12-15-20	169 13-16-22	197 14-17-23	225 15-18-25	253 16-19-28
1S	CFM/SIDE THROW, FT.	169 12-15-20	225 14-17-23	282 16-19-26	338 17-22-29	394 18-22-31	450 19-24-33	507 22-25-35	
12 x 12  1.0 SQ. FT.	RETURN FACTORS —SP=1.3 TP NC + 4	CFM NC	300 10	400 17	500 23	600 28	700 33	800 36	900 39
	4A	CFM/SIDE THROW, FT.	75 8-13-15	100 11-14-18	125 13-15-21	150 14-17-22	175 14-18-24	200 15-20-25	225 17-21-27
	3A	CFM/SIDE THROW, FT.	75 112 8-13-15 11-14-19	100 150 11-14-18 12-15-21	125 187 13-15-21 14-17-24	150 225 14-17-22 15-19-26	175 262 14-18-24 16-20-27	200 300 15-20-25 17-21-30	225 338 17-21-27 19-22-31
	2S  2G	CFM/SIDE THROW, FT.	150 12-15-20	200 15-17-25	250 17-19-27	300 18-20-29	350 19-21-31	400 20-25-34	450 21-25-36
1S	CFM/SIDE THROW, FT.	300 16-20-28	400 18-22-32	500 21-25-37	600 22-26-39	700 23-28-41	800 25-29-41	900 28-33-47	
15 x 15  1.56 SQ. FT.	RETURN FACTORS —SP=1.8 TP NC + 4	CFM NC	465 10	625 19	780 25	935 30	1090 33	1250 39	1400 41
	4A	CFM/SIDE THROW, FT.	117 13-16-21	156 14-18-24	195 16-19-27	234 18-21-29	273 19-22-30	312 20-24-33	350 21-26-35
	3A	CFM/SIDE THROW, FT.	117 175 13-16-21 14-17-23	156 234 14-18-24 17-19-29	195 292 16-19-27 19-22-31	234 351 18-21-29 21-23-34	273 409 19-22-30 22-25-36	312 468 19-24-35 22-29-39	350 527 21-26-35 25-29-42
	2S  2G	CFM/SIDE THROW, FT.	234 16-20-27	312 19-22-31	390 21-25-36	468 22-27-40	546 24-29-42	625 27-31-45	700 27-35-47
1S	CFM/SIDE THROW, FT.	467 21-25-36	625 23-29-42	780 26-32-47	935 29-36-51	1090 30-39-55	1250 32-42-57	1400 36-44-61	
18 x 18  2.25 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 6	CFM NC	675 12	900 21	1125 27	1350 31	1575 36	1800 39	2025 42
	4A	CFM/SIDE THROW, FT.	168 15-19-25	225 17-20-29	281 19-24-32	337 20-25-36	394 22-27-37	450 24-29-41	506 25-31-43
	3A	CFM/SIDE THROW, FT.	168 253 15-19-25 17-22-29	225 338 17-20-29 20-25-33	281 422 19-24-32 23-27-38	337 506 20-25-36 25-32-42	394 590 22-27-37 26-32-45	450 675 24-29-41 27-35-48	506 760 25-31-43 32-36-51
	2S  2G	CFM/SIDE THROW, FT.	337 19-23-32	450 22-26-38	562 24-30-43	675 26-31-46	787 30-34-49	900 30-35-53	1012 32-39-55
1S	CFM/SIDE THROW, FT.	675 25-33-45	900 30-36-51	1125 34-42-58	1350 36-45-61	1575 39-48-66	1800 43-52-70	2025 46-55-75	

For performance notes, see page D37.

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • SQUARE NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033	400 .058	500 .090	600 .130	700 .177	800 .231	900 .293
21 x 21  3.06 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 8	CFM NC	915 14	1225 22	1530 28	1835 32	2140 37	2450 40	2750 43
	4A	CFM/SIDE THROW, FT.	230 18-21-30	306 19-25-34	382 21-28-39	460 23-30-41	535 25-32-44	612 26-34-46	688 28-39-51
	3A	CFM/SIDE THROW, FT.	230 345 15-19-26 20-25-34	306 460 17-22-29 23-28-39	382 573 19-25-34 26-31-45	460 688 20-26-36 28-34-50	535 802 22-28-39 29-36-53	612 918 23-29-40 34-39-56	688 1030 25-34-45 34-43-59
	2S  2G	CFM/SIDE THROW, FT.	458 22-27-39	612 25-31-45	765 28-35-50	917 31-39-55	1070 32-42-59	1225 35-45-62	1375 39-48-66
	1S	CFM/SIDE THROW, FT.	917 29-37-51	1225 34-43-59	1530 39-50-67	1835 43-53-71	2140 46-56-77	2450 50-60-82	2750 53-64-88
24 x 24  4.0 SQ. FT.	RETURN FACTORS —SP=2.7 TP NC + 8	CFM NC	1200 15	1600 23	2000 29	2400 33	2800 37	3200 41	3600 44
	4A	CFM/SIDE THROW, FT.	300 20-24-33	400 24-27-40	500 27-31-44	600 29-33-47	700 31-35-51	800 33-40-55	900 35-40-58
	3A	CFM/SIDE THROW, FT.	300 450 20-24-33 23-28-39	400 600 24-27-40 26-31-46	500 750 27-31-44 29-36-52	600 900 29-33-47 31-38-56	700 1050 31-33-51 36-41-59	800 1200 33-40-55 36-43-64	900 1350 35-40-58 39-47-67
	2S  2G	CFM/SIDE THROW, FT.	600 25-33-45	800 30-36-51	1000 34-42-58	1200 36-45-61	1400 39-48-66	1600 43-52-70	1800 46-55-75
	1S	CFM/SIDE THROW, FT.	1200 35-40-59	1600 38-48-67	2000 45-54-77	2400 48-58-82	2800 51-62-90	3200 54-67-93	3600 59-70-101
30 x 30  6.25 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	1875 16	2500 24	3125 30	3750 35	4375 39	5000 42	5625 46
	4A	CFM/SIDE THROW, FT.	469 25-31-42	625 29-36-48	782 34-40-55	937 36-44-61	1093 38-46-65	1250 40-50-69	1406 46-52-73
	3A	CFM/SIDE THROW, FT.	469 703 25-31-42 28-34-49	625 938 29-36-48 32-39-57	782 1172 34-40-55 35-44-64	937 1405 36-44-61 39-49-69	1093 1640 38-46-65 41-49-74	1250 1875 40-50-69 44-57-78	1406 2110 46-52-73 49-60-83
	2S  2G	CFM/SIDE THROW, FT.	937 32-40-55	1250 37-47-63	1562 42-53-72	1875 47-57-77	2187 50-60-83	2500 53-65-88	2812 57-68-95
	1S	CFM/SIDE THROW, FT.	1875 42-53-72	2500 49-60-83	3125 56-69-93	3750 60-72-102	4375 63-77-109	5000 69-83-116	5625 72-88-123
36 x 36  9.0 SQ. FT.	RETURN FACTORS —SP=3.6 TP NC + 9	CFM NC	2700 18	3600 25	4500 31	5400 36	6300 40	7200 44	8100 48
	4A	CFM/SIDE THROW, FT.	675 30-37-51	900 34-41-57	1125 39-46-67	1350 41-51-74	1575 44-53-78	1800 51-57-83	2025 51-64-87
	3A	CFM/SIDE THROW, FT.	675 1010 30-37-51 34-44-60	900 1350 34-41-57 40-48-68	1125 1687 39-46-67 46-56-78	1350 2025 41-51-74 48-60-82	1575 2362 44-53-78 52-64-88	1800 2700 51-57-83 58-70-94	2025 3038 51-64-87 62-74-100
	2S  2G	CFM/SIDE THROW, FT.	1350 40-45-67	1800 43-54-76	2250 50-61-86	2700 54-65-92	3150 58-70-101	3600 61-76-104	4050 67-79-113
	1S	CFM/SIDE THROW, FT.	2700 49-61-85	3600 59-70-99	4500 66-80-114	5400 72-85-122	6300 76-91-131	7200 82-97-142	8100 87-106-150

For performance notes, see page D37.

D

CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODELS 6500 AND 6200 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VELOCITY TP	300 .033		400 .058		500 .090		600 .130		700 .177		800 .231		900 .293	
			CFM NC	1800 18	2400 25	3000 31	3600 36	4200 40	4800 43	5400 46						
36 x 24 6.0 SQ. FT.	RETURN FACTORS —SP=3.3 TP NC + 8	CFM NC	1800 18	2400 25	3000 31	3600 36	4200 40	4800 43	5400 46							
	4B  4C	CFM/SIDE THROW, FT.	600 300 29-37-51 19-22-31	800 400 34-41-58 22-25-37	1000 500 39-48-66 25-29-41	1200 600 41-51-70 27-31-44	1400 700 44-54-75 29-32-48	1600 800 49-59-80 31-37-51	1800 900 53-63-85 32-37-54							
	4E	CFM/SIDE THROW, FT.	450 450 25-31-42 24-31-42	600 600 29-37-51 29-37-51	750 750 32-41-58 32-41-58	900 900 35-44-61 35-44-61	1050 1050 37-48-66 37-48-66	1200 1200 41-51-71 41-51-71	1350 1350 42-54-75 42-54-75							
	3A1	CFM/SIDE THROW, FT.	750 300 31-37-54 19-22-31	1000 400 37-42-61 22-25-37	1250 500 41-49-70 25-29-41	1500 600 44-54-75 27-31-44	1750 700 48-58-80 29-32-48	2000 800 51-61-85 31-37-51	2250 900 54-65-90 32-37-54							
	3A2	CFM/SIDE THROW, FT.	676 562 27-32-48 24-29-41	900 750 34-37-54 27-32-48	1125 937 34-42-61 31-37-54	1350 1125 37-48-66 32-39-58	1575 1312 39-51-71 35-42-61	1800 1500 42-54-75 37-44-66	2025 1687 48-58-80 41-49-70							
	2A	CFM/SIDE THROW, FT.	900 32-41-56	1200 37-48-65	1500 42-54-73	1800 48-58-78	2100 51-61-85	2400 54-66-90	2700 58-70-97							
	2B	CFM/SIDE THROW, FT.	900 32-41-56	1200 37-48-65	1500 42-54-73	1800 48-58-78	2100 51-61-85	2400 54-66-90	2700 58-70-97							
	2C  2D	CFM/SIDE THROW, FT.	1200 600 37-42-63 25-31-42	1600 800 41-51-71 29-37-51	2000 1000 48-58-82 32-41-58	2400 1200 51-61-87 35-44-61	2800 1400 54-66-95 37-48-66	3200 1600 58-71-99 41-51-71	3600 1800 63-75-107 42-54-75							
	2E	CFM/SIDE THROW, FT.	1200 600 37-42-63 25-31-42	1600 800 41-51-71 29-37-51	2000 1000 48-58-82 32-41-58	2400 1200 51-61-87 35-44-61	2800 1400 54-66-95 37-48-66	3200 1600 58-71-99 41-51-71	3600 1800 63-75-107 42-54-75							
	1A	CFM/SIDE THROW, FT.	1800 41-51-70	2400 48-58-80	3000 54-66-90	3600 58-70-99	4200 61-75-105	4800 66-80-114	5400 70-85-122							
	1B	CFM/SIDE THROW, FT.	1800 41-51-70	2400 48-58-80	3000 54-66-90	3600 58-70-99	4200 61-75-105	4800 66-80-114	5400 70-85-122							
	36 x 30 7.5 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	2250 19	3000 26	3750 32	4500 37	5250 41	6000 44	6750 47						
4B  4C		CFM/SIDE THROW, FT.	657 468 29-37-51 20-25-34	875 625 34-41-58 24-29-39	1093 782 39-48-66 27-32-44	1313 937 41-51-70 29-37-49	1532 1093 44-54-75 31-37-53	1750 1250 49-59-80 32-41-56	1969 1406 53-63-85 37-42-59							
3A1		CFM/SIDE THROW, FT.	890 468 32-41-56 20-25-34	1187 625 37-48-65 24-29-39	1484 782 42-54-73 27-32-44	1781 937 48-58-78 29-37-49	2078 1093 51-61-85 31-37-53	2375 1250 54-66-90 32-41-56	2672 1406 58-70-97 37-42-59							
3A2		CFM/SIDE THROW, FT.	787 675 31-37-54 22-27-37	1050 900 37-42-61 25-31-42	1312 1125 41-49-70 29-34-49	1575 1350 44-54-75 31-37-54	1837 1575 48-58-80 32-39-58	2100 1800 51-61-85 37-42-61	2362 2025 54-65-90 37-48-65							
2A		CFM/SIDE THROW, FT.	1125 34-42-59	1500 39-49-68	1875 44-56-76	2250 49-59-83	2625 53-65-88	3000 56-68-97	3375 59-73-102							
2B		CFM/SIDE THROW, FT.	1125 34-42-59	1500 39-49-68	1875 44-56-76	2250 49-59-83	2625 53-65-88	3000 56-68-97	3375 59-73-102							
2C  2D		CFM/SIDE THROW, FT.	1312 938 37-42-63 29-37-51	1750 1250 41-51-71 34-41-58	2188 1562 48-58-82 39-48-66	2625 1875 51-61-87 41-51-70	3063 2187 54-66-95 44-54-75	3500 2500 58-71-99 49-59-80	3938 2812 63-75-107 53-63-85							
2E		CFM/SIDE THROW, FT.	1312 938 37-42-63 29-37-51	1750 1250 41-51-71 34-41-58	2188 1562 48-58-82 39-48-66	2625 1875 51-61-87 41-51-70	3063 2187 54-66-95 44-54-75	3500 2500 58-71-99 49-59-80	3938 2812 63-75-107 53-63-85							
1A		CFM/SIDE THROW, FT.	2250 48-60-82	3000 56-68-94	3750 64-78-106	4500 68-82-116	5250 72-88-124	6000 78-94-134	6750 82-100-144							
1B		CFM/SIDE THROW, FT.	2250 48-60-82	3000 56-68-94	3750 64-78-106	4500 68-82-116	5250 72-88-124	6000 78-94-134	6750 82-100-144							

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

**CFM** - cubic feet per minute  
**TP** - total pressure - inches w.g.  
**T** - throw in feet  
**NC** - Noise Criteria (values) based on 10 dB room absorption, re  $10^{-12}$  watts.  
**Neck Velocity** – feet per minute

#### Performance Notes:

1. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 25%.
2. Sound levels in performance tables are for steel construction – **Model 6500**. Apply the following corrections for aluminum construction – **Model 6200**.  
 TP = Listed value x 1.25.  
 NC = Listed value + 4.
3. Performance data as tabulated is for supply air conditions. Correction factors for return air application - see next page.
4. Correction factors for adjustable models - see next page.
5. Correction factors for round inlets - see next page.
6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

## PERFORMANCE DATA CORRECTIONS:

### MODELS 6500 AND 6200

#### CORRECTION FACTORS FOR RETURN INLET

If the unit is used as a return inlet, the performance data is obtained by applying the return corrections, as follows:

- Add the NC correction at the left side of the table to the NC value listed in the performance table.
- Multiply the listed SP factor at the left side of the table by the total pressure (TP) listed at the top of the table.

#### CORRECTION FACTORS FOR MODELS 6550 AND 6250 (ADJUSTABLE PATTERN CONTROLLERS) – TABLE 2

Refer to the performance data for the **Models 6500 and 6200**. Apply the corrections from Table 2 to the data for square, 4-way core styles, as follows:

- NC = listed + correction
- Total Pressure = listed x factor
- Horizontal Throw = listed
- Vertical Throw = listed x factor

Apply the throw factor to the 50 fpm terminal velocity throw only.

#### Example:

18" x 18", **Model 6500**, 1350 cfm, 20°F temperature difference heating, vertical projection, (Page D23).

- NC = 31 + 6 = 37
- TP = .13 x 2.1 = .273
- Throw = 36 x .9 = 32.4 feet @ 50 fpm terminal velocity.

#### CORRECTION FACTORS WITH SQUARE TO ROUND INLET ADAPTOR – TABLE 3

- Add the NC correction factor from Table 3 and the NC value listed in the performance tables.
- Multiply the correction factor from Table 3 by the listed total pressure in the performance tables.
- Multiply the correction factor from Table 3 by the listed throws in the performance tables.

#### Example:

12" x 12" unit with 10" round adaptor handling 500 cfm supply air. (Page D23).

- NC = 23 + 7 = 30
- Total Pressure = .09 x 1.65 = 0.149
- Throw = 21 x 1.15 = 24.15 feet @ 50 fpm terminal velocity.

#### Example:

12" x 12" unit handling 600 cfm of return air. (Page D23).

- Return NC = 28 + 4 = 32.
- Return negative SP = 1.3 x (-.13) = -.169.

**TABLE 2 Correction Factors 6550/6250 Adjustable**

NECK SIZE	NC (add)		TOTAL PRESSURE (multiply)		VERTICAL THROW (multiply)			
	H	V	H	V	COOLING, ΔT		HEATING, ΔT	
					20°F	0°F	20°F	40°F
6 x 6	2	6	1.2	1.5	1.3	1.1	0.8	0.6
9 x 9	2	6	1.4	2.1	1.5	1.2	0.9	0.6
12 x 12	2	6	1.4	2.1	1.6	1.3	1.0	0.6
15 x 15	2	6	1.4	2.1	1.7	1.3	1.0	0.6
18 x 18	2	6	1.4	2.1	1.7	1.3	0.9	0.6
21 x 21	2	6	1.4	2.1	1.7	1.3	0.8	0.5
24 x 24	2	6	1.6	2.2	1.5	1.1	0.7	0.3

**TABLE 3 Correction Factors for SR Adaptors**

SQUARE INLET	ROUND INLET	NC (add)	TP (multiply)	THROW (multiply)		
				150	100	50
6 x 6	5	7	1.65	1.10	1.10	1.15
9 x 9	6	17	3.50	1.15	1.15	1.20
9 x 9	8	4	1.40	1.10	1.10	1.10
12 x 12	8	17	3.50	1.15	1.15	1.20
12 x 12	10	7	1.65	1.10	1.10	1.15
15 x 15	10	17	3.50	1.15	1.15	1.20
15 x 15	12	9	1.90	1.10	1.10	1.15
15 x 15	14	3	1.25	1.05	1.05	1.10
18 x 18	12	17	3.50	1.15	1.15	1.20
18 x 18	14	10	2.00	1.10	1.10	1.15
18 x 18	16	5	1.45	1.10	1.10	1.10
21 x 21	14	17	3.70	1.15	1.15	1.20
21 x 21	16	11	2.25	1.10	1.10	1.15
21 x 21	18	6	1.60	1.10	1.10	1.10
21 x 21	20	3	1.20	1.05	1.05	1.10
24 x 24	16	17	3.50	1.15	1.15	1.20
24 x 24	18	12	2.35	1.10	1.10	1.15
24 x 24	20	7	1.65	1.10	1.10	1.15
24 x 24	22	4	1.33	1.05	1.05	1.10

D  
CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODEL 6400IV • RECTANGULAR NECK

#### Core Style 4B • 4-way blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.01	.016	.022	.031
	Total Pressure	.003	.012	.026	.046	.072	.103	.140
9 x 6	Airflow, CFM	38	75	113	150	188	225	263
	Throw, Side A	2-2-3 (13)	2-3-5 (25)	3-4-7 (38)	4-5-10 (50)	5-6-12 (63)	5-7-14 (75)	6-9-16 (88)
	Throw, Side B	1-2-2 (6)	2-2-4 (12)	2-3-5 (18)	3-4-7 (25)	3-5-8 (31)	4-8-10 (37)	4-6-11 (43)
	Noise Criteria	—	—	—	11	22	26	29
12 x 6	Airflow, CFM	50	100	150	200	250	300	350
	Throw, Side A	2-3-4 (19)	2-4-7 (37)	4-5-10 (56)	5-7-12 (75)	6-8-15 (94)	7-10-18 (113)	8-11-21 (131)
	Throw, Side B	1-2-2 (6)	2-2-4 (13)	2-3-5 (18)	3-4-7 (25)	3-5-8 (31)	4-5-10 (37)	4-6-11 (44)
	Noise Criteria	—	—	—	12	19	25	30
12 x 9	Airflow, CFM	75	150	225	300	375	450	525
	Throw, Side A	2-3-4 (24)	3-4-7 (47)	4-6-11 (70)	5-7-14 (94)	6-9-17 (117)	7-11-20 (141)	8-12-23 (164)
	Throw, Side B	2-2-3 (14)	2-3-5 (28)	3-4-7 (42)	4-5-9 (56)	4-6-11 (70)	5-7-13 (84)	6-8-15 (98)
	Noise Criteria	—	—	—	13	20	27	32
15 x 9	Airflow, CFM	94	188	281	375	469	563	656
	Throw, Side A	2-3-4 (33)	3-4-8 (65)	4-6-11 (98)	6-8-15 (131)	7-10-18 (165)	8-11-20 (198)	9-13-25 (230)
	Throw, Side B	2-2-3 (14)	2-3-5 (28)	3-4-7 (48)	4-5-9 (56)	4-6-11 (70)	5-7-13 (84)	6-8-15 (98)
	Noise Criteria	—	—	—	14	21	28	32
18 x 9	Airflow, CFM	113	225	338	450	563	675	788
	Throw, Side A	2-3-5 (42)	3-5-8 (85)	5-7-12 (126)	6-8-16 (169)	7-10-19 (211)	8-12-23 (254)	10-14-27 (296)
	Throw, Side B	2-2-3 (14)	2-3-5 (28)	3-4-7 (42)	4-5-9 (56)	4-6-11 (70)	5-7-13 (84)	6-8-15 (98)
	Noise Criteria	—	—	—	15	22	29	33
21 x 9	Airflow, CFM	131	263	394	525	656	788	919
	Throw, Side A	2-3-4 (51)	4-5-9 (103)	5-7-13 (154)	6-9-17 (206)	8-11-21 (258)	9-13-25 (309)	10-15-29 (360)
	Throw, Side B	2-2-3 (14)	2-3-5 (28)	3-4-7 (42)	4-5-9 (56)	4-6-11 (70)	5-7-13 (84)	6-8-15 (98)
	Noise Criteria	—	—	—	16	23	30	34
15 x 12	Airflow, CFM	125	250	375	500	625	750	875
	Throw, Side A	2-3-5 (38)	4-5-9 (75)	5-7-12 (112)	6-9-16 (150)	7-11-20 (187)	9-12-24 (225)	10-14-28 (262)
	Throw, Side B	2-2-4 (25)	3-4-7 (50)	4-5-10 (75)	5-7-13 (100)	6-8-16 (125)	7-10-19 (150)	8-11-22 (175)
	Noise Criteria	—	—	—	15	22	29	34
18 x 12	Airflow, CFM	5-29-0	10-26-0	3-25-1	8-22-1	1-19-2	6-18-2	11-15-2
	Throw, Side A	2-3-5 (50)	4-5-9 (100)	5-7-13 (150)	6-9-17 (200)	8-11-21 (250)	9-13-25 (300)	10-15-28 (351)
	Throw, Side B	2-2-4 (25)	3-4-7 (50)	3-5-10 (74)	5-7-13 (99)	6-8-16 (124)	7-10-19 (149)	8-11-22 (173)
	Noise Criteria	—	—	—	16	23	30	35
21 x 12	Airflow, CFM	175	350	525	700	875	1050	1225
	Throw, Side A	2-3-5 (53)	4-5-9 (125)	5-7-13 (187)	7-9-18 (250)	8-11-22 (312)	9-13-26 (375)	11-15-30 (437)
	Throw, Side B	2-2-4 (35)	3-4-7 (50)	4-5-10 (75)	5-7-13 (100)	6-8-16 (125)	7-10-19 (150)	8-11-22 (175)
	Noise Criteria	—	16	—	16	23	31	36
24 x 12	Airflow, CFM	200	400	600	800	1000	1200	1400
	Throw, Side A	3-3-6 (75)	4-6-10 (150)	6-8-15 (225)	7-10-19 (300)	9-12-24 (375)	10-15-28 (450)	12-17-33 (525)
	Throw, Side B	2-2-4 (25)	3-4-7 (50)	4-5-10 (75)	5-7-13 (100)	6-8-16 (125)	7-10-19 (150)	8-11-22 (175)
	Noise Criteria	—	17	—	17	24	31	36
18 x 15	Airflow, CFM	186	375	563	750	938	1125	1313
	Throw, Side A	2-3-5 (54)	4-5-9 (110)	5-7-12 (164)	6-9-16 (219)	7-10-19 (273)	9-12-24 (328)	10-14-28 (383)
	Throw, Side B	2-3-5 (39)	3-5-8 (78)	5-6-12 (117)	6-8-15 (156)	7-11-20 (195)	8-12-22 (234)	9-14-26 (273)
	Noise Criteria	—	16	—	17	24	31	37
21 x 18	Airflow, CFM	263	525	785	1050	1310	1575	1840
	Throw, Side A	3-3-6 (76)	4-6-10 (200)	6-8-15 (225)	7-10-19 (300)	9-12-24 (375)	10-15-28 (450)	12-17-33 (526)
	Throw, Side B	3-3-6 (56)	4-6-10 (112)	6-8-15 (169)	7-10-19 (225)	9-12-24 (280)	10-15-28 (337)	12-17-33 (394)
	Noise Criteria	—	18	13	19	26	33	38
24 x 18	Airflow, CFM	300	600	900	1200	1500	1800	2100
	Throw, Side A	3-4-6 (94)	4-6-11 (187)	6-9-16 (281)	8-11-21 (375)	9-14-26 (469)	11-16-32 (563)	13-19-37 (656)
	Throw, Side B	3-3-6 (56)	4-6-10 (112)	6-8-15 (169)	7-10-19 (225)	9-10-24 (280)	10-15-28 (337)	12-17-33 (394)
	Noise Criteria	—	—	14	20	27	34	39

For performance notes, see page D79.

## PERFORMANCE DATA:

### MODEL 6400IV • RECTANGULAR NECK

#### Core Style 3B • 3-way blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.012	.026	.046	.072	.103	.140
12 x 6	Airflow, CFM	50	100	150	200	250	300	350
	Throw, Side A	2-2-4 (25)	3-4-7 (50)	4-5-10 (75)	5-7-13 (100)	6-8-16 (125)	7-10-19 (150)	8-12-22 (175)
	Throw, Side B	2-2-3 (13)	2-3-5 (25)	3-4-7 (38)	4-5-10 (50)	5-6-12 (63)	5-7-14 (75)	6-8-15 (88)
	Noise Criteria	—	—	—	12	19	27	30
18 x 9	Airflow, CFM	113	225	338	450	563	675	788
	Throw, Side A	3-3-6 (57)	3-6-10 (113)	6-8-15 (169)	7-10-19 (225)	9-12-24 (282)	10-15-28 (338)	12-17-33 (394)
	Throw, Side B	2-3-4 (28)	3-4-7 (56)	4-6-11 (84)	5-7-14 (113)	6-9-17 (141)	7-11-20 (169)	8-12-23 (199)
	Noise Criteria	—	—	—	15	22	29	23
24 x 12	Airflow, CFM	200	400	600	800	1000	1200	1400
	Throw, Side A	3-4-6 (100)	4-6-11 (200)	6-9-17 (300)	8-11-22 (400)	10-14-27 (500)	11-17-32 (600)	13-19-37 (700)
	Throw, Side B	2-3-5 (50)	4-5-9 (100)	5-7-13 (150)	6-9-16 (200)	7-11-20 (250)	9-13-24 (300)	10-14-28 (350)
	Noise Criteria	—	—	—	17	24	31	36

#### Core Style 3A2 • 3-way blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.012	.026	.046	.072	.103	.140
9 x 6	Airflow, CFM	38	75	113	150	188	225	263
	Throw, Side A	2-2-3 (15)	2-3-5 (28)	3-4-7 (42)	4-5-10 (56)	5-6-12 (70)	5-7-14 (84)	6-9-16 (98)
	Throw, Side B	2-2-3 (12)	2-3-5 (23)	3-4-7 (35)	4-5-9 (47)	4-6-11 (58)	5-7-13 (70)	6-8-15 (82)
	Noise Criteria	—	—	—	11	22	26	29
12 x 9	Airflow, CFM	75	150	225	300	375	450	525
	Throw, Side A	2-3-4 (25)	3-4-6 (50)	4-5-10 (75)	5-7-13 (100)	6-9-16 (125)	7-10-19 (150)	8-12-23 (175)
	Throw, Side B	2-2-4 (25)	3-4-7 (50)	4-6-10 (75)	5-7-13 (100)	6-8-16 (125)	7-10-20 (150)	8-11-22 (175)
	Noise Criteria	—	—	—	13	20	27	32
15 x 9	Airflow, CFM	94	188	281	375	469	563	656
	Throw, Side A	2-3-5 (39)	3-5-8 (78)	5-6-12 (117)	6-8-15 (156)	7-10-19 (196)	8-12-22 (235)	9-14-26 (274)
	Throw, Side B	2-3-4 (27)	3-4-7 (55)	4-6-11 (82)	5-7-14 (109)	6-9-17 (137)	7-11-20 (164)	8-12-23 (191)
	Noise Criteria	—	—	—	14	21	28	32
15 x 12	Airflow, CFM	125	250	375	500	625	750	875
	Throw, Side A	2-3-5 (39)	3-5-8 (78)	5-6-12 (117)	6-8-15 (156)	7-10-19 (195)	8-12-23 (234)	9-14-26 (273)
	Throw, Side B	2-3-5 (43)	3-5-8 (86)	5-6-12 (129)	6-8-15 (172)	7-10-19 (215)	8-12-23 (258)	9-14-26 (301)
	Noise Criteria	—	—	—	15	22	29	34
18 x 15	Airflow, CFM	188	375	563	750	938	1125	1313
	Throw, Side A	3-3-6 (56)	4-6-10 (113)	6-8-15 (168)	7-10-19 (225)	9-12-24 (281)	10-15-28 (338)	12-17-33 (394)
	Throw, Side B	4-4-7 (66)	5-7-12 (131)	7-9-17 (197)	8-11-21 (262)	10-13-26 (328)	11-16-30 (394)	13-18-35 (459)
	Noise Criteria	—	—	—	17	24	31	37

#### Performance Notes:

1. All pressures are in inches w.g..  
 2. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 25%.

3. Tests conducted on diffuser only without damper using ideal straight rigid inlet condition. Other inlet conditions may affect performance. Correction factors for addition of a neck mounted opposed blade damper (fully open):  
 Total Pressure: Multiply catalog value by x 1.20.  
 Noise Criteria: Add + 4 to catalog value.

4. Correction factor for round inlets, see next page.  
 5. Noise Criteria (NC) values are based upon 10dB room absorption, re 10<sup>-12</sup> watts. Dash (—) in space indicates an Noise Criteria of less than 10.  
 6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

## PERFORMANCE DATA:

### MODEL 6400IV • RECTANGULAR NECK

#### Core Style 3E • 3-way blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.012	.026	.046	.072	.103	.140
15 x 6	Airflow, CFM	63	125	188	250	313	375	438
	Throw, Side A	2-3-5 (38)	4-5-9 (75)	5-7-12 (113)	6-9-16 (150)	7-11-20 (188)	9-12-24 (225)	10-14-28 (263)
	Throw, Side B	2-2-3 (13)	2-3-5 (25)	3-4-7 (38)	4-5-10 (50)	5-6-12 (63)	5-7-14 (75)	6-9-16 (88)
	Noise Criteria	—	—	—	12	19	26	31
21 x 9	Airflow, CFM	131	263	394	525	656	788	919
	Throw, Side A	2-3-5 (75)	4-5-9 (150)	5-7-13 (225)	6-9-17 (300)	8-11-21 (375)	9-13-25 (450)	10-15-29 (525)
	Throw, Side B	2-3-4 (28)	3-4-7 (56)	4-6-11 (84)	5-7-14 (113)	6-9-17 (141)	7-11-20 (169)	8-12-23 (197)
	Noise Criteria	—	—	—	16	23	30	34
24 x 9	Airflow, CFM	150	300	450	600	750	900	1050
	Throw, Side A	2-3-5 (94)	4-5-10 (188)	5-8-14 (281)	7-10-19 (375)	8-12-23 (469)	10-14-28 (563)	11-17-32 (656)
	Throw, Side B	2-3-4 (28)	3-4-7 (56)	4-6-11 (84)	5-7-14 (113)	6-9-17 (141)	7-11-20 (169)	8-12-23 (197)
	Noise Criteria	—	—	—	17	24	31	36

#### Core Style 3A1 • 3-way blow pattern



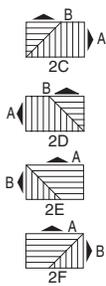
Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.012	.026	.046	.072	.103	.140
9 x 6	Airflow, CFM	38	75	113	150	188	225	263
	Throw, Side A	2-2-3 (16)	3-3-6 (31)	3-5-8 (47)	4-6-10 (62)	5-7-13 (78)	6-8-15 (93)	7-9-18 (109)
	Throw, Side B	1-2-2 (6)	2-2-4 (12)	2-3-5 (19)	3-4-7 (25)	3-5-8 (31)	4-5-10 (37)	4-6-11 (44)
	Noise Criteria	—	—	—	11	22	26	29
12 x 6	Airflow, CFM	50	100	150	200	250	300	350
	Throw, Side A	2-2-4 (22)	3-4-6 (44)	4-5-9 (66)	5-6-12 (88)	6-8-15 (109)	6-9-17 (131)	7-11-20 (153)
	Throw, Side B	1-2-2 (6)	2-2-4 (13)	2-3-5 (19)	3-4-7 (25)	3-5-8 (32)	4-5-10 (38)	4-6-11 (44)
	Noise Criteria	—	—	—	12	19	26	30
12 x 9	Airflow, CFM	75	150	225	300	375	450	525
	Throw, Side A	2-3-4 (30)	3-4-7 (61)	4-6-11 (91)	5-7-14 (122)	6-9-17 (152)	7-11-20 (183)	8-12-23 (213)
	Throw, Side B	2-2-3 (14)	2-3-5 (28)	3-4-7 (42)	4-5-9 (56)	4-6-11 (70)	5-7-13 (84)	6-8-15 (98)
	Noise Criteria	—	—	—	13	20	27	32
15 x 9	Airflow, CFM	94	188	281	375	469	563	656
	Throw, Side A	2-3-5 (40)	3-5-8 (80)	5-7-12 (119)	6-8-16 (159)	7-10-19 (199)	8-12-23 (239)	10-14-27 (279)
	Throw, Side B	2-2-3 (14)	2-3-5 (28)	3-4-7 (42)	4-5-9 (56)	4-6-11 (70)	5-7-13 (84)	6-8-15 (98)
	Noise Criteria	—	—	—	14	21	28	32
15 x 12	Airflow, CFM	125	250	375	500	625	750	875
	Throw, Side A	2-3-5 (50)	4-5-9 (100)	5-7-13 (150)	6-9-17 (200)	8-11-21 (250)	9-13-25 (300)	10-15-29 (350)
	Throw, Side B	2-2-4 (25)	3-4-7 (50)	4-5-10 (75)	5-7-12 (100)	6-8-15 (125)	7-10-18 (150)	8-11-21 (175)
	Noise Criteria	—	—	—	15	22	29	34
18 x 12	Airflow, CFM	150	300	450	600	750	900	1050
	Throw, Side A	2-3-5 (63)	4-5-9 (125)	5-7-13 (188)	7-9-18 (250)	8-11-22 (313)	9-13-26 (375)	11-15-30 (437)
	Throw, Side B	2-2-4 (25)	3-4-7 (50)	4-5-10 (75)	5-7-12 (100)	6-8-15 (125)	7-10-18 (150)	8-11-21 (175)
	Noise Criteria	—	—	—	16	23	30	35
18 x 15	Airflow, CFM	186	375	563	750	938	1125	1313
	Throw, Side A	3-3-6 (74)	4-6-10 (149)	6-8-15 (223)	8-12-24 (297)	9-12-24 (371)	10-15-28 (445)	12-17-33 (520)
	Throw, Side B	2-3-5 (39)	3-5-8 (78)	5-6-12 (117)	6-8-15 (156)	7-10-19 (195)	8-12-22 (234)	9-14-26 (273)
	Noise Criteria	—	—	—	17	24	31	37

For performance notes, see page D79.

## PERFORMANCE DATA:

### MODEL 6400IV • RECTANGULAR NECK

#### Core Styles 2C, 2D, 2E and 2F • 2-way corner blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.014	.031	.056	.087	.126	.171
9 x 6	Airflow, CFM	38	75	113	150	188	225	263
	Throw, Side A	2-3-4 (25)	3-4-7 (50)	4-6-10 (75)	5-7-14 (100)	6-9-17 (125)	7-10-20 (150)	8-12-23 (175)
	Throw, Side B	2-2-3 (13)	2-3-5 (25)	3-4-7 (38)	4-5-10 (50)	5-6-12 (63)	5-7-14 (75)	6-9-16 (88)
	Noise Criteria	—	—	—	11	18	25	29
12 x 6	Airflow, CFM	50	100	150	200	250	300	350
	Throw, Side A	2-3-5 (38)	4-5-9 (75)	5-7-12 (113)	6-9-16 (150)	7-11-20 (188)	9-12-24 (225)	10-14-28 (263)
	Throw, Side B	2-2-3 (13)	2-3-5 (25)	3-4-7 (38)	4-5-10 (50)	5-6-12 (63)	5-7-14 (75)	6-9-16 (88)
	Noise Criteria	—	—	—	12	19	26	30
12 x 9	Airflow, CFM	75	150	225	300	375	450	525
	Throw, Side A	2-3-5 (47)	4-5-9 (94)	5-7-13 (140)	6-9-17 (188)	8-11-21 (234)	9-13-25 (281)	10-15-29 (328)
	Throw, Side B	2-3-4 (28)	3-4-7 (56)	4-6-11 (84)	5-7-14 (112)	6-9-17 (140)	7-11-20 (169)	8-12-23 (197)
	Noise Criteria	—	—	—	13	20	27	32
15 x 9	Airflow, CFM	94	188	281	375	469	563	656
	Throw, Side A	2-3-5 (66)	4-5-9 (132)	5-7-13 (197)	7-9-18 (262)	8-11-22 (328)	9-13-26 (394)	11-15-30 (459)
	Throw, Side B	2-3-4 (28)	3-4-7 (56)	4-6-11 (84)	5-7-14 (113)	6-9-17 (141)	7-11-20 (169)	8-12-23 (197)
	Noise Criteria	—	—	—	14	21	28	32
18 x 9	Airflow, CFM	113	225	338	450	563	675	788
	Throw, Side A	2-3-5 (85)	4-5-10 (169)	5-8-14 (254)	7-10-19 (338)	8-12-23 (421)	10-14-27 (506)	11-16-32 (591)
	Throw, Side B	2-3-4 (28)	3-4-7 (56)	4-6-11 (85)	5-7-14 (113)	6-9-17 (141)	7-11-20 (169)	8-12-23 (197)
	Noise Criteria	—	—	—	15	22	29	33
15 x 12	Airflow, CFM	125	250	375	500	625	750	875
	Throw, Side A	2-3-5 (75)	4-5-9 (150)	5-7-13 (225)	6-9-17 (300)	8-11-21 (375)	9-13-25 (450)	9-15-29 (525)
	Throw, Side B	2-3-5 (50)	4-5-9 (100)	5-7-13 (150)	6-9-17 (200)	8-11-21 (250)	9-13-25 (300)	10-15-29 (350)
	Noise Criteria	—	—	—	15	22	29	34
18 x 12	Airflow, CFM	150	300	450	600	750	900	1050
	Throw, Side A	2-3-5 (100)	4-5-10 (200)	5-8-14 (300)	7-10-19 (400)	8-12-23 (500)	10-14-29 (600)	11-17-32 (700)
	Throw, Side B	2-3-5 (50)	4-5-9 (100)	5-9-13 (150)	6-9-17 (200)	8-11-21 (250)	9-13-25 (300)	10-15-29 (350)
	Noise Criteria	—	—	—	18	25	31	36

#### Core Style 2A • 2-way opposite blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.014	.031	.056	.087	.126	.171
15 x 9	Airflow, CFM	94	188	281	375	469	563	656
	Throw, Side	2-3-5 (47)	3-5-8 (94)	5-6-12 (141)	6-8-15 (188)	7-10-19 (234)	8-12-23 (282)	9-14-26 (328)
	Noise Criteria	—	—	—	14	21	28	32
18 x 9	Airflow, CFM	113	225	338	450	563	675	788
	Throw, Side	2-3-5 (57)	4-5-9 (113)	5-7-12 (169)	6-9-16 (225)	7-11-20 (282)	9-12-24 (338)	10-14-28 (394)
	Noise Criteria	—	—	—	15	22	29	33
21 x 9	Airflow, CFM	131	263	394	525	656	788	919
	Throw, Side	2-3-5 (66)	3-5-9 (132)	5-7-13 (197)	6-9-17 (263)	8-11-21 (328)	9-13-26 (394)	11-15-30 (460)
	Noise Criteria	—	—	—	15	23	30	34
15 x 12	Airflow, CFM	125	250	375	500	625	750	875
	Throw, Side	2-3-5 (63)	4-5-10 (125)	5-7-14 (188)	7-10-18 (250)	8-12-23 (313)	10-14-27 (375)	11-16-31 (438)
	Noise Criteria	—	—	—	15	22	29	34
18 x 12	Airflow, CFM	150	300	450	600	750	900	1050
	Throw, Side	3-3-6 (75)	4-6-10 (150)	6-8-15 (225)	7-10-20 (300)	9-13-24 (375)	10-15-29 (450)	12-17-33 (525)
	Noise Criteria	—	—	—	16	23	30	35
21 x 12	Airflow, CFM	175	350	525	700	875	1050	1225
	Throw, Side	3-3-6 (88)	4-6-11 (175)	6-8-16 (263)	8-11-21 (350)	9-13-25 (438)	11-16-30 (525)	12-18-35 (613)
	Noise Criteria	—	16	—	17	24	31	36
24 x 12	Airflow, CFM	200	400	600	800	1000	1200	1400
	Throw, Side	3-4-6 (100)	4-6-11 (200)	6-9-17 (300)	8-11-22 (400)	10-14-27 (500)	11-17-32 (600)	13-19-37 (700)
	Noise Criteria	—	—	—	18	25	31	36

For performance notes, see page D79.

## PERFORMANCE DATA:

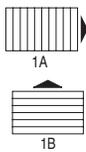
### MODEL 6400IV • RECTANGULAR NECK

#### Core Style 2B • 2-way opposite blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.014	.031	.056	.087	.126	.171
9 x 6	Airflow, CFM	38	75	113	150	188	225	263
	Throw	2-2-4 (19)	3-4-7 (38)	4-5-10 (57)	5-7-12 (75)	6-8-15 (94)	7-10-18 (113)	8-11-21 (132)
	Noise Criteria	—	—	—	11	18	26	29
12 x 6	Airflow, CFM	50	100	150	200	250	300	350
	Throw	2-3-4 (25)	3-4-7 (50)	4-6-11 (75)	5-7-14 (100)	6-9-17 (125)	7-11-20 (150)	8-12-23 (175)
	Noise Criteria	—	—	—	12	19	26	30
12 x 9	Airflow, CFM	75	150	225	300	375	450	525
	Throw	2-3-4 (38)	3-4-8 (75)	4-6-11 (113)	6-8-15 (150)	7-10-18 (188)	8-11-21 (225)	9-13-25 (263)
	Noise Criteria	—	—	—	15	23	30	34

#### Core Styles 1A and 1B • 1-way blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.014	.031	.056	.087	.126	.171
9 x 6	Airflow, CFM	38	75	113	150	188	225	263
	Throw	2-3-4	4-5-9	5-7-12	6-9-16	7-11-20	9-12-24	10-14-28
	Noise Criteria	—	—	—	11	18	26	29
12 x 6	Airflow, CFM	50	100	150	200	250	300	350
	Throw	2-3-5	4-5-9	5-7-13	6-9-17	8-11-21	9-13-25	10-15-29
	Noise Criteria	—	—	—	13	20	27	32
15 x 6	Airflow, CFM	63	125	188	250	313	375	438
	Throw	2-3-5	4-5-9	5-7-13	6-9-17	8-11-21	9-13-25	10-15-29
	Noise Criteria	—	—	—	12	19	26	31
18 x 6	Airflow, CFM	75	150	225	300	375	450	525
	Throw	2-3-5	4-5-9	5-7-13	6-9-17	8-11-21	9-13-26	11-15-30
	Noise Criteria	—	—	—	12	20	27	32
21 x 6	Airflow, CFM	88	175	263	350	438	525	613
	Throw	2-3-5	4-5-10	5-7-14	7-10-18	8-12-22	10-14-27	11-16-31
	Noise Criteria	—	—	—	13	21	28	33
24 x 6	Airflow, CFM	100	200	300	400	500	600	700
	Throw	2-3-5	4-5-10	5-8-14	7-10-19	8-12-23	10-14-28	11-20-32
	Noise Criteria	—	—	—	15	22	28	33
21 x 9	Airflow, CFM	131	263	394	525	656	788	919
	Throw	3-3-6	4-6-10	6-8-15	7-10-20	9-13-25	10-15-29	12-18-34
	Noise Criteria	—	—	—	16	23	30	35
24 x 9	Airflow, CFM	150	300	450	600	750	900	1050
	Throw	3-4-6	4-6-11	6-9-16	8-11-21	9-14-26	11-16-31	13-19-36
	Noise Criteria	—	—	—	17	24	31	36

#### Performance Notes:

1. All pressures are in inches w.g..  
 2. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 25%.

3. Tests conducted on diffuser only without damper using ideal straight rigid inlet condition. Other inlet conditions may affect performance. Correction factors for addition of a neck mounted opposed blade damper (fully open):  
 Total Pressure: Multiply catalog value by x 1.20.  
 Noise Criteria: Add + 4 to catalog value.

4. Correction factor for round inlets, see next page.  
 5. Noise Criteria (NC) values are based upon 10dB room absorption, re 10<sup>-12</sup> watts. Dash (—) in space indicates an Noise Criteria of less than 10.  
 6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

## PERFORMANCE DATA CORRECTIONS:

### MODEL 6400IV

#### Correction Factors For Round Necks (Square to Round Inlet Adaptors).

- Add the NC correction factor from Table 1 and the NC value listed in the performance tables.
- Multiply the correction factor from Table 1 by the listed total pressure in the performance tables.
- Multiply the correction factor from Table 1 by the listed throws in the performance tables.

#### Example:

12" x 12" unit with a 4A core and a 10" round adaptor handling 500 cfm supply air. (Page D72).

- $NC = 20 + 7 = 27$
- Total Pressure =  $.072 \times 1.65 = 0.119$
- Throw =  $16 \times 1.15 = 18.40$  feet @ 50 fpm terminal velocity.

TABLE 1 Correction Factors for SR Adaptors

SQUARE INLET	ROUND INLET	NC (add)	TP (multiply)	THROW (multiply)		
				150	100	50
6 x 6	5	7	1.65	1.10	1.10	1.15
9 x 9	6	17	3.50	1.15	1.15	1.20
9 x 9	8	4	1.40	1.10	1.10	1.10
12 x 12	8	17	3.50	1.15	1.15	1.20
12 x 12	10	7	1.65	1.10	1.10	1.15
15 x 15	10	17	3.50	1.15	1.15	1.20
15 x 15	12	9	1.90	1.10	1.10	1.15
15 x 15	14	3	1.25	1.05	1.05	1.10
18 x 18	12	17	3.50	1.15	1.15	1.20
18 x 18	14	10	2.00	1.10	1.10	1.15
18 x 18	16	5	1.45	1.10	1.10	1.10
21 x 21	14	17	3.70	1.15	1.15	1.20
21 x 21	16	11	2.25	1.10	1.10	1.15
21 x 21	18	6	1.60	1.10	1.10	1.10
21 x 21	20	3	1.20	1.05	1.05	1.10
24 x 24	16	17	3.50	1.15	1.15	1.20
24 x 24	18	12	2.35	1.10	1.10	1.15
24 x 24	20	7	1.65	1.10	1.10	1.15

#### Recommended Maximum Airflow

Diffuser mounting height and air temperature differential ( $\Delta T$ ) are both to be considered when selecting diffusers. As air travels from a diffuser, room air is entrained into the supply air stream and the delivery pattern thickens.

If the volume or throw requirement is too great, the lower part of the supply air stream can intrude into the occupied zone causing objectionable drafts. Consult Table 2 to verify selection.

TABLE 2 Maximum Recommended Airflow

CEILING HEIGHT (ft.)	MAX. AIRFLOW PER DIFFUSER (CFM)				MAX. REC. COOLING TEMP. DIFFERENTIAL $\Delta T$
	4-way	3-way	2-way (2A, 2B)	1-way & 2S	
7	400	300	200	100	15°F
8	600	450	300	150	20°F
9	1200	900	600	300	25°F
10	1800	1350	900	450	25°F
12	3200	2400	1600	800	30°F
14	4800	3600	2400	1200	30°F
16	6000	4500	3000	1500	30°F

## PERFORMANCE DATA:

### MODEL 6400IV • SQUARE NECK

#### Core Style 4A • 4-way blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.012	.026	.046	.072	.103	.140
6 x 6	Airflow, CFM	25	50	75	100	125	150	175
	Throw	1-2-2	2-2-4	2-3-5	3-5-7	3-6-8	4-6-10	4-7-12
	Noise Criteria	—	—	—	—	15	21	26
9 x 9	Airflow, CFM	56	113	169	225	281	338	394
	Throw	2-2-3	2-3-5	3-5-7	4-5-9	4-6-11	5-8-13	6-9-16
	Noise Criteria	—	—	—	—	18	24	29
12 x 12	Airflow, CFM	100	200	300	400	500	600	700
	Throw	2-2-4	3-4-7	4-5-10	5-7-13	6-8-16	7-10-19	8-11-22
	Noise Criteria	—	—	—	13	20	27	32
15 x 15	Airflow, CFM	156	313	469	625	781	938	1094
	Throw	2-3-5	3-5-8	4-6-12	6-8-15	7-10-19	8-12-23	9-14-26
	Noise Criteria	—	—	—	15	22	29	34
18 x 18	Airflow, CFM	225	450	675	900	1125	1350	1575
	Throw	3-3-6	4-6-10	6-8-15	7-10-19	9-12-24	10-15-28	12-17-33
	Noise Criteria	—	—	—	16	23	30	35
21 x 21	Airflow, CFM	306	613	919	1225	1531	1838	2144
	Throw	3-4-6	4-6-11	6-9-17	8-11-22	10-14-27	11-17-32	13-19-37
	Noise Criteria	—	—	—	18	25	31	36
24 x 24	Airflow, CFM	400	800	1200	1600	2000	2400	2800
	Throw	3-4-7	5-7-12	7-10-18	9-12-24	10-15-29	12-18-35	14-21-41
	Noise Criteria	—	—	12	19	26	32	37

#### Performance Notes:

1. All pressures are in inches w.g..

2. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 25%.

3. Tests conducted on diffuser only without damper using ideal straight rigid inlet condition. Other inlet conditions may affect performance. Correction factors for addition of a neck mounted opposed blade damper (fully open):

Total Pressure: Multiply catalog value by x 1.20.

Noise Criteria: Add + 4 to catalog value.

4. Correction factor for round inlets, see next page.

5. Noise Criteria (NC) values are based upon 10dB room absorption, re 10<sup>-12</sup> watts. Dash (—) in space indicates an Noise Criteria of less than 10.

6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

## PERFORMANCE DATA:

### MODEL 6400IV • SQUARE NECK

#### Core Style 3A • 3-way blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.012	.026	.046	.072	.103	.140
6 x 6	Airflow, CFM	25	50	75	100	125	150	175
	Throw, Side A	1-1-2 (6)	2-2-4 (13)	2-3-5 (19)	3-4-7 (25)	3-5-8 (31)	4-5-10 (37)	4-6-11 (44)
	Throw, Side B	2-2-3 (9)	2-3-5 (19)	3-4-6 (28)	3-5-8 (38)	4-5-10 (47)	5-6-12 (56)	5-7-14 (66)
	Noise Criteria	—	—	—	—	15	21	26
9 x 9	Airflow, CFM	56	113	169	225	281	338	394
	Throw, Side A	2-2-3 (14)	2-3-5 (28)	3-4-7 (42)	4-5-9 (56)	4-6-11(70)	5-7-13 (84)	6-8-15 (99)
	Throw, Side B	2-2-4 (21)	3-4-7 (43)	4-5-9 (64)	5-7-12 (84)	6-8-15 (105)	7-9-18 (127)	8-11-21 (148)
	Noise Criteria	—	—	—	—	18	24	29
12 x 12	Airflow, CFM	100	200	300	400	500	600	700
	Throw, Side A	2-2-4 (25)	3-4-7 (50)	4-5-10 (75)	5-7-13 (100)	6-8-16 (125)	7-10-19 (150)	8-11-22 (175)
	Throw, Side B	2-3-5 (38)	3-5-8 (75)	5-6-12 (113)	6-8-16 (150)	7-10-19 (188)	8-12-23 (225)	10-14-27 (263)
	Noise Criteria	—	—	—	13	20	27	32
15 x 15	Airflow, CFM	156	313	469	625	781	938	1094
	Throw, Side A	2-3-5 (39)	3-5-8 (78)	4-6-12 (117)	6-8-15 (156)	7-10-19 (195)	8-12-23 (235)	9-14-26 (273)
	Throw, Side B	3-3-6 (59)	4-6-10 (117)	6-8-15 (176)	7-10-20 (234)	9-13-24 (293)	10-15-29 (352)	12-17-34 (410)
	Noise Criteria	—	—	—	15	22	29	34
18 x 18	Airflow, CFM	225	450	675	900	1125	1350	1575
	Throw, Side A	3-3-6 (56)	4-6-10 (113)	6-8-15 (169)	7-10-19 (225)	9-12-24 (281)	10-15-28 (338)	12-17-33 (394)
	Throw, Side B	3-4-6 (84)	5-6-12 (169)	6-9-17 (253)	8-12-22 (338)	10-14-28 (422)	12-17-33 (506)	13-20-38 (591)
	Noise Criteria	—	—	—	16	23	30	35

#### Core Style 2S • 2-way opposite blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.014	.031	.056	.087	.126	.171
6 x 6	Airflow, CFM	25	50	75	100	125	150	175
	Throw	2-2-3	2-3-5	3-4-7	4-5-10	5-6-12	5-7-14	6-9-16
	Noise Criteria	—	—	—	—	17	23	28
9 x 9	Airflow, CFM	56	113	169	225	281	338	394
	Throw	2-3-4	3-4-7	4-6-11	5-7-14	6-9-17	7-11-20	8-12-23
	Noise Criteria	—	—	—	13	20	27	32
12 x 12	Airflow, CFM	100	200	300	400	500	600	700
	Throw	2-3-5	4-5-9	5-7-13	6-9-16	7-11-20	9-13-24	10-14-28
	Noise Criteria	—	—	—	15	22	29	34
15 x 15	Airflow, CFM	156	313	469	625	781	938	1094
	Throw	3-3-6	4-6-10	6-8-15	7-10-20	9-13-24	10-15-29	12-17-33
	Noise Criteria	—	—	—	17	24	31	36
18 x 18	Airflow, CFM	225	450	675	900	1125	1350	1575
	Throw	3-4-6	4-6-11	6-9-17	8-11-22	10-14-27	11-17-32	13-19-37
	Noise Criteria	—	—	—	18	25	32	37
21 x 21	Airflow, CFM	306	613	919	1225	1531	1838	2144
	Throw	3-4-7	5-7-13	7-10-18	9-13-24	11-15-30	13-18-36	15-21-42
	Noise Criteria	—	—	13	20	27	33	38
24 x 24	Airflow, CFM	400	800	1200	1600	2000	2400	2800
	Throw	3-4-7	5-7-13	7-10-20	9-13-26	11-16-32	13-20-38	15-23-44
	Noise Criteria	—	—	14	21	28	34	39

For performance notes, see page D79.

## PERFORMANCE DATA:

### MODEL 6400IV • SQUARE NECK

#### Core Style 2G • 2-way corner blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.014	.031	.056	.087	.126	.171
6 x 6	Airflow, CFM	25	50	75	100	125	150	175
	Throw	2-2-3	2-3-5	3-5-7	4-5-10	5-6-12	5-7-14	4-9-16
	Noise Criteria	—	—	—	—	17	23	28
9 x 9	Airflow, CFM	56	113	169	225	281	338	394
	Throw	2-3-4	3-4-7	4-6-11	5-7-14	6-9-17	7-11-20	8-12-23
	Noise Criteria	—	—	—	13	20	27	32
12 x 12	Airflow, CFM	100	200	300	400	500	600	700
	Throw	2-3-5	4-5-9	5-7-13	6-9-16	7-11-20	9-13-24	10-14-28
	Noise Criteria	—	—	—	15	22	29	34
15 x 15	Airflow, CFM	156	313	469	625	781	938	1094
	Throw	3-3-6	4-6-10	6-8-15	7-10-20	9-13-24	10-15-29	12-17-33
	Noise Criteria	—	—	—	17	24	31	36
18 x 18	Airflow, CFM	225	450	675	900	1125	1350	1575
	Throw	3-4-6	4-6-11	6-9-17	8-11-22	10-14-27	11-17-32	13-19-37
	Noise Criteria	—	—	—	18	25	32	37

#### Core Style 1S • 1-way blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.014	.031	.056	.087	.126	.171
6 x 6	Airflow, CFM	25	50	75	100	125	150	175
	Throw	2-3-4	3-4-7	4-6-10	5-7-13	6-9-18	7-10-20	5-12-23
	Noise Criteria	—	—	—	—	17	23	28
9 x 9	Airflow, CFM	56	113	169	225	281	338	394
	Throw	2-3-5	4-5-9	5-7-13	6-9-17	8-11-21	9-13-25	10-15-29
	Noise Criteria	—	—	—	13	20	27	32
12 x 12	Airflow, CFM	100	200	300	400	500	600	700
	Throw	2-3-5	4-5-10	5-8-13	7-10-19	8-12-23	10-14-28	11-17-32
	Noise Criteria	—	—	—	15	22	29	34
15 x 15	Airflow, CFM	156	313	469	625	781	938	1094
	Throw	3-3-6	4-6-11	6-8-16	8-11-21	9-13-26	11-16-31	13-18-36
	Noise Criteria	—	—	—	17	24	31	36
18 x 18	Airflow, CFM	225	450	675	900	1125	1350	1575
	Throw	3-4-6	5-6-12	6-9-17	8-12-23	10-15-28	12-17-33	14-20-39
	Noise Criteria	—	—	—	18	25	32	37
21 x 21	Airflow, CFM	306	613	919	1225	1531	1838	2144
	Throw	3-4-7	5-7-13	7-10-19	9-13-25	11-16-31	13-19-38	15-22-44
	Noise Criteria	—	—	13	20	27	33	38
24 x 24	Airflow, CFM	400	800	1200	1600	2000	2400	2800
	Throw	3-4-7	5-7-14	7-11-20	10-14-27	12-17-33	14-20-40	16-24-46
	Noise Criteria	—	—	14	21	28	34	39

For performance notes, see page D79.

## PERFORMANCE DATA:

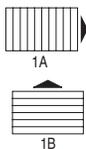
### MODEL 6400IV • RECTANGULAR NECK

#### Core Style 2B • 2-way opposite blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.014	.031	.056	.087	.126	.171
9 x 6	Airflow, CFM	38	75	113	150	188	225	263
	Throw	2-2-4 (19)	3-4-7 (38)	4-5-10 (57)	5-7-12 (75)	6-8-15 (94)	7-10-18 (113)	8-11-21 (132)
	Noise Criteria	—	—	—	11	18	26	29
12 x 6	Airflow, CFM	50	100	150	200	250	300	350
	Throw	2-3-4 (25)	3-4-7 (50)	4-6-11 (75)	5-7-14 (100)	6-9-17 (125)	7-11-20 (150)	8-12-23 (175)
	Noise Criteria	—	—	—	12	19	26	30
12 x 9	Airflow, CFM	75	150	225	300	375	450	525
	Throw	2-3-4 (38)	3-4-8 (75)	4-6-11 (113)	6-8-15 (150)	7-10-18 (188)	8-11-21 (225)	9-13-25 (263)
	Noise Criteria	—	—	—	15	23	30	34

#### Core Styles 1A and 1B • 1-way blow pattern



Nominal Neck Size	Neck Velocity, FPM	100	200	300	400	500	600	700
	Velocity Pressure	.001	.002	.006	.010	.016	.022	.031
	Total Pressure	.003	.014	.031	.056	.087	.126	.171
9 x 6	Airflow, CFM	38	75	113	150	188	225	263
	Throw	2-3-4	4-5-9	5-7-12	6-9-16	7-11-20	9-12-24	10-14-28
	Noise Criteria	—	—	—	11	18	26	29
12 x 6	Airflow, CFM	50	100	150	200	250	300	350
	Throw	2-3-5	4-5-9	5-7-13	6-9-17	8-11-21	9-13-25	10-15-29
	Noise Criteria	—	—	—	13	20	27	32
15 x 6	Airflow, CFM	63	125	188	250	313	375	438
	Throw	2-3-5	4-5-9	5-7-13	6-9-17	8-11-21	9-13-25	10-15-29
	Noise Criteria	—	—	—	12	19	26	31
18 x 6	Airflow, CFM	75	150	225	300	375	450	525
	Throw	2-3-5	4-5-9	5-7-13	6-9-17	8-11-21	9-13-26	11-15-30
	Noise Criteria	—	—	—	12	20	27	32
21 x 6	Airflow, CFM	88	175	263	350	438	525	613
	Throw	2-3-5	4-5-10	5-7-14	7-10-18	8-12-22	10-14-27	11-16-31
	Noise Criteria	—	—	—	13	21	28	33
24 x 6	Airflow, CFM	100	200	300	400	500	600	700
	Throw	2-3-5	4-5-10	5-8-14	7-10-19	8-12-23	10-14-28	11-20-32
	Noise Criteria	—	—	—	15	22	28	33
21 x 9	Airflow, CFM	131	263	394	525	656	788	919
	Throw	3-3-6	4-6-10	6-8-15	7-10-20	9-13-25	10-15-29	12-18-34
	Noise Criteria	—	—	—	16	23	30	35
24 x 9	Airflow, CFM	150	300	450	600	750	900	1050
	Throw	3-4-6	4-6-11	6-9-16	8-11-21	9-14-26	11-16-31	13-19-36
	Noise Criteria	—	—	—	17	24	31	36

#### Performance Notes:

1. All pressures are in inches w.g..  
 2. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 25%.

3. Tests conducted on diffuser only without damper using ideal straight rigid inlet condition. Other inlet conditions may affect performance. Correction factors for addition of a neck mounted opposed blade damper (fully open):  
 Total Pressure: Multiply catalog value by x 1.20.  
 Noise Criteria: Add + 4 to catalog value.

4. Correction factor for round inlets, see next page.  
 5. Noise Criteria (NC) values are based upon 10dB room absorption, re 10<sup>-12</sup> watts. Dash (—) in space indicates an Noise Criteria of less than 10.  
 6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

## PERFORMANCE DATA CORRECTIONS:

### MODEL 6400IV

#### Correction Factors For Round Necks (Square to Round Inlet Adaptors).

- Add the NC correction factor from Table 1 and the NC value listed in the performance tables.
- Multiply the correction factor from Table 1 by the listed total pressure in the performance tables.
- Multiply the correction factor from Table 1 by the listed throws in the performance tables.

#### Example:

12" x 12" unit with a 4A core and a 10" round adaptor handling 500 cfm supply air. (Page D72).

- $NC = 20 + 7 = 27$
- Total Pressure =  $.072 \times 1.65 = 0.119$
- Throw =  $16 \times 1.15 = 18.40$  feet @ 50 fpm terminal velocity.

TABLE 1 Correction Factors for SR Adaptors

SQUARE INLET	ROUND INLET	NC (add)	TP (multiply)	THROW (multiply)		
				150	100	50
6 x 6	5	7	1.65	1.10	1.10	1.15
9 x 9	6	17	3.50	1.15	1.15	1.20
9 x 9	8	4	1.40	1.10	1.10	1.10
12 x 12	8	17	3.50	1.15	1.15	1.20
12 x 12	10	7	1.65	1.10	1.10	1.15
15 x 15	10	17	3.50	1.15	1.15	1.20
15 x 15	12	9	1.90	1.10	1.10	1.15
15 x 15	14	3	1.25	1.05	1.05	1.10
18 x 18	12	17	3.50	1.15	1.15	1.20
18 x 18	14	10	2.00	1.10	1.10	1.15
18 x 18	16	5	1.45	1.10	1.10	1.10
21 x 21	14	17	3.70	1.15	1.15	1.20
21 x 21	16	11	2.25	1.10	1.10	1.15
21 x 21	18	6	1.60	1.10	1.10	1.10
21 x 21	20	3	1.20	1.05	1.05	1.10
24 x 24	16	17	3.50	1.15	1.15	1.20
24 x 24	18	12	2.35	1.10	1.10	1.15
24 x 24	20	7	1.65	1.10	1.10	1.15

#### Recommended Maximum Airflow

Diffuser mounting height and air temperature differential ( $\Delta T$ ) are both to be considered when selecting diffusers. As air travels from a diffuser, room air is entrained into the supply air stream and the delivery pattern thickens.

If the volume or throw requirement is too great, the lower part of the supply air stream can intrude into the occupied zone causing objectionable drafts. Consult Table 2 to verify selection.

TABLE 2 Maximum Recommended Airflow

CEILING HEIGHT (ft.)	MAX. AIRFLOW PER DIFFUSER (CFM)				MAX. REC. COOLING TEMP. DIFFERENTIAL $\Delta T$
	4-way	3-way	2-way (2A, 2B)	1-way & 2S	
7	400	300	200	100	15°F
8	600	450	300	150	20°F
9	1200	900	600	300	25°F
10	1800	1350	900	450	25°F
12	3200	2400	1600	800	30°F
14	4800	3600	2400	1200	30°F
16	6000	4500	3000	1500	30°F

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300 .006 .029		400 .010 .051		500 .016 .080		600 .022 .116		700 .031 .157		800 .040 .205		900 .050 .260	
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A
9 x 6  .375 SQ. FT.	RETURN FACTORS —SP=1.2 TP NC + 0	CFM NC	110 —		150 14		185 20		225 25		260 29		300 33		335 37	
	4B	CFM/SIDE THROW, FT.	37 6-9-11	18 4-5-8	50 8-10-13	25 5-6-9	62 9-11-15	31 6-8-10	75 10-12-16	37 6-8-11	87 10-13-17	44 8-9-12	100 11-14-18	50 8-9-12	112 12-15-19	56 9-10-13
	3A1	CFM/SIDE THROW, FT.	47 8-9-12	18 4-5-8	62 9-10-14	25 5-6-9	78 10-11-16	31 6-8-10	94 11-12-17	37 6-8-11	109 12-13-18	44 8-9-12	125 12-14-19	50 8-9-12	140 13-15-22	56 9-10-13
	3A2	CFM/SIDE THROW, FT.	42 6-9-11	35 5-6-10	55 8-10-13	47 6-8-11	70 9-11-15	58 8-9-12	84 10-12-16	70 8-10-13	98 10-13-17	82 9-10-14	112 11-14-18	94 9-11-15	126 12-15-19	105 10-12-16
	2A 2B	CFM/SIDE THROW, FT.	56 9-11-14		75 10-12-16		93 11-14-18		112 12-15-19		131 13-16-22		150 14-17-22		168 15-18-24	
	2C 2E	CFM/SIDE THROW, FT.	75 9-11-15	37 6-9-11	100 10-12-17	50 8-10-13	125 11-14-19	62 9-11-15	150 12-15-22	75 10-12-16	175 13-16-22	87 10-13-19	200 14-17-24	100 11-14-18	225 15-18-25	112 12-15-19
	1A 1B	CFM/SIDE THROW, FT.	112 11-13-18		150 13-15-22		187 15-17-24		225 16-18-26		262 17-19-28		300 18-22-30		337 19-22-32	
12 x 6  .50 SQ. FT.	RETURN FACTORS —SP=1.6 TP NC + 1	CFM NC	150 —		200 14		250 20		300 26		350 31		400 35		450 39	
	4B	CFM/SIDE THROW, FT.	56 9-11-14	18 4-5-8	75 10-12-16	25 5-6-9	94 11-14-18	31 6-8-10	113 12-15-19	37 6-8-11	131 13-16-22	44 8-9-12	150 14-17-22	50 8-9-12	169 15-18-24	56 9-10-13
	4C	CFM/SIDE THROW, FT.	66 9-11-15	18 4-5-8	87 10-12-17	25 5-6-9	109 11-14-19	31 6-8-10	131 12-15-22	37 6-8-11	153 13-16-22	44 8-9-12	175 14-17-24	50 8-9-12	197 15-18-25	56 9-10-13
	3A1	CFM/SIDE THROW, FT.	75 6-9-11	37 6-9-11	100 8-10-13	50 8-10-13	126 9-11-15	62 9-11-15	150 10-12-16	75 10-12-16	176 10-13-17	87 10-13-17	200 11-14-18	100 11-14-18	226 12-15-19	112 12-15-19
	3B	CFM/SIDE THROW, FT.	75 6-9-11	37 6-9-11	100 8-10-13	50 8-10-13	126 9-11-15	62 9-11-15	150 10-12-16	75 10-12-16	176 10-13-17	87 10-13-17	200 11-14-18	100 11-14-18	226 12-15-19	112 12-15-19
	2A 2B	CFM/SIDE THROW, FT.	75 9-11-15		100 10-12-17		125 11-14-19		150 12-15-22		175 13-16-22		200 14-17-24		225 15-18-25	
	2C 2E	CFM/SIDE THROW, FT.	112 11-13-18	37 6-9-11	150 13-15-22	50 8-10-13	188 15-17-24	62 9-11-15	225 16-18-26	75 10-12-16	263 17-19-28	87 10-13-17	300 18-22-30	100 11-14-18	338 19-22-32	112 12-15-19
	1A 1B	CFM/SIDE THROW, FT.	150 11-13-18		200 13-15-22		250 15-17-24		300 16-18-26		350 17-19-28		400 18-22-30		450 19-22-32	
15 x 6  .625 SQ. FT.	RETURN FACTORS —SP=1.9 TP NC + 1	CFM NC	190 —		250 15		310 21		375 27		440 32		500 36		565 40	
	4B	CFM/SIDE THROW, FT.	75 9-11-15	18 4-5-8	100 10-12-17	25 5-6-9	125 11-14-19	31 6-8-10	150 12-15-22	37 6-8-11	175 13-16-22	44 8-9-12	200 14-17-24	50 8-9-12	225 15-18-25	56 9-10-13
	4E	CFM/SIDE THROW, FT.	56 9-11-14	37 8-9-12	75 10-12-16	50 9-10-14	94 11-14-18	62 10-11-16	113 12-15-19	75 11-12-17	131 13-16-22	87 12-13-18	150 14-17-22	100 12-14-19	169 15-18-24	112 13-15-22
	3A1	CFM/SIDE THROW, FT.	84 10-11-16	18 4-5-8	112 11-13-18	25 5-6-9	140 12-15-20	31 6-8-10	169 13-16-22	37 6-8-11	197 14-17-23	44 8-9-12	225 15-18-25	50 8-9-12	253 16-19-28	56 9-10-13
	2A 2B	CFM/SIDE THROW, FT.	94 10-12-17		125 11-14-19		156 12-16-22		187 13-17-23		219 14-18-25		250 15-19-26		281 16-22-29	
	2C 2E	CFM/SIDE THROW, FT.	150 11-13-18	37 6-9-11	200 13-15-22	50 8-10-13	250 15-17-24	62 9-11-15	300 16-18-26	75 10-12-16	350 17-19-28	87 10-13-17	400 18-22-30	100 11-14-18	450 19-22-32	112 12-15-19
	1A 1B	CFM/SIDE THROW, FT.	188 12-15-20		250 14-17-23		312 16-19-26		375 17-22-29		438 18-22-31		500 19-24-33		563 22-25-35	

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

For performance notes, see page D63.

D  
CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300 .006 .029		400 .010 .051		500 .016 .080		600 .022 .116		700 .031 .157		800 .040 .205		900 .050 .260	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
18 x 6  .75 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 2	CFM NC	225 —		300 16		375 22		450 28		525 33		600 37		675 41	
	4B  4C	CFM/SIDE THROW, FT.	94	18	125	25	156	31	188	37	218	44	250	50	281	56
	4E	CFM/SIDE THROW, FT.	56	56	75	75	94	94	113	113	131	131	150	150	169	169
	3A1	CFM/SIDE THROW, FT.	103	18	137	25	172	31	206	37	240	44	275	50	309	56
	2A 2B	CFM/SIDE THROW, FT.	112		150		187		225		262		300		337	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	187	37	250	50	313	62	375	75	438	87	500	100	563	112
	1A 1B	CFM/SIDE THROW, FT.	225		300		375		450		525		600		675	
21 x 6  .875 SQ. FT.	RETURN FACTORS —SP=3.2 TP NC + 3	CFM NC	260 —		350 16		435 22		525 29		610 33		700 38		785 41	
	4B  4C	CFM/SIDE THROW, FT.	112	18	150	25	187	31	225	37	262	44	300	50	337	56
	4E	CFM/SIDE THROW, FT.	75	56	100	75	125	94	150	113	175	131	200	150	225	169
	3A1	CFM/SIDE THROW, FT.	122	18	162	25	203	31	244	37	284	44	325	50	365	56
	2A 2B	CFM/SIDE THROW, FT.	131		175		218		262		306		350		393	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	225	37	300	50	375	62	450	75	525	87	600	100	675	112
	1A 1B	CFM/SIDE THROW, FT.	262		350		437		525		612		700		787	
24 x 6  1.0 SQ. FT.	RETURN FACTORS —SP=3.9 TP NC + 4	CFM NC	300 —		400 16		500 23		600 30		700 34		800 39		900 42	
	4B  4C	CFM/SIDE THROW, FT.	131	18	175	25	219	31	263	37	306	44	350	50	394	56
	4E	CFM/SIDE THROW, FT.	75	75	100	100	125	125	150	150	175	175	200	200	225	225
	3A1	CFM/SIDE THROW, FT.	141	18	187	25	234	31	281	37	328	44	375	50	422	56
	2A 2B	CFM/SIDE THROW, FT.	150		200		250		300		350		400		450	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	260	37	350	50	438	62	525	75	613	87	700	100	788	112
	1A 1B	CFM/SIDE THROW, FT.	300		400		500		600		700		800		900	

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D63.

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300 .006 .029		400 .010 .051		500 .016 .080		600 .022 .116		700 .031 .157		800 .040 .205		900 .050 .260								
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A	B						
30 x 6 1.25 SQ. FT.	RETURN FACTORS —SP=3.2 TP NC + 3	CFM NC	375 —		500 17		625 24		750 30		875 35		1000 40		1125 43								
	4B  4C	CFM/SIDE THROW, FT.	169 18	12-15-20	4-5-8	225 25	14-17-23	5-6-9	281 31	16-19-26	6-8-10	338 37	17-22-29	6-8-11	393 44	18-22-31	8-9-12	450 50	19-24-33	8-9-12	506 56	21-25-35	9-10-13
	4E	CFM/SIDE THROW, FT.	94 94	10-12-17	10-12-17	125 125	11-14-19	11-14-19	156 156	12-16-22	12-16-22	188 188	13-17-23	13-17-23	219 219	14-18-25	14-18-25	250 250	15-19-26	15-19-26	282 282	16-22-29	16-22-29
	3A1	CFM/SIDE THROW, FT.	178 18	12-15-20	4-5-8	237 25	14-17-23	5-6-9	297 31	16-19-26	6-8-10	356 37	17-22-29	6-8-11	415 44	18-22-31	8-9-12	475 50	19-24-33	8-9-12	534 56	21-25-35	9-10-13
	2A 2B	CFM/SIDE THROW, FT.	187	12-15-20		250	14-17-23		312	16-19-26		375	17-22-29		437	18-22-31		500	19-24-33		562	21-25-35	
	2C 2E  2D 2F	CFM/SIDE THROW, FT.	337 37	14-17-24	6-9-11	450 50	16-19-28	8-10-13	563 62	18-22-32	9-11-15	675 75	19-23-34	10-12-16	788 87	22-25-36	10-13-17	900 100	22-26-39	11-14-18	1013 112	24-29-41	12-15-19
1A 1B	CFM/SIDE THROW, FT.	375	15-18-25		500	17-22-30		625	19-24-34		750	22-26-36		875	22-28-39		1000	24-30-42		1125	25-32-44		
12 x 9 .75 SQ. FT.	RETURN FACTORS —SP=3.9 TP NC + 4	CFM NC	225 —		300 17		375 23		450 28		525 33		600 36		675 40								
	4B  4C	CFM/SIDE THROW, FT.	70 42	8-10-13	5-6-10	94 56	9-11-15	6-8-11	117 70	10-12-17	8-10-13	141 84	11-13-18	8-10-13	164 98	12-14-19	9-10-14	188 112	12-15-22	9-11-15	211 126	13-16-22	10-12-16
	3A1	CFM/SIDE THROW, FT.	91 42	10-12-17	5-6-10	121 56	11-14-19	6-8-11	152 70	12-16-22	8-9-12	183 84	13-17-23	8-10-13	213 98	14-18-25	9-10-14	244 112	15-19-26	9-11-15	274 126	16-22-29	10-12-16
	3A2	CFM/SIDE THROW, FT.	75 75	9-11-14	9-11-14	100 100	10-12-16	10-12-16	125 125	11-14-18	11-14-18	150 150	12-15-19	12-15-19	175 175	13-16-22	13-16-22	200 200	14-17-22	14-17-22	225 225	15-18-24	15-18-24
	2A 2B	CFM/SIDE THROW, FT.	112	11-13-18		150	13-15-22		187	15-17-24		225	16-18-26		262	17-19-28		300	18-22-30		337	19-22-32	
	2C 2E  2D 2F	CFM/SIDE THROW, FT.	141 84	11-13-18	9-11-14	188 112	13-15-22	10-12-16	234 141	15-17-24	11-14-18	281 169	16-18-26	12-15-19	328 197	17-19-28	13-16-22	375 225	18-22-30	14-17-22	422 253	19-22-32	15-18-24
1A 1B	CFM/SIDE THROW, FT.	225	13-16-22		300	15-18-25		375	17-20-29		450	18-22-32		525	19-23-34		600	22-25-36		675	22-28-38		
15 x 9 .93 SQ. FT.	RETURN FACTORS —SP=1.7 TP NC + 3	CFM NC	280 —		375 18		470 24		565 29		655 34		750 37		845 41								
	4B  4C	CFM/SIDE THROW, FT.	98 42	10-12-17	5-6-10	131 56	11-14-19	6-8-11	165 70	12-16-22	8-9-12	198 84	13-17-23	8-10-13	230 98	14-18-25	9-10-14	263 112	15-19-26	9-11-15	296 126	16-22-29	10-12-16
	4E	CFM/SIDE THROW, FT.	70 70	9-11-15	9-11-15	94 94	10-12-17	10-12-17	117 117	11-14-19	11-14-19	141 141	12-15-22	12-15-22	164 164	13-16-22	13-16-22	188 188	14-17-24	14-17-24	211 211	15-18-25	15-18-25
	3A1	CFM/SIDE THROW, FT.	120 42	11-13-18	5-6-10	159 56	13-15-22	6-8-11	200 70	15-17-24	8-9-12	240 84	16-18-26	8-10-13	279 98	17-19-28	9-10-14	319 112	18-22-30	9-11-15	359 126	19-22-32	10-12-16
	3A2	CFM/SIDE THROW, FT.	117 82	10-11-16	8-10-13	155 110	11-13-18	9-11-15	196 137	12-15-20	10-12-17	233 165	13-16-22	11-13-18	272 192	14-17-23	12-14-19	312 219	15-18-25	12-15-22	351 247	16-19-28	13-16-22
	2A 2B	CFM/SIDE THROW, FT.	140	11-13-18		187	13-15-22		235	15-17-24		281	16-18-26		328	17-19-28		375	18-22-30		422	19-22-32	
2C 2E  2D 2F	CFM/SIDE THROW, FT.	197 84	12-15-20	9-11-14	263 112	14-17-23	10-12-16	329 141	16-19-26	11-14-18	394 169	17-22-29	12-15-19	459 197	18-22-31	13-16-22	525 225	19-24-33	14-17-22	592 253	22-25-35	15-18-24	
1A 1B	CFM/SIDE THROW, FT.	281	14-17-24		375	16-19-28		470	18-22-32		563	19-23-34		656	22-25-36		750	22-26-39		845	24-29-41		

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D63.

D  
CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300	400	500	600	700	800	900
			.006 .029	.010 .051	.016 .080	.022 .116	.031 .157	.040 .205	.050 .260
18 x 9  1.125 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 3	CFM NC	335	450	560	675	790	900	1010
			A B	A B	A B	A B	A B	A B	A B
	4B  4C	CFM/SIDE THROW, FT.	126 42	169 56	211 70	254 84	296 98	338 112	380 126
	4E	CFM/SIDE THROW, FT.	99 70	132 94	164 117	197 141	230 164	263 188	296 211
	3A1	CFM/SIDE THROW, FT.	147 42	197 56	246 70	295 84	345 98	394 112	443 126
	3B	CFM/SIDE THROW, FT.	168 84	225 112	281 141	337 169	394 197	450 225	506 253
	2A  2B	CFM/SIDE THROW, FT.	163	225	281	337	394	450	506
21 x 9  1.125 SQ. FT.	RETURN FACTORS —SP=2.5 TP NC + 4	CFM NC	395	525	655	785	915	1050	1180
			A B	A B	A B	A B	A B	A B	A B
	4B  4C	CFM/SIDE THROW, FT.	154 42	206 56	258 70	309 84	360 98	413 112	464 126
	4E	CFM/SIDE THROW, FT.	98 98	131 131	163 163	196 196	229 229	261 261	294 294
	3A1	CFM/SIDE THROW, FT.	175 42	234 56	292 70	351 84	410 98	468 112	527 126
	2A  2B	CFM/SIDE THROW, FT.	196	262	327	393	458	525	590
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	308 84	412 112	514 141	617 169	720 197	825 225	927 253
24 x 9  1.5 SQ. FT.	RETURN FACTORS —SP=2.9 TP NC + 4	CFM NC	450	600	750	900	1050	1200	1350
			A B	A B	A B	A B	A B	A B	A B
	4B  4C	CFM/SIDE THROW, FT.	183 42	244 56	305 70	366 84	427 98	488 112	549 126
	4E	CFM/SIDE THROW, FT.	126 99	169 132	211 164	253 197	295 230	337 263	379 296
	3A1	CFM/SIDE THROW, FT.	204 42	272 56	340 70	408 84	476 98	544 112	612 126
	2A  2B	CFM/SIDE THROW, FT.	225	300	375	450	525	600	675
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	365 84	488 112	609 141	731 169	853 197	975 225	1097 253
1A  1B	CFM/SIDE THROW, FT.	450	600	750	900	1050	1200	1350	

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D63.

D

CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300 .006 .029		400 .010 .051		500 .016 .080		600 .022 .116		700 .031 .157		800 .040 .205		900 .050 .260	
			CFM NC	560 —	750 20	935 26	1125 32	1310 37	1500 39	1685 44	A	B	A	B	A	B
30 x 9 1.875 SQ. FT.	RETURN FACTORS —SP=3.9 TP NC + 5	CFM NC	560 —		750 20		935 26		1125 32		1310 37		1500 39		1685 44	
	4B  4C	CFM/SIDE THROW, FT.	238 42	13-16-22 5-6-10	319 56	15-18-25 6-8-11	398 70	17-20-29 8-9-12	478 84	18-22-32 8-10-13	557 98	19-23-34 9-10-14	638 112	22-25-36 9-11-15	716 126	22-28-38 10-12-16
	4E	CFM/SIDE THROW, FT.	155 126	12-15-20 11-13-18	206 169	14-17-23 13-15-22	258 211	16-19-26 15-17-24	310 253	17-22-29 16-18-26	361 295	18-22-30 17-19-28	413 337	19-24-33 18-22-30	465 379	22-25-35 19-22-32
	3A1	CFM/SIDE THROW, FT.	259 42	13-16-22 5-6-10	347 56	15-18-25 6-8-11	433 70	17-20-29 8-9-12	520 84	18-22-32 8-10-13	606 98	19-23-34 9-10-14	694 112	22-25-36 9-11-15	779 126	22-28-38 10-12-16
	2A  2B	CFM/SIDE THROW, FT.	281	14-17-24	375	16-19-28	468	18-22-32	562	19-23-34	655	22-25-36	750	22-26-39	842	24-29-41
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	476 84	16-19-28 9-11-14	638 112	18-22-32 10-12-16	796 141	20-25-36 11-14-18	956 169	22-28-39 12-15-19	1113 197	23-30-42 13-16-22	1275 225	25-32-44 14-17-22	1432 253	28-34-47 15-18-24
1A  1B	CFM/SIDE THROW, FT.	562	16-19-28	750	18-22-32	937	20-25-36	1125	22-28-39	1310	23-30-42	1500	25-32-44	1685	28-34-47	
36 x 9 2.25 SQ. FT.	RETURN FACTORS —SP=5.0 TP NC + 6	CFM NC	675 —		900 21		1125 27		1350 33		1575 38		1800 40		2025 44	
	4B  4C	CFM/SIDE THROW, FT.	295 42	14-17-24 5-6-10	394 56	16-19-28 6-8-11	492 70	18-22-32 8-9-12	591 84	19-23-34 8-10-13	689 98	22-25-36 9-10-14	788 112	24-29-41 10-12-16	886 126	24-29-41 10-12-16
	4E	CFM/SIDE THROW, FT.	183 155	12-15-20 12-15-20	244 206	14-17-23 14-17-23	305 258	16-19-26 16-19-26	366 310	17-22-29 17-22-29	427 361	18-22-31 18-22-31	488 413	19-24-33 19-24-33	549 465	22-25-35 22-25-35
	3A1	CFM/SIDE THROW, FT.	316 42	14-17-24 5-6-10	422 56	16-19-28 6-8-11	527 70	18-22-32 8-9-12	633 84	19-23-34 8-10-13	738 98	22-25-36 9-10-14	844 112	24-29-41 10-12-16	949 126	24-29-41 10-12-16
	2A  2B	CFM/SIDE THROW, FT.	337	14-17-24	450	16-19-28	562	18-22-32	675	19-23-34	787	22-25-36	900	22-26-39	1012	24-29-41
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	590 84	17-22-30 9-11-14	788 112	20-24-34 10-12-16	984 141	23-28-39 11-14-18	1181 169	24-30-41 12-15-19	1378 197	26-32-44 13-16-22	1575 225	29-35-47 14-17-22	1772 253	31-37-50 15-18-24
1A  1B	CFM/SIDE THROW, FT.	675	17-22-30	900	20-24-34	1125	23-28-39	1350	24-30-41	1575	26-32-44	1800	29-35-47	2025	31-37-50	
15 x 12 1.25 SQ. FT.	RETURN FACTORS —SP=1.6 TP NC + 2	CFM NC	375 —		500 19		625 25		750 30		875 34		1000 38		1125 41	
	4B  4C	CFM/SIDE THROW, FT.	112 75	9-11-15 6-9-11	150 100	10-12-17 8-10-13	187 125	11-14-19 9-11-15	225 150	12-15-22 10-12-16	262 175	13-16-22 10-13-17	300 200	14-17-24 11-14-18	337 225	15-18-25 12-15-19
	3A1	CFM/SIDE THROW, FT.	150 75	11-13-18 6-9-11	200 100	13-15-22 8-10-13	250 125	15-17-24 9-11-15	300 150	16-18-26 10-12-16	350 175	17-19-28 10-13-17	400 200	18-22-30 11-14-18	450 225	19-22-32 12-15-19
	3A2	CFM/SIDE THROW, FT.	117 129	8-10-13 10-11-16	156 172	9-11-15 11-13-18	195 215	10-12-17 12-15-20	234 258	11-13-18 13-16-22	273 301	12-14-19 14-17-23	312 344	12-15-22 15-18-25	351 387	13-16-22 16-19-28
	2A  2B	CFM/SIDE THROW, FT.	187	12-15-20	250	14-17-23	312	16-19-26	375	17-22-29	437	18-22-31	500	19-24-33	567	22-25-35
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	225 150	13-16-22 10-12-17	300 200	15-18-25 11-14-19	375 250	17-20-29 12-16-22	450 300	18-22-32 13-17-23	525 350	19-23-34 14-18-25	600 400	22-25-36 15-19-26	675 450	22-28-38 16-22-29
1A  1B	CFM/SIDE THROW, FT.	375	15-18-25	500	17-22-30	625	19-24-34	750	22-26-36	875	22-28-39	1000	24-30-42	1125	25-32-44	

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D63.

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300	400	500	600	700	800	900
			.006 .029	.010 .051	.016 .080	.022 .116	.031 .157	.040 .205	.050 .260
18 x 12  1.5 SQ. FT.	RETURN FACTORS —SP=1.9 TP NC + 3	CFM NC	450	600	750	900	1050	1200	1350
			A B	A B	A B	A B	A B	A B	A B
	4B  4C	CFM/SIDE THROW, FT.	150 75 11-13-18 6-9-11	200 100 13-15-22 8-10-13	250 125 15-17-24 9-11-15	300 150 16-18-26 10-12-16	350 175 17-19-28 10-13-17	400 200 18-22-30 11-14-18	450 225 19-22-32 12-15-19
	3A1	CFM/SIDE THROW, FT.	187 75 12-15-20 6-9-11	250 100 14-17-23 8-10-13	312 125 16-19-26 9-11-15	375 150 17-22-29 10-12-16	437 175 18-22-31 10-13-17	500 200 19-24-33 11-14-18	562 225 22-25-35 12-15-1
	3A2	CFM/SIDE THROW, FT.	168 141 10-12-17 9-11-15	225 187 11-14-19 10-12-17	281 234 12-16-22 11-14-19	337 281 13-17-23 12-15-22	394 328 14-18-25 13-16-22	450 375 15-19-26 14-17-24	506 422 16-22-29 15-18-25
	2A 2B	CFM/SIDE THROW, FT.	225 13-16-22	300 15-18-25	375 17-20-29	450 18-22-32	525 19-23-34	600 22-25-36	675 22-28-38
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	300 150 14-17-24 10-12-17	400 200 16-19-28 11-14-19	500 250 18-22-32 12-16-22	600 300 19-23-34 13-17-23	700 350 22-25-36 14-18-25	800 400 22-26-39 15-19-26	900 450 24-29-41 16-22-29
1A 1B	CFM/SIDE THROW, FT.	450 15-18-25	600 17-22-30	750 19-24-34	900 22-26-36	1050 22-28-39	1200 24-30-42	1350 25-32-44	
21 x 12  1.75 SQ. FT.	RETURN FACTORS —SP=2.2 TP NC + 5	CFM NC	525	700	875	1050	1225	1400	1575
			A B	A B	A B	A B	A B	A B	A B
	4B  4C	CFM/SIDE THROW, FT.	187 75 12-15-20 6-9-11	250 100 14-17-23 8-10-13	312 125 16-19-26 9-11-15	375 150 17-22-29 10-12-16	437 175 18-22-31 10-13-17	500 200 19-24-33 11-14-18	562 225 22-25-35 12-15-19
	4E	CFM/SIDE THROW, FT.	150 112 11-13-18 11-13-18	200 150 13-15-22 13-15-22	250 187 15-17-24 15-17-24	300 225 16-18-26 16-18-26	350 262 17-19-28 17-19-28	400 300 18-22-30 18-22-30	450 337 19-22-32 19-22-32
	3A1	CFM/SIDE THROW, FT.	225 75 13-16-22 6-9-11	300 100 15-18-25 8-10-13	375 125 17-20-29 9-11-15	450 150 18-22-32 10-12-16	525 175 19-23-34 10-13-17	600 200 22-25-36 11-14-18	675 225 22-28-38 12-15-19
	3A2	CFM/SIDE THROW, FT.	148 230 10-12-17 10-12-17	197 306 11-14-19 11-14-19	246 382 12-16-22 12-16-22	295 460 13-17-23 13-17-23	345 535 14-18-25 14-18-25	394 612 15-19-26 15-19-26	443 688 16-22-29 16-22-29
	2A 2B	CFM/SIDE THROW, FT.	262 13-16-22	350 15-18-25	437 17-20-29	525 18-22-32	612 19-23-34	700 22-25-36	787 22-28-38
2C  2D 2E  2F	CFM/SIDE THROW, FT.	375 150 15-18-25 10-12-17	500 200 17-22-30 11-14-19	625 250 19-24-34 12-16-22	750 300 22-26-36 13-17-23	875 350 22-28-39 14-18-25	1000 400 24-30-42 15-19-26	1125 450 25-32-44 16-22-29	
1A 1B	CFM/SIDE THROW, FT.	525 16-19-28	700 18-22-32	875 20-25-36	1050 22-28-39	1225 23-30-42	1400 25-32-44	1575 28-34-47	
24 x 12  2.0 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 5	CFM NC	600	800	1000	1200	1400	1600	1800
			A B	A B	A B	A B	A B	A B	A B
	4B  4C	CFM/SIDE THROW, FT.	225 75 13-16-22 6-9-11	300 100 15-18-25 8-10-13	375 125 17-20-29 9-11-15	450 150 18-22-32 10-12-16	525 175 19-23-34 10-13-17	600 200 22-25-36 11-14-18	675 225 22-28-38 12-15-19
	4E	CFM/SIDE THROW, FT.	150 150 11-13-18 11-13-18	200 200 13-15-22 13-15-22	250 250 15-17-24 15-17-24	300 300 16-18-26 16-18-26	350 350 17-19-28 17-19-28	400 400 18-22-30 18-22-30	450 450 19-22-32 19-22-32
	3A1	CFM/SIDE THROW, FT.	262 75 13-16-22 6-9-11	350 100 15-18-25 8-10-13	437 175 17-20-29 9-11-15	525 150 18-22-32 10-12-16	612 175 19-23-34 10-13-17	700 200 22-25-36 11-14-18	787 225 22-28-38 12-15-19
	3B	CFM/SIDE THROW, FT.	300 150 11-13-18 10-12-17	400 200 13-15-22 11-14-19	500 250 15-17-24 12-16-22	600 300 16-18-26 13-17-23	700 350 17-19-28 14-18-25	800 400 18-22-30 15-19-26	900 450 19-22-32 16-22-29
	2A 2B	CFM/SIDE THROW, FT.	300 14-17-24	400 16-19-28	500 18-22-32	600 19-23-34	700 22-25-36	800 22-26-39	900 24-29-41
2C  2D 2E  2F	CFM/SIDE THROW, FT.	450 150 15-18-25 10-12-17	600 200 17-22-30 11-14-19	750 250 19-24-34 12-16-22	900 300 22-26-36 13-17-23	1050 350 22-28-39 14-18-25	1200 400 24-30-42 15-19-26	1350 450 25-32-44 16-22-29	
1A 1B	CFM/SIDE THROW, FT.	600 17-22-30	800 20-24-34	1000 23-28-39	1200 24-30-41	1400 26-32-44	1600 29-35-47	1800 31-37-50	

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

For performance notes, see page D63.

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300 .006 .029		400 .010 .051		500 .016 .080		600 .022 .116		700 .031 .157		800 .040 .205		900 .050 .260			
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A	B	
30 x 12 2.5 SQ. FT.	RETURN FACTORS —SP=3.3 TP NC + 6	CFM NC	750 15	1000 23	1250 29	1500 33	1750 37	2000 41	2250 43									
	4B	CFM/SIDE THROW, FT.	300 75 14-17-24	400 100 16-19-28	500 125 18-22-32	600 150 19-23-34	700 175 21-25-36	800 200 22-26-39	900 225 24-29-41	1250 29 16-19-28	1500 33 18-22-32	1750 37 20-24-40	2000 41 22-26-39	2250 43 24-29-41	1250 29 16-19-28	1500 33 18-22-32	1750 37 20-24-40	2000 41 22-26-39
	4C	CFM/SIDE THROW, FT.	300 75 14-17-24	400 100 16-19-28	500 125 18-22-32	600 150 19-23-34	700 175 21-25-36	800 200 22-26-39	900 225 24-29-41	1250 29 16-19-28	1500 33 18-22-32	1750 37 20-24-40	2000 41 22-26-39	2250 43 24-29-41	1250 29 16-19-28	1500 33 18-22-32	1750 37 20-24-40	2000 41 22-26-39
	4E	CFM/SIDE THROW, FT.	183 183 12-15-20	250 250 14-17-23	313 313 16-19-26	375 375 17-22-29	437 437 18-22-31	500 500 19-24-33	562 562 21-25-36	625 625 22-28-30	687 687 23-28-31	750 750 24-30-33	812 812 25-32-36	875 875 26-34-38	937 937 27-36-41	1000 1000 28-38-44	1062 1062 30-40-46	1125 1125 31-42-48
	3A1	CFM/SIDE THROW, FT.	337 75 14-17-24	450 100 16-19-28	562 125 18-22-32	675 150 19-23-34	787 175 21-25-36	900 200 22-26-39	1012 225 24-29-41	1250 29 16-19-28	1500 33 18-22-32	1750 37 20-24-40	2000 41 22-26-39	2250 43 24-29-41	1250 29 16-19-28	1500 33 18-22-32	1750 37 20-24-40	2000 41 22-26-39
	2A 2B	CFM/SIDE THROW, FT.	375 15-18-25	500 17-22-30	625 19-24-34	750 22-26-36	875 25-32-36	1000 28-36-42	1125 31-42-48	1250 34-48-54	1500 42-60-84	1750 49-68-96	2000 56-78-104	2250 63-87-114	1250 34-48-54	1500 42-60-84	1750 49-68-96	2000 56-78-104
36 x 12 3.0 SQ. FT.	RETURN FACTORS —SP=4.0 TP NC + 7	CFM NC	900 16	1200 25	1500 30	1800 34	2100 38	2400 42	2700 44									
	4B	CFM/SIDE THROW, FT.	375 75 15-18-25	500 100 17-22-30	625 125 19-24-34	750 150 22-26-36	875 175 25-32-36	1000 200 28-36-42	1125 225 31-42-48	1250 250 34-48-54	1500 300 42-60-84	1750 350 50-75-100	2000 400 59-88-117	2250 450 68-102-135	1250 250 34-48-54	1500 300 42-60-84	1750 350 50-75-100	2000 400 59-88-117
	4C	CFM/SIDE THROW, FT.	375 75 15-18-25	500 100 17-22-30	625 125 19-24-34	750 150 22-26-36	875 175 25-32-36	1000 200 28-36-42	1125 225 31-42-48	1250 250 34-48-54	1500 300 42-60-84	1750 350 50-75-100	2000 400 59-88-117	2250 450 68-102-135	1250 250 34-48-54	1500 300 42-60-84	1750 350 50-75-100	2000 400 59-88-117
	4E	CFM/SIDE THROW, FT.	225 225 13-16-22	300 300 15-18-25	375 375 17-20-29	450 450 18-22-32	525 525 19-23-34	600 600 22-25-36	675 675 25-32-36	750 750 28-36-42	825 825 31-42-48	900 900 34-48-54	975 975 37-56-75	1050 1050 40-60-80	1125 1125 43-64-85	1200 1200 46-69-92	1275 1275 49-74-99	1350 1350 52-78-104
	3A1	CFM/SIDE THROW, FT.	412 75 15-18-25	550 100 17-22-30	687 125 19-24-34	825 150 22-26-36	962 175 25-32-36	1100 200 28-36-42	1237 225 31-42-48	1375 250 34-48-54	1512 300 42-60-84	1649 350 50-75-100	1786 400 59-88-117	1923 450 68-102-135	1375 250 34-48-54	1512 300 42-60-84	1649 350 50-75-100	1786 400 59-88-117
	2A 2B	CFM/SIDE THROW, FT.	450 15-18-25	600 17-22-30	750 19-24-34	900 22-26-36	1050 25-32-36	1200 28-36-42	1350 31-42-48	1500 34-48-54	1650 37-56-75	1800 40-60-80	2000 46-69-92	2200 52-78-104	1500 37-56-75	1800 46-69-92	2100 54-81-108	2400 64-96-128
18 x 15 1.875 SQ. FT.	RETURN FACTORS —SP=2.0 TP NC + 4	CFM NC	560 14	750 21	935 28	1125 32	1310 36	1500 39	1685 43									
	4B	CFM/SIDE THROW, FT.	164 117 10-12-17	219 156 11-14-19	273 195 12-16-22	328 234 13-17-23	383 273 14-18-25	438 312 15-19-26	492 351 16-22-29	547 396 17-25-35	602 441 18-28-38	657 496 20-31-41	712 541 22-34-44	767 596 24-38-48	547 396 17-25-35	602 441 18-28-38	657 496 20-31-41	712 541 22-34-44
	4C	CFM/SIDE THROW, FT.	164 117 10-12-17	219 156 11-14-19	273 195 12-16-22	328 234 13-17-23	383 273 14-18-25	438 312 15-19-26	492 351 16-22-29	547 396 17-25-35	602 441 18-28-38	657 496 20-31-41	712 541 22-34-44	767 596 24-38-48	547 396 17-25-35	602 441 18-28-38	657 496 20-31-41	712 541 22-34-44
	3A1	CFM/SIDE THROW, FT.	222 117 13-16-22	297 156 15-18-25	371 195 17-20-29	445 234 18-22-32	519 273 19-23-34	594 312 22-25-36	668 351 25-32-36	742 396 28-36-42	816 441 31-42-48	890 496 34-48-54	964 541 37-56-75	1038 596 40-60-80	742 396 28-36-42	816 441 31-42-48	890 496 34-48-54	964 541 37-56-75
	3A2	CFM/SIDE THROW, FT.	168 197 9-11-15	225 262 10-12-17	281 328 11-14-19	337 394 12-15-22	394 459 13-16-22	450 525 14-17-24	506 590 15-18-25	562 657 17-22-29	618 715 19-24-33	674 781 21-26-37	730 837 23-29-41	786 893 25-32-36	562 657 17-22-29	618 715 19-24-33	674 781 21-26-37	730 837 25-32-36
	2A 2B	CFM/SIDE THROW, FT.	281 14-17-24	375 16-19-28	468 18-22-32	562 19-23-34	656 22-25-36	750 25-32-36	843 28-36-42	937 31-42-48	1030 34-48-54	1124 37-56-75	1218 40-60-80	1312 43-64-85	937 541 37-56-75	1030 602 40-60-80	1124 657 43-64-85	1218 712 46-69-92

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is: A x .82 = B.

For performance notes, see page D63.

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300		400		500		600		700		800		900	
			.006 .029		.010 .051		.016 .080		.022 .116		.031 .157		.040 .205		.050 .260	
21 x 15  2.185 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 5	CFM NC	655 12		875 21		1090 28		1310 33		1530 36		1750 39		1970 43	
	4B  4C	CFM/SIDE THROW, FT.	210 13-16-22	117 8-10-13	281 15-18-25	156 9-11-15	361 17-20-29	195 10-12-17	422 18-22-32	234 11-13-18	493 19-23-34	273 12-14-19	563 22-25-36	312 12-15-22	634 22-28-38	351 13-16-22
	4E	CFM/SIDE THROW, FT.	164 12-15-20	164 12-15-20	218 14-17-24	218 14-17-24	273 16-19-26	273 16-19-26	327 17-22-29	327 17-22-29	382 18-22-31	382 18-22-31	437 19-24-33	437 19-24-33	491 22-25-35	491 22-25-35
	3A1	CFM/SIDE THROW, FT.	269 13-16-22	117 8-10-13	359 15-18-25	156 9-11-15	448 17-20-29	195 10-12-17	539 18-22-32	234 11-13-18	629 19-23-34	273 12-14-19	719 22-25-36	312 12-15-22	809 22-28-38	351 13-16-22
	3A2	CFM/SIDE THROW, FT.	230 11-13-18	213 10-12-17	306 13-15-22	284 11-14-19	382 15-17-24	355 12-16-22	460 16-18-26	426 13-17-23	535 17-19-28	498 14-18-25	612 18-22-30	569 15-19-26	688 19-22-32	641 16-22-29
	2A 2B	CFM/SIDE THROW, FT.	327 14-17-24		437 16-19-28		596 18-22-32		656 19-23-34		766 22-25-36		875 22-26-39		985 24-29-41	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	422 15-18-25	234 12-15-20	563 17-22-30	312 14-17-23	702 19-24-34	390 16-19-26	844 22-26-36	468 17-22-29	966 22-28-39	546 18-22-31	1126 24-30-42	624 19-24-33	1268 25-32-44	702 22-25-35
	1A 1B	CFM/SIDE THROW, FT.	655 17-22-30		875 20-24-34		1092 23-28-39		1312 24-30-41		1532 26-32-44		1750 29-35-47		1970 31-37-50	
24 x 15  2.5 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 6	CFM NC	750 14		1000 22		1250 29		1500 34		1750 37		2000 39		2250 44	
	4B  4C	CFM/SIDE THROW, FT.	258 13-16-22	117 8-10-13	344 15-18-25	156 9-11-15	430 17-20-29	195 10-12-17	516 18-22-32	234 11-13-18	602 19-23-34	273 12-14-19	688 22-25-36	312 12-15-22	774 22-28-38	351 13-16-22
	4E	CFM/SIDE THROW, FT.	211 13-16-22	164 12-15-20	281 15-18-25	218 14-17-24	352 17-20-29	273 16-19-26	422 18-22-32	327 17-22-29	492 19-23-34	382 18-22-31	563 22-25-36	437 19-24-33	633 22-28-38	491 22-25-35
	3A1	CFM/SIDE THROW, FT.	316 14-17-24	117 8-10-13	422 16-19-28	156 9-11-15	527 18-22-32	195 10-12-17	633 19-23-34	234 11-13-18	738 22-25-36	273 12-14-19	844 22-26-39	312 12-15-22	949 24-29-41	351 13-16-22
	3A2	CFM/SIDE THROW, FT.	300 13-16-22	225 11-13-18	400 15-18-25	300 13-15-22	500 17-20-29	375 15-17-24	600 18-22-32	450 16-18-26	700 19-23-34	525 17-19-28	800 22-25-36	600 18-22-30	900 22-28-38	675 19-22-32
	2A 2B	CFM/SIDE THROW, FT.	375 15-18-25		500 17-22-30		625 19-24-34		750 22-26-36		875 22-28-39		1000 24-30-42		1125 25-32-44	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	516 16-19-28	234 12-15-20	688 18-22-32	312 14-17-23	860 20-25-36	390 16-19-26	1032 22-28-39	468 17-22-29	1204 23-30-42	546 18-22-31	1376 25-32-44	624 19-24-33	1548 28-34-47	702 22-25-35
	1A 1B	CFM/SIDE THROW, FT.	750 18-22-32		1000 22-25-36		1250 24-29-41		1500 26-32-44		1750 28-34-47		2000 30-36-50		2250 32-38-53	
30 x 15  3.125 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 7	CFM NC	935 14		1250 23		1565 30		1875 36		2190 39		2500 40		2810 45	
	4B  4C	CFM/SIDE THROW, FT.	351 14-17-24	117 8-10-13	469 16-19-28	156 9-11-15	587 18-22-32	195 10-12-17	703 19-23-34	234 11-13-18	822 22-25-36	273 12-14-19	938 22-26-39	312 12-15-22	1054 24-29-41	351 13-16-22
	4E	CFM/SIDE THROW, FT.	258 13-16-22	211 13-16-22	344 15-18-25	281 15-18-25	430 17-20-29	352 17-20-29	516 18-22-32	422 18-22-32	602 19-23-34	492 19-23-34	688 22-25-36	583 22-25-36	775 22-28-38	633 22-28-38
	3A1	CFM/SIDE THROW, FT.	410 15-18-25	117 8-10-13	547 17-22-30	156 9-11-15	685 19-24-34	195 10-12-17	820 22-26-36	234 11-13-18	958 22-28-39	273 12-14-19	1094 24-30-42	312 12-15-22	1224 25-32-44	351 13-16-22
	3B	CFM/SIDE THROW, FT.	468 12-15-20	234 12-15-20	625 14-17-23	312 14-17-23	782 16-19-26	391 16-19-26	937 17-22-29	469 17-22-29	1095 18-22-31	547 18-22-31	1250 19-24-33	625 19-24-33	1406 22-25-35	702 22-25-35
	2A 2B	CFM/SIDE THROW, FT.	468 16-19-28		625 18-22-32		782 20-25-36		937 22-28-39		1095 23-30-42		1250 25-32-44		1405 28-34-47	
	2C  2D 2E  2F	CFM/SIDE THROW, FT.	702 17-22-30	234 12-15-20	938 20-24-34	312 14-17-23	1175 23-28-39	390 16-19-26	1407 24-30-41	468 17-22-29	1644 26-32-44	546 18-22-31	1876 29-35-47	624 19-24-33	2108 34-37-50	702 22-25-35
	1A 1B	CFM/SIDE THROW, FT.	937 19-24-33		1250 22-28-38		1565 25-32-43		1875 28-34-46		2190 30-36-50		2500 32-39-53		2810 34-41-57	

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D63.

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300 .006 .029		400 .010 .051		500 .016 .080		600 .022 .116		700 .031 .157		800 .040 .205		900 .050 .260	
			CFM NC	A	B	A	B	A	B	A	B	A	B	A	B	A
36 x 15 3.75 SQ. FT.	RETURN FACTORS —SP=3.8 TP NC + 7	CFM NC	1125 13	1500 23	1875 31	2250 37	2625 40	3000 41	3375 46							
	4B  4C	CFM/SIDE THROW, FT.	446 117 15-18-25 8-10-13	594 156 17-22-30 9-11-15	742 195 19-24-34 10-12-17	891 234 22-26-36 11-13-18	1039 273 22-30-39 12-14-19	1188 312 24-30-42 12-15-22	1336 351 25-32-44 13-16-22							
	4E	CFM/SIDE THROW, FT.	306 258 14-17-24 13-16-22	408 344 16-19-28 15-18-25	510 430 18-22-32 17-20-29	612 516 19-23-34 18-22-32	714 602 22-25-36 19-23-34	816 688 22-26-39 22-25-36	918 775 24-29-41 22-28-38							
	3A1	CFM/SIDE THROW, FT.	504 117 16-19-28 8-10-13	672 156 18-22-32 9-11-15	840 195 20-25-36 10-12-17	1008 234 22-30-39 11-13-18	1176 273 23-30-42 12-14-19	1344 312 25-32-44 12-15-22	1512 351 28-34-47 13-16-22							
	2A  2B	CFM/SIDE THROW, FT.	562 16-19-28	750 18-22-32	937 20-25-36	1125 22-28-39	1312 23-30-42	1500 25-32-44	1682 28-34-47							
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	890 234 19-24-33 12-15-20	1188 312 22-28-33 14-17-23	1485 390 25-32-43 16-19-26	1782 468 28-34-46 17-22-29	2079 546 30-36-50 18-22-31	2376 624 32-39-53 19-24-33	2873 702 34-41-57 22-25-35							
1A  1B	CFM/SIDE THROW, FT.	1125 20-25-35	1500 23-29-40	1875 26-32-45	2250 28-35-49	2625 31-38-52	3000 33-40-57	3375 35-43-60								
21 x 18 2.625 SQ. FT.	RETURN FACTORS —SP=2.2 TP NC + 5	CFM NC	785 14	1050 21	1310 27	1575 32	1840 36	2100 40	2360 43							
	4B  4C	CFM/SIDE THROW, FT.	225 169 11-13-18 9-11-15	300 225 13-15-22 10-12-17	375 280 15-17-24 11-14-19	450 337 16-18-27 12-15-22	526 394 17-19-28 13-16-22	600 450 18-22-30 14-17-24	674 506 19-22-32 15-18-25							
	3A1	CFM/SIDE THROW, FT.	309 169 14-17-24 9-11-15	412 225 16-19-28 10-12-17	514 281 18-22-32 11-14-19	619 337 19-23-34 12-15-22	723 394 22-25-36 13-16-22	825 450 22-26-39 14-17-24	927 506 24-29-41 15-18-25							
	3A2	CFM/SIDE THROW, FT.	279 230 14-17-24 10-12-17	372 306 16-19-28 11-14-19	464 382 18-22-32 12-16-22	557 460 19-23-34 13-17-23	652 535 22-25-36 14-18-25	744 612 22-26-39 15-19-26	836 688 24-29-41 16-22-29							
	2A  2B	CFM/SIDE THROW, FT.	393 15-18-25	525 17-22-30	655 19-24-31	787 22-26-36	920 22-28-39	1050 24-30-42	1180 25-32-44							
	2C  2D  2E  2F	CFM/SIDE THROW, FT.	450 338 15-18-25 13-16-22	600 450 17-22-30 15-18-25	750 560 19-24-31 17-20-29	900 675 22-26-36 18-22-32	1060 790 22-28-39 19-23-34	1200 900 24-30-42 22-25-36	1350 1010 25-32-44 22-28-38							
1A  1B	CFM/SIDE THROW, FT.	787 18-22-32	1050 22-25-36	1310 24-29-41	1575 26-32-44	1840 28-34-47	2100 30-36-50	2360 32-38-53								
24 x 18 3.0 SQ. FT.	RETURN FACTORS —SP=2.5 TP NC + 6	CFM NC	900 15	1200 22	1500 28	1800 33	2100 37	2400 40	2700 43							
	4B  4C	CFM/SIDE THROW, FT.	281 169 14-17-24 9-11-15	375 225 16-19-28 10-12-17	469 281 18-22-32 11-14-19	563 337 19-23-34 12-15-22	656 394 22-25-36 13-16-22	750 450 22-26-39 14-17-24	844 506 24-29-41 15-18-25							
	4E	CFM/SIDE THROW, FT.	225 225 13-16-22 13-16-22	300 300 15-18-25 15-18-25	375 375 17-20-29 17-20-29	450 450 18-22-32 18-22-32	525 525 19-23-34 19-23-34	600 600 22-25-36 22-25-36	675 675 22-28-38 22-28-38							
	3A1	CFM/SIDE THROW, FT.	366 169 15-18-25 9-11-15	487 225 17-22-30 10-12-17	609 281 19-24-34 11-14-19	731 337 22-26-36 12-15-22	853 394 22-28-39 13-16-22	975 450 24-30-42 14-17-24	1098 506 25-32-44 15-18-25							
	3A2	CFM/SIDE THROW, FT.	300 300 14-17-24 11-13-18	400 400 16-19-28 13-15-22	500 500 18-22-32 15-17-24	600 600 19-23-34 16-18-26	700 700 22-25-36 17-19-28	800 800 22-26-39 18-22-30	900 900 24-29-41 19-22-32							
	2A  2B	CFM/SIDE THROW, FT.	450 15-18-25	600 17-22-30	750 19-24-34	900 22-26-36	1050 22-28-39	1200 24-30-42	1350 25-32-44							
2C  2D  2E  2F	CFM/SIDE THROW, FT.	562 338 16-19-28 13-16-22	750 450 18-22-32 15-18-25	938 562 20-25-36 17-20-29	1125 675 22-28-39 18-22-32	1313 787 23-30-42 19-23-34	1500 900 25-32-44 22-25-36	1688 1012 28-34-47 22-28-38								
1A  1B	CFM/SIDE THROW, FT.	900 19-24-33	1200 22-28-38	1500 25-32-43	1800 28-34-46	2100 30-36-50	2400 32-39-53	2700 34-41-57								

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D63.

D  
CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300	400	500	600	700	800	900
			.006 .029	.010 .051	.016 .080	.022 .116	.031 .157	.040 .205	.050 .260
30 x 18  3.75 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 7	CFM NC	1125 15	1500 23	1875 29	2250 34	2625 38	3000 42	3375 45
	4B  4C	CFM/SIDE THROW, FT.	394 169 15-18-25 9-11-15	525 225 17-22-30 10-12-17	657 281 19-24-34 11-14-19	788 337 22-26-36 12-15-22	918 394 22-28-39 13-16-22	1050 450 24-30-42 14-17-24	1181 506 25-32-44 15-18-25
	4E	CFM/SIDE THROW, FT.	281 281 14-17-24 14-17-24	375 375 16-19-28 16-19-28	469 469 18-22-32 18-22-32	563 563 19-23-34 19-23-34	657 657 22-25-36 22-25-36	750 750 22-26-39 22-26-39	845 845 24-29-41 24-29-41
	3A1	CFM/SIDE THROW, FT.	478 169 16-19-28 9-11-15	637 225 18-22-32 10-12-17	797 281 20-25-36 11-14-19	956 337 22-28-39 12-15-22	1115 394 23-30-42 13-16-22	1275 450 25-32-44 14-17-24	1434 506 28-34-47 15-18-25
	3A2	CFM/SIDE THROW, FT.	469 327 14-17-24 12-15-20	625 437 16-19-28 14-17-23	782 546 18-22-32 16-19-26	937 656 19-23-34 17-22-29	1093 766 22-25-36 18-22-31	1250 875 22-26-39 19-24-33	1406 984 24-29-41 22-25-35
	2A 2B	CFM/SIDE THROW, FT.	562 16-19-28	750 18-22-32	937 20-25-36	1125 22-28-39	1312 23-30-42	1500 25-32-44	1687 28-34-47
	2C 2E	CFM/SIDE THROW, FT.	787 337 18-22-32 13-16-22	1050 450 22-25-36 15-18-25	1313 562 24-29-41 17-20-29	1575 675 26-32-44 18-22-32	1838 787 28-34-47 19-23-34	2100 900 30-36-50 22-25-36	2363 1012 32-38-53 22-28-38
	1A 1B	CFM/SIDE THROW, FT.	1125 20-25-35	1500 23-29-39	1875 26-33-45	2250 29-35-49	2625 31-38-52	3000 33-40-57	3375 35-43-60
36 x 18  4.5 SQ. FT.	RETURN FACTORS —SP=3.6 TP NC + 8	CFM NC	1350 16	1800 24	2250 30	2700 35	3150 39	3600 42	4050 45
	4B  4C	CFM/SIDE THROW, FT.	506 169 16-19-28 9-11-15	675 225 18-22-32 10-12-17	844 281 22-25-36 11-14-19	1013 337 22-28-39 12-15-22	1181 394 23-30-42 13-16-22	1350 450 25-32-44 14-17-24	1519 506 28-34-47 15-18-25
	4E	CFM/SIDE THROW, FT.	339 339 14-17-24 14-17-24	452 452 16-19-28 16-19-28	565 565 18-22-32 18-22-32	678 678 19-23-34 19-23-34	791 791 22-25-36 22-25-36	904 904 22-26-39 22-26-39	1020 1020 24-29-41 24-29-41
	3A1	CFM/SIDE THROW, FT.	591 169 17-22-30 9-11-15	787 225 20-24-34 10-12-17	984 281 23-28-39 11-14-19	1181 337 24-30-41 12-15-22	1378 394 26-32-44 13-16-22	1575 450 29-35-47 14-17-24	1772 506 31-37-50 15-18-25
	3B	CFM/SIDE THROW, FT.	675 337 13-16-22 13-16-22	900 450 15-18-25 15-18-25	1125 562 17-20-29 17-20-29	1350 675 18-22-32 18-22-32	1575 787 19-23-34 19-23-34	1800 900 22-25-36 22-25-36	2025 1012 22-28-38 22-28-38
	2A 2B	CFM/SIDE THROW, FT.	675 17-22-30	900 20-24-34	1125 23-28-39	1350 24-30-41	1575 26-32-44	1800 29-35-47	2025 31-37-50
	2C 2E	CFM/SIDE THROW, FT.	1010 337 20-25-35 13-16-22	1350 450 23-29-40 15-18-25	1688 562 26-33-45 17-20-29	2025 675 29-35-49 18-22-32	2363 787 31-38-52 19-23-34	2700 900 33-40-57 22-25-36	3038 1012 35-43-60 22-28-38
	1A 1B	CFM/SIDE THROW, FT.	1350 22-25-37	1800 24-30-42	2250 28-34-48	2700 30-36-51	3150 32-39-56	3600 34-42-58	4050 37-44-63
24 x 21  3.5 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 7	CFM NC	1050 15	1400 22	1750 28	2100 33	2450 37	2800 41	3150 44
	4B  4C	CFM/SIDE THROW, FT.	295 230 12-15-20 10-12-17	394 306 14-17-23 11-14-19	493 382 16-19-26 12-16-22	590 460 17-22-29 13-17-23	690 535 18-22-31 14-18-25	788 612 19-24-33 15-19-26	887 688 22-25-35 16-22-29
	3A1	CFM/SIDE THROW, FT.	410 230 15-18-25 10-12-17	547 306 17-22-30 11-14-19	684 382 19-24-34 12-16-22	820 460 22-26-36 13-17-23	957 535 22-28-39 14-18-25	1094 612 24-30-42 15-19-26	1231 688 25-32-44 16-22-29
	3A2	CFM/SIDE THROW, FT.	375 300 15-18-25 11-13-18	500 400 17-22-30 13-15-22	625 500 19-24-34 15-17-24	750 600 22-26-36 16-18-26	875 700 22-28-39 17-19-28	1000 800 24-30-42 18-22-30	1125 900 25-32-44 19-22-32
	2A 2B	CFM/SIDE THROW, FT.	525 16-19-28	700 18-22-32	875 20-25-36	1050 22-28-39	1225 23-30-42	1400 25-32-44	1575 28-34-47
	2C 2E	CFM/SIDE THROW, FT.	591 459 17-22-30 14-17-24	788 612 20-24-34 16-19-28	986 764 23-28-39 18-22-32	1180 920 24-30-41 19-23-34	1380 1070 26-32-44 22-25-36	1576 1224 29-35-47 22-26-39	1774 1376 31-37-50 24-29-41
	1A 1B	CFM/SIDE THROW, FT.	1050 20-25-35	1400 23-29-40	1750 26-33-45	2100 29-35-49	2450 31-38-52	2800 33-40-51	3150 35-43-60

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D63.

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300 .006 .029		400 .010 .051		500 .016 .080		600 .022 .116		700 .031 .157		800 .040 .205		900 .050 .260	
			CFM NC	1310 16	1750 23	2185 29	2625 34	3060 38	3500 41	3935 44						
30 x 21 4.375 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B
	4B  4C	CFM/SIDE THROW, FT.	425 230 15-18-25 10-12-17	569 306 17-22-30 11-14-19	710 382 19-24-34 12-16-22	852 460 22-26-36 13-17-23	995 535 22-28-39 14-18-25	1138 612 24-30-42 15-19-26	1279 688 25-32-44 16-22-29							
	4E	CFM/SIDE THROW, FT.	360 295 14-17-24 14-17-24	480 394 16-19-28 16-19-28	600 492 18-22-32 18-22-32	720 591 19-23-34 19-23-34	840 690 22-25-36 22-25-36	960 788 22-26-39 22-26-39	1080 887 24-29-41 24-29-41							
	3A1	CFM/SIDE THROW, FT.	540 230 16-19-28 10-12-17	722 306 18-22-32 11-14-19	901 382 20-25-36 12-16-22	1082 460 22-28-39 13-17-23	1262 535 23-30-42 14-18-25	1444 612 25-32-44 15-19-26	1623 688 28-34-47 16-22-29							
	3A2	CFM/SIDE THROW, FT.	468 422 15-18-25 12-15-20	625 562 17-22-30 14-17-23	782 701 19-24-34 16-19-26	937 844 22-26-36 17-22-29	1093 983 22-28-39 18-22-31	1250 1125 24-30-42 19-24-33	1406 1264 25-32-44 22-25-36							
	2A  2B	CFM/SIDE THROW, FT.	655 17-22-30	875 20-24-34	1092 23-28-39	1312 24-30-41	1530 26-32-44	1750 29-35-47	1968 31-37-50							
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	853 457 18-22-32 14-17-24	1138 612 22-25-36 16-19-28	1421 764 24-29-41 18-22-32	1705 920 26-32-44 19-23-34	1990 1070 28-34-47 22-25-36	2276 1224 30-36-50 22-26-39	2559 1376 32-38-53 24-29-41							
	1A  1B	CFM/SIDE THROW, FT.	1310 22-25-37	1750 24-30-42	2185 28-34-48	2625 30-36-51	3060 32-39-56	3500 34-42-58	3935 37-44-63							
36 x 21 5.25 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B
	4B  4C	CFM/SIDE THROW, FT.	558 230 16-19-28 10-12-17	744 306 18-22-32 11-14-19	930 382 20-25-36 12-16-22	1115 460 22-28-39 13-17-23	1306 535 23-30-42 14-18-25	1488 612 25-32-44 15-19-26	1674 688 28-34-47 16-22-29							
	4E	CFM/SIDE THROW, FT.	427 360 15-18-25 15-18-25	568 480 17-22-30 17-22-30	710 600 19-24-34 19-24-34	852 720 22-26-36 22-26-36	945 840 22-28-39 22-28-39	1135 960 24-30-42 24-30-42	1280 1080 25-32-44 25-32-44							
	3A1	CFM/SIDE THROW, FT.	672 230 17-22-30 10-12-17	897 306 20-24-34 11-14-19	1121 382 23-28-39 12-16-22	1345 460 24-30-41 13-17-23	1570 535 26-32-44 14-18-25	1794 612 29-35-47 15-19-26	2018 688 31-37-50 16-22-29							
	3A2	CFM/SIDE THROW, FT.	675 450 15-18-25 13-16-22	900 600 17-22-30 15-18-25	1125 750 19-24-34 17-20-29	1350 900 22-26-36 18-22-32	1575 1050 22-28-39 19-23-34	1800 1200 24-30-42 22-25-36	2025 1350 25-32-44 22-28-38							
	2A  2B	CFM/SIDE THROW, FT.	787 18-22-32	1050 22-25-36	1312 24-29-41	1575 26-32-44	1837 28-34-47	2100 30-36-50	2362 32-38-53							
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	1115 460 20-25-35 14-17-24	1488 612 23-29-40 16-19-28	1861 764 26-33-45 18-22-32	2230 920 29-35-49 19-23-34	2605 1070 31-38-52 22-25-36	2976 1224 33-40-57 22-26-39	3349 1376 35-43-60 24-29-41							
	1A  1B	CFM/SIDE THROW, FT.	1575 24-30-41	2100 23-34-47	2625 32-39-53	3150 34-41-58	3675 36-44-62	4200 39-47-67	4725 41-50-72							
30 x 24 5.0 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B
	4B  4C	CFM/SIDE THROW, FT.	450 300 15-18-25 11-13-18	600 400 17-22-30 13-15-22	750 500 19-24-34 15-17-24	900 600 22-26-36 16-18-26	1050 700 22-28-39 17-19-28	1200 800 24-30-42 18-22-30	1350 900 25-32-44 19-22-32							
	4E	CFM/SIDE THROW, FT.	375 375 15-18-25 15-18-25	500 500 17-22-30 17-22-30	625 625 19-24-34 19-24-34	750 750 22-26-36 22-26-36	875 875 22-28-39 22-28-39	1000 1000 24-30-42 24-30-42	1125 1125 25-32-44 25-32-44							
	3A1	CFM/SIDE THROW, FT.	600 300 17-22-30 11-13-18	800 400 20-24-34 13-15-22	1000 500 23-28-39 15-17-24	1200 600 24-30-41 16-18-26	1400 700 26-32-44 17-19-28	1600 800 29-35-47 18-22-30	1800 900 31-37-50 19-22-32							
	3A2	CFM/SIDE THROW, FT.	515 470 18-22-32 15-18-25	687 625 22-25-36 17-22-30	859 782 24-29-41 19-24-34	1031 937 26-32-44 22-26-36	1203 1093 28-34-47 22-28-39	1375 1250 30-36-50 24-30-42	1548 1406 32-38-53 25-32-44							
	2A  2B	CFM/SIDE THROW, FT.	750 19-24-33	1000 22-28-38	1250 25-32-43	1500 28-34-46	1750 30-36-50	2000 32-39-53	2250 34-41-57							
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	900 600 22-25-37	1200 800 24-30-42	1500 1000 28-34-48	1800 1200 30-36-51	2100 1400 32-39-56	2400 1600 34-42-58	2700 1800 37-44-63							
	1A  1B	CFM/SIDE THROW, FT.	1500 35-43-61	2000 41-49-69	2500 44-55-77	3000 49-59-86	3500 53-65-90	4000 56-69-96	4500 60-72-103							

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

For performance notes, see page D63.

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300	400	500	600	700	800	900	
			.006 .029	.010 .051	.016 .080	.022 .116	.031 .157	.040 .205	.050 .260	
36 x 24  6.0 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	1800 18	2400 25	3000 31	3600 36	4200 40	4800 43	5400 46	
	4B  4C	CFM/SIDE THROW, FT.	600 300 17-22-30 11-13-18	800 400 20-24-34 13-15-22	1000 500 23-28-39 15-17-24	1200 600 24-30-41 16-18-26	1400 700 26-32-44 17-19-28	1600 800 29-35-47 18-22-30	1800 900 31-37-50 19-22-32	
	4E	CFM/SIDE THROW, FT.	450 450 15-18-25 15-18-25	600 600 17-22-30 17-22-30	750 750 19-24-34 19-24-34	900 900 22-26-36 22-26-36	1050 1050 22-28-39 22-28-39	1200 1200 24-30-42 24-30-42	1350 1350 25-32-41 25-32-44	
	3A1	CFM/SIDE THROW, FT.	750 300 18-22-32 11-13-18	1000 400 22-25-36 13-15-22	1250 500 24-29-41 15-17-24	1500 600 26-32-44 16-18-26	1750 700 28-34-47 17-19-28	2000 800 30-36-50 18-22-30	2250 900 32-38-53 19-22-32	
	3A2	CFM/SIDE THROW, FT.	676 562 16-19-28 14-17-24	900 750 18-22-32 16-19-28	1125 937 20-25-36 18-22-32	1350 1125 22-28-39 19-23-34	1575 1312 23-30-42 22-25-36	1800 1500 25-32-44 22-26-39	2025 1687 28-34-47 24-29-41	
	2A	CFM/SIDE THROW, FT.	900 19-24-33	1200 22-28-38	1500 25-32-43	1800 28-34-46	2100 30-36-50	2400 32-39-53	2700 34-41-57	
	2B	CFM/SIDE THROW, FT.	1200 600 22-25-37 15-18-25	1600 800 24-30-42 17-22-30	2000 1000 28-34-48 19-24-34	2400 1200 30-36-51 22-26-36	2800 1400 32-39-56 22-28-39	3200 1600 34-42-58 24-30-42	3600 1800 37-44-63 25-32-44	
	2C  2D	CFM/SIDE THROW, FT.	1800 24-30-41	2400 28-34-47	3000 32-39-53	3600 34-41-58	4200 36-44-62	4800 39-47-67	5400 41-50-72	
	2E	CFM/SIDE THROW, FT.	1200 600 22-25-37 15-18-25	1600 800 24-30-42 17-22-30	2000 1000 28-34-48 19-24-34	2400 1200 30-36-51 22-26-36	2800 1400 32-39-56 22-28-39	3200 1600 34-42-58 24-30-42	3600 1800 37-44-63 25-32-44	
	1A	CFM/SIDE THROW, FT.	1800 24-30-41	2400 28-34-47	3000 32-39-53	3600 34-41-58	4200 36-44-62	4800 39-47-67	5400 41-50-72	
	1B	CFM/SIDE THROW, FT.	1800 24-30-41	2400 28-34-47	3000 32-39-53	3600 34-41-58	4200 36-44-62	4800 39-47-67	5400 41-50-72	
	36 x 30  7.5 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	2250 19	3000 26	3750 32	4500 37	5250 41	6000 44	6750 47
		4B  4C	CFM/SIDE THROW, FT.	657 468 17-22-30 12-15-20	875 625 20-24-34 14-17-23	1093 782 23-28-39 16-19-26	1313 937 24-30-41 17-22-29	1532 1093 26-32-44 18-22-31	1750 1250 29-35-47 19-24-33	1969 1406 31-37-50 22-25-35
		3A1	CFM/SIDE THROW, FT.	890 468 19-24-33 12-15-20	1187 625 22-28-38 14-17-23	1484 782 25-32-43 16-19-26	1781 937 28-34-46 17-22-29	2078 1093 30-36-50 18-22-31	2375 1250 32-39-53 19-24-33	2672 1406 34-41-57 22-25-35
3A2		CFM/SIDE THROW, FT.	787 675 18-22-32 13-16-22	1050 900 22-25-36 15-18-25	1312 1125 24-29-41 17-20-29	1575 1350 26-32-44 18-22-32	1837 1575 28-34-47 19-23-34	2100 1800 30-36-50 22-25-36	2362 2025 32-38-53 22-28-38	
2A		CFM/SIDE THROW, FT.	1125 20-25-35	1500 23-29-40	1875 26-33-45	2250 29-35-49	2625 31-38-52	3000 33-40-57	3375 35-43-60	
2B		CFM/SIDE THROW, FT.	1312 938 22-25-37 17-22-30	1750 1250 24-30-42 20-24-34	2188 1562 28-34-48 23-28-39	2625 1875 30-36-51 24-30-41	3063 2187 32-39-56 26-32-44	3500 2500 34-42-58 29-35-47	3938 2812 37-44-63 31-37-50	
2C  2D		CFM/SIDE THROW, FT.	2250 24-30-41	3000 28-34-47	3750 32-39-53	4500 34-41-58	5250 36-44-62	6000 39-47-67	6750 41-50-72	
2E	CFM/SIDE THROW, FT.	2250 24-30-41	3000 28-34-47	3750 32-39-53	4500 34-41-58	5250 36-44-62	6000 39-47-67	6750 41-50-72		
1A	CFM/SIDE THROW, FT.	2250 24-30-41	3000 28-34-47	3750 32-39-53	4500 34-41-58	5250 36-44-62	6000 39-47-67	6750 41-50-72		
1B	CFM/SIDE THROW, FT.	2250 24-30-41	3000 28-34-47	3750 32-39-53	4500 34-41-58	5250 36-44-62	6000 39-47-67	6750 41-50-72		

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

**CFM** - cubic feet per minute  
**VP** - velocity pressure - inches w.g.  
**TP** - total pressure - inches w.g.  
**T** - throw in feet  
**NC** - Noise Criteria (values) based on 10 dB room absorption, re  $10^{-12}$  watts.  
**Neck Velocity** - feet per minute

#### Performance Notes:

1. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 30% with a downward projection of approximately 30 degrees.
2. Performance data as tabulated is for supply air conditions. Correction factors for return air application - see next page.
3. Correction factors for round inlets - see next page.
4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

## PERFORMANCE DATA CORRECTIONS:

### MODEL 6400

#### CORRECTION FACTORS WITH SQUARE TO ROUND INLET ADAPTOR – TABLE 2

- Add the NC correction factor from Table 2 and the NC value listed in the performance tables.
- Multiply the correction factor from Table 2 by the listed total pressure in the performance tables.
- Multiply the correction factor from Table 2 by the listed throws in the performance tables.

#### Example:

12" x 12" unit with 10" round adaptor handling 500 cfm supply air. (Page D50).

- $NC = 23 + 7 = 30$
- Total Pressure =  $.08 \times 1.65 = 0.132$
- Throw =  $15 \times 1.15 = 17.25$  feet @ 50 fpm terminal velocity.

TABLE 2 Correction Factors for SR Adaptors

SQUARE INLET	ROUND INLET	NC (add)	TP (multiply)	THROW (multiply)		
				150	100	50
6 x 6	5	7	1.65	1.10	1.10	1.15
9 x 9	6	17	3.50	1.15	1.15	1.20
9 x 9	8	4	1.40	1.10	1.10	1.10
12 x 12	8	17	3.50	1.15	1.15	1.20
12 x 12	10	7	1.65	1.10	1.10	1.15
15 x 15	10	17	3.50	1.15	1.15	1.20
15 x 15	12	9	1.90	1.10	1.10	1.15
15 x 15	14	3	1.25	1.05	1.05	1.10
18 x 18	12	17	3.50	1.15	1.15	1.20
18 x 18	14	10	2.00	1.10	1.10	1.15
18 x 18	16	5	1.45	1.10	1.10	1.10
21 x 21	14	17	3.70	1.15	1.15	1.20
21 x 21	16	11	2.25	1.10	1.10	1.15
21 x 21	18	6	1.60	1.10	1.10	1.10
21 x 21	20	3	1.20	1.05	1.05	1.10
24 x 24	16	17	3.50	1.15	1.15	1.20
24 x 24	18	12	2.35	1.10	1.10	1.15
24 x 24	20	7	1.65	1.10	1.10	1.15

#### CORRECTION FACTORS FOR RETURN INLET

If the unit is used as a return inlet, the performance data is obtained by applying the return corrections, as follows:

- Add the NC correction at the left side of the table to the NC value listed in the performance table.
- Multiply the SP factor at the left side of the table by the total pressure (TP) listed at the top of the table.

#### Example:

12" x 12" unit handling 600 cfm of return air. (Page D50).

- Return NC =  $28 + 4 = 32$ .
- Return negative SP =  $1.3 \times (-.116) = -.151$ .

#### RECOMMENDED MAXIMUM AIRFLOW – TABLE 3

Diffuser mounting height and air temperature differential ( $\Delta T$ ) are both to be considered when selecting diffusers. As air travels from a diffuser, room air is entrained into the supply air stream and the delivery pattern thickens.

If the volume or throw requirement is too great, the lower part of the supply air stream can intrude into the occupied zone causing objectionable drafts. Consult Table 3 to verify selection.

TABLE 3 Maximum Recommended Airflow

CEILING HEIGHT (ft.)	MAX. AIRFLOW PER DIFFUSER (CFM)				MAX. REC. COOLING TEMP. DIFFERENTIAL $\Delta T$
	4-way	3-way	2-way (2A, 2B)	1-way & 2S	
7	400	300	200	100	15°F
8	600	450	300	150	20°F
9	1200	900	600	300	25°F
10	1800	1350	900	450	25°F
12	3200	2400	1600	800	30°F
14	4800	3600	2400	1200	30°F
16	6000	4500	3000	1500	30°F

## PERFORMANCE DATA:

### MODEL 6400 • SQUARE NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300		400		500		600		700		800		900	
			.006 .029		.010 .051		.016 .080		.022 .116		.031 .157		.040 .205		.050 .260	
6 x 6  .25 SQ. FT.	RETURN FACTORS —SP=1.1 TP NC + 1	CFM NC	75 —		100 10		125 17		150 22		175 26		200 31		225 35	
	4A	CFM/SIDE THROW, FT.	19 4-5-8		25 5-6-9		31 6-8-10		37 6-8-11		44 8-9-12		50 8-9-12		56 9-10-13	
	3A	CFM/SIDE THROW, FT.	19 28 4-5-8 5-8-11		25 38 5-6-9 6-9-12		31 47 6-8-10 8-10-14		37 56 6-8-11 8-11-15		44 66 8-9-12 9-12-16		50 75 8-9-12 9-12-17		56 85 9-10-13 10-13-18	
	2S  2G	CFM/SIDE THROW, FT.	37 8-9-12		50 9-10-14		62 10-11-16		75 11-12-17		88 12-13-18		100 12-14-19		113 13-15-22	
	1S	CFM/SIDE THROW, FT.	75 9-11-15		100 10-12-17		125 11-14-19		150 12-15-22		175 13-16-22		200 14-17-24		225 15-18-25	
9 x 9  .56 SQ. FT.	RETURN FACTORS —SP=1.2 TP NC + 2	CFM NC	170 —		225 14		280 20		340 26		395 31		450 35		505 38	
	4A	CFM/SIDE THROW, FT.	42 5-6-10		56 6-8-11		70 8-9-12		84 8-10-13		98 9-10-14		112 9-11-15		126 10-12-16	
	3A	CFM/SIDE THROW, FT.	42 63 5-6-10 8-10-13		56 85 6-8-11 9-11-15		70 106 8-9-12 10-12-17		84 127 8-10-13 11-13-18		98 148 9-10-14 12-14-19		112 169 9-11-15 12-15-22		126 190 10-12-16 13-16-22	
	2S  2G	CFM/SIDE THROW, FT.	84 9-10-15		112 11-13-18		141 12-15-20		169 13-16-22		197 14-17-23		225 15-18-25		253 16-19-28	
	1S	CFM/SIDE THROW, FT.	169 12-15-20		225 14-17-23		282 16-19-26		338 17-22-29		394 18-22-31		450 19-24-33		507 22-25-35	
12 x 12  1.0 SQ. FT.	RETURN FACTORS —SP=1.3 TP NC + 4	CFM NC	300 10		400 17		500 23		600 28		700 33		800 36		900 39	
	4A	CFM/SIDE THROW, FT.	75 6-9-11		100 8-10-13		125 9-11-15		150 10-12-16		175 10-13-17		200 11-14-18		225 12-15-19	
	3A	CFM/SIDE THROW, FT.	75 112 6-9-11 9-11-15		100 150 8-10-13 10-12-17		125 187 9-11-15 11-14-19		150 225 10-12-16 12-15-22		175 262 10-13-17 13-16-22		200 300 11-14-18 14-17-24		225 338 12-15-19 15-18-25	
	2S  2G	CFM/SIDE THROW, FT.	150 11-13-18		200 13-15-22		250 15-17-24		300 16-18-26		350 17-19-28		400 18-22-30		450 19-22-32	
	1S	CFM/SIDE THROW, FT.	300 14-17-24		400 16-19-28		500 18-22-32		600 19-23-34		700 22-25-36		800 23-27-38		900 24-29-41	
15 x 15  1.56 SQ. FT.	RETURN FACTORS —SP=1.8 TP NC + 4	CFM NC	465 10		625 19		780 25		935 30		1090 33		1250 38		1400 41	
	4A	CFM/SIDE THROW, FT.	117 8-10-13		156 9-11-15		195 10-12-17		234 11-13-18		273 12-14-19		312 12-15-22		350 13-16-24	
	3A	CFM/SIDE THROW, FT.	117 175 8-10-13 11-13-18		156 234 9-11-15 13-15-22		195 292 10-12-17 15-17-24		234 351 11-13-18 16-18-26		273 409 12-14-19 17-19-28		312 468 12-15-22 18-22-30		350 527 13-16-24 19-22-32	
	2S  2G	CFM/SIDE THROW, FT.	234 13-16-22		312 15-18-25		390 17-20-29		468 18-22-32		546 19-23-34		625 22-25-36		700 22-28-38	
	1S	CFM/SIDE THROW, FT.	467 16-19-28		625 18-22-32		780 20-25-36		935 22-28-39		1090 23-30-42		1250 25-32-44		1400 28-34-47	
18 x 18  2.25 SQ. FT.	RETURN FACTORS —SP=2.1 TP NC + 6	CFM NC	675 12		900 21		1125 27		1350 31		1575 36		1800 39		2025 42	
	4A	CFM/SIDE THROW, FT.	168 9-11-15		225 10-12-17		281 11-14-19		337 12-15-21		394 13-16-22		450 14-17-24		506 15-18-25	
	3A	CFM/SIDE THROW, FT.	168 253 9-11-15 12-15-20		225 338 10-12-17 14-17-23		281 422 11-14-19 16-19-26		337 506 12-15-21 17-22-29		394 590 13-16-22 18-22-31		450 675 14-17-24 19-24-33		506 760 15-18-25 22-25-35	
	2S  2G	CFM/SIDE THROW, FT.	337 14-17-24		450 16-19-28		562 18-22-32		675 19-23-34		787 22-25-36		900 22-26-39		1012 24-29-41	
	1S	CFM/SIDE THROW, FT.	675 17-22-30		900 20-24-34		1125 23-28-39		1350 24-30-41		1575 26-32-44		1800 29-35-47		2025 31-37-50	

For performance notes, see page D63.

D  
CEILING DIFFUSERS

## PERFORMANCE DATA:

### MODEL 6400 • SQUARE NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300		400		500		600		700		800		900	
			.006 .029		.010 .051		.016 .080		.022 .116		.031 .157		.040 .205		.050 .260	
21 x 21  3.06 SQ. FT.	RETURN FACTORS —SP=2.6 TP NC + 8	CFM NC	915 14		1225 22		1530 28		1835 32		2140 37		2450 40		2750 43	
	4A	CFM/SIDE THROW, FT.	230		306		382		460		535		612		688	
	3A	CFM/SIDE THROW, FT.	230	345	306	460	382	573	460	688	535	802	612	918	688	1030
	2S  2G	CFM/SIDE THROW, FT.	458		612		765		917		1070		1225		1375	
1S	CFM/SIDE THROW, FT.	917		1225		1530		1835		2140		2450		2750		
24 x 24  4.0 SQ. FT.	RETURN FACTORS —SP=2.7 TP NC + 8	CFM NC	1200 15		1600 23		2000 29		2400 33		2800 37		3200 41		3600 44	
	4A	CFM/SIDE THROW, FT.	300		400		500		600		700		800		900	
	3A	CFM/SIDE THROW, FT.	300	450	400	600	500	750	600	900	700	1050	800	1200	900	1350
	2S  2G	CFM/SIDE THROW, FT.	600		800		1000		1200		1400		1600		1800	
1S	CFM/SIDE THROW, FT.	1200		1600		2000		2400		2800		3200		3600		
30 x 30  6.25 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	1875 16		2500 24		3125 30		3750 35		4375 39		5000 42		5625 46	
	4A	CFM/SIDE THROW, FT.	469		625		782		937		1093		1250		1406	
	3A	CFM/SIDE THROW, FT.	469	703	625	938	782	1172	937	1405	1093	1640	1250	1875	1406	2110
	2S  2G	CFM/SIDE THROW, FT.	937		1250		1562		1875		2187		2500		2812	
1S	CFM/SIDE THROW, FT.	1875		2500		3125		3750		4375		5000		5625		
36 x 36  9.0 SQ. FT.	RETURN FACTORS —SP=3.6 TP NC + 9	CFM NC	2700 18		3600 25		4500 31		5400 36		6300 40		7200 44		8100 48	
	4A	CFM/SIDE THROW, FT.	675		900		1125		1350		1575		1800		2025	
	3A	CFM/SIDE THROW, FT.	675	1010	900	1350	1125	1687	1350	2025	1575	2362	1800	2700	2025	3038
	2S  2G	CFM/SIDE THROW, FT.	1350		1800		2250		2700		3150		3600		4050	
1S	CFM/SIDE THROW, FT.	2700		3600		4500		5400		6300		7200		8100		

For performance notes, see page D63.

## PERFORMANCE DATA:

### MODEL 6400 • RECTANGULAR NECK

NOMINAL NECK SIZE	BLOW PATTERNS	NECK VEL. VP TP	300	400	500	600	700	800	900	
			.006 .029	.010 .051	.016 .080	.022 .116	.031 .157	.040 .205	.050 .260	
36 x 24  6.0 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	1800 18	2400 25	3000 31	3600 36	4200 40	4800 43	5400 46	
	4B  4C	CFM/SIDE THROW, FT.	600 300 17-22-30 11-13-18	800 400 20-24-34 13-15-22	1000 500 23-28-39 15-17-24	1200 600 24-30-41 16-18-26	1400 700 26-32-44 17-19-28	1600 800 29-35-47 18-22-30	1800 900 31-37-50 19-22-32	
	4E	CFM/SIDE THROW, FT.	450 450 15-18-25 15-18-25	600 600 17-22-30 17-22-30	750 750 19-24-34 19-24-34	900 900 22-26-36 22-26-36	1050 1050 22-28-39 22-28-39	1200 1200 24-30-42 24-30-42	1350 1350 25-32-41 25-32-44	
	3A1	CFM/SIDE THROW, FT.	750 300 18-22-32 11-13-18	1000 400 22-25-36 13-15-22	1250 500 24-29-41 15-17-24	1500 600 26-32-44 16-18-26	1750 700 28-34-47 17-19-28	2000 800 30-36-50 18-22-30	2250 900 32-38-53 19-22-32	
	3A2	CFM/SIDE THROW, FT.	676 562 16-19-28 14-17-24	900 750 18-22-32 16-19-28	1125 937 20-25-36 18-22-32	1350 1125 22-28-39 19-23-34	1575 1312 23-30-42 22-25-36	1800 1500 25-32-44 22-26-39	2025 1687 28-34-47 24-29-41	
	2A	CFM/SIDE THROW, FT.	900 19-24-33	1200 22-28-38	1500 25-32-43	1800 28-34-46	2100 30-36-50	2400 32-39-53	2700 34-41-57	
	2B	CFM/SIDE THROW, FT.	900 19-24-33	1200 22-28-38	1500 25-32-43	1800 28-34-46	2100 30-36-50	2400 32-39-53	2700 34-41-57	
	2C  2D	CFM/SIDE THROW, FT.	1200 600 22-25-37 15-18-25	1600 800 24-30-42 17-22-30	2000 1000 28-34-48 19-24-34	2400 1200 30-36-51 22-26-36	2800 1400 32-39-56 22-28-39	3200 1600 34-42-58 24-30-42	3600 1800 37-44-63 25-32-44	
	2E	CFM/SIDE THROW, FT.	1200 600 22-25-37 15-18-25	1600 800 24-30-42 17-22-30	2000 1000 28-34-48 19-24-34	2400 1200 30-36-51 22-26-36	2800 1400 32-39-56 22-28-39	3200 1600 34-42-58 24-30-42	3600 1800 37-44-63 25-32-44	
	1A	CFM/SIDE THROW, FT.	1800 24-30-41	2400 28-34-47	3000 32-39-53	3600 34-41-58	4200 36-44-62	4800 39-47-67	5400 41-50-72	
	1B	CFM/SIDE THROW, FT.	1800 24-30-41	2400 28-34-47	3000 32-39-53	3600 34-41-58	4200 36-44-62	4800 39-47-67	5400 41-50-72	
	36 x 30  7.5 SQ. FT.	RETURN FACTORS —SP=3.4 TP NC + 8	CFM NC	2250 19	3000 26	3750 32	4500 37	5250 41	6000 44	6750 47
		4B  4C	CFM/SIDE THROW, FT.	657 468 17-22-30 12-15-20	875 625 20-24-34 14-17-23	1093 782 23-28-39 16-19-26	1313 937 24-30-41 17-22-29	1532 1093 26-32-44 18-22-31	1750 1250 29-35-47 19-24-33	1969 1406 31-37-50 22-25-35
		3A1	CFM/SIDE THROW, FT.	890 468 19-24-33 12-15-20	1187 625 22-28-38 14-17-23	1484 782 25-32-43 16-19-26	1781 937 28-34-46 17-22-29	2078 1093 30-36-50 18-22-31	2375 1250 32-39-53 19-24-33	2672 1406 34-41-57 22-25-35
3A2		CFM/SIDE THROW, FT.	787 675 18-22-32 13-16-22	1050 900 22-25-36 15-18-25	1312 1125 24-29-41 17-20-29	1575 1350 26-32-44 18-22-32	1837 1575 28-34-47 19-23-34	2100 1800 30-36-50 22-25-36	2362 2025 32-38-53 22-28-38	
2A		CFM/SIDE THROW, FT.	1125 20-25-35	1500 23-29-40	1875 26-33-45	2250 29-35-49	2625 31-38-52	3000 33-40-57	3375 35-43-60	
2B		CFM/SIDE THROW, FT.	1125 20-25-35	1500 23-29-40	1875 26-33-45	2250 29-35-49	2625 31-38-52	3000 33-40-57	3375 35-43-60	
2C  2D		CFM/SIDE THROW, FT.	1312 938 22-25-37 17-22-30	1750 1250 24-30-42 20-24-34	2188 1562 28-34-48 23-28-39	2625 1875 30-36-51 24-30-41	3063 2187 32-39-56 26-32-44	3500 2500 34-42-58 29-35-47	3938 2812 37-44-63 31-37-50	
2E	CFM/SIDE THROW, FT.	1312 938 22-25-37 17-22-30	1750 1250 24-30-42 20-24-34	2188 1562 28-34-48 23-28-39	2625 1875 30-36-51 24-30-41	3063 2187 32-39-56 26-32-44	3500 2500 34-42-58 29-35-47	3938 2812 37-44-63 31-37-50		
1A	CFM/SIDE THROW, FT.	2250 24-30-41	3000 28-34-47	3750 32-39-53	4500 34-41-58	5250 36-44-62	6000 39-47-67	6750 41-50-72		
1B	CFM/SIDE THROW, FT.	2250 24-30-41	3000 28-34-47	3750 32-39-53	4500 34-41-58	5250 36-44-62	6000 39-47-67	6750 41-50-72		

#### Notes:

1. Core style 4E is sized to give equal flow as near as possible in directions A and B.
2. For core styles 1A, 1B, 2A and 2B, the "A" direction is shown. Throw correction factor for "B" direction is:  $A \times .82 = B$ .

- CFM** - cubic feet per minute  
**VP** - velocity pressure - inches w.g.  
**TP** - total pressure - inches w.g.  
**T** - throw in feet  
**NC** - Noise Criteria (values) based on 10 dB room absorption, re  $10^{-12}$  watts.  
**Neck Velocity** - feet per minute

#### Performance Notes:

1. Throw values are given for terminal velocities of 150, 100 and 50 fpm under isothermal conditions. Data applies to ceiling mounted units when the maximum coanda effect applies. When no ceiling is present (exposed duct), throws are reduced by approximately 30% with a downward projection of approximately 30 degrees.
2. Performance data as tabulated is for supply air conditions. Correction factors for return air application - see next page.
3. Correction factors for round inlets - see next page.
4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.

## PERFORMANCE DATA CORRECTIONS:

### MODEL 6400

#### CORRECTION FACTORS WITH SQUARE TO ROUND INLET ADAPTOR – TABLE 2

- Add the NC correction factor from Table 2 and the NC value listed in the performance tables.
- Multiply the correction factor from Table 2 by the listed total pressure in the performance tables.
- Multiply the correction factor from Table 2 by the listed throws in the performance tables.

#### Example:

12" x 12" unit with 10" round adaptor handling 500 cfm supply air. (Page D50).

- $NC = 23 + 7 = 30$
- Total Pressure =  $.08 \times 1.65 = 0.132$
- Throw =  $15 \times 1.15 = 17.25$  feet @ 50 fpm terminal velocity.

TABLE 2 Correction Factors for SR Adaptors

SQUARE INLET	ROUND INLET	NC (add)	TP (multiply)	THROW (multiply)		
				150	100	50
6 x 6	5	7	1.65	1.10	1.10	1.15
9 x 9	6	17	3.50	1.15	1.15	1.20
9 x 9	8	4	1.40	1.10	1.10	1.10
12 x 12	8	17	3.50	1.15	1.15	1.20
12 x 12	10	7	1.65	1.10	1.10	1.15
15 x 15	10	17	3.50	1.15	1.15	1.20
15 x 15	12	9	1.90	1.10	1.10	1.15
15 x 15	14	3	1.25	1.05	1.05	1.10
18 x 18	12	17	3.50	1.15	1.15	1.20
18 x 18	14	10	2.00	1.10	1.10	1.15
18 x 18	16	5	1.45	1.10	1.10	1.10
21 x 21	14	17	3.70	1.15	1.15	1.20
21 x 21	16	11	2.25	1.10	1.10	1.15
21 x 21	18	6	1.60	1.10	1.10	1.10
21 x 21	20	3	1.20	1.05	1.05	1.10
24 x 24	16	17	3.50	1.15	1.15	1.20
24 x 24	18	12	2.35	1.10	1.10	1.15
24 x 24	20	7	1.65	1.10	1.10	1.15

#### CORRECTION FACTORS FOR RETURN INLET

If the unit is used as a return inlet, the performance data is obtained by applying the return corrections, as follows:

- Add the NC correction at the left side of the table to the NC value listed in the performance table.
- Multiply the SP factor at the left side of the table by the total pressure (TP) listed at the top of the table.

#### Example:

12" x 12" unit handling 600 cfm of return air. (Page D50).

- Return NC =  $28 + 4 = 32$ .
- Return negative SP =  $1.3 \times (-.116) = -.151$ .

#### RECOMMENDED MAXIMUM AIRFLOW – TABLE 3

Diffuser mounting height and air temperature differential ( $\Delta T$ ) are both to be considered when selecting diffusers. As air travels from a diffuser, room air is entrained into the supply air stream and the delivery pattern thickens.

If the volume or throw requirement is too great, the lower part of the supply air stream can intrude into the occupied zone causing objectionable drafts. Consult Table 3 to verify selection.

TABLE 3 Maximum Recommended Airflow

CEILING HEIGHT (ft.)	MAX. AIRFLOW PER DIFFUSER (CFM)				MAX. REC. COOLING TEMP. DIFFERENTIAL $\Delta T$
	4-way	3-way	2-way (2A, 2B)	1-way & 2S	
7	400	300	200	100	15°F
8	600	450	300	150	20°F
9	1200	900	600	300	25°F
10	1800	1350	900	450	25°F
12	3200	2400	1600	800	30°F
14	4800	3600	2400	1200	30°F
16	6000	4500	3000	1500	30°F