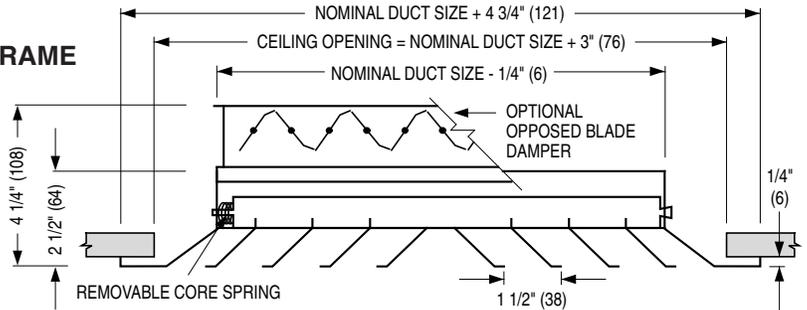




**PATTERN CEILING DIFFUSERS**  
**STEEL • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6500 AND 6500-O TYPES S & B**

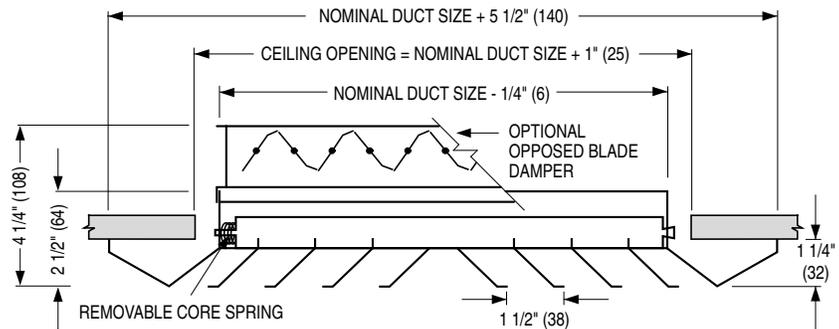
**TYPE S • SURFACE MOUNT • FLAT FRAME**

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 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: Corrosion-resistant steel.
2. Model 6500 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 6500-O.

**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:**

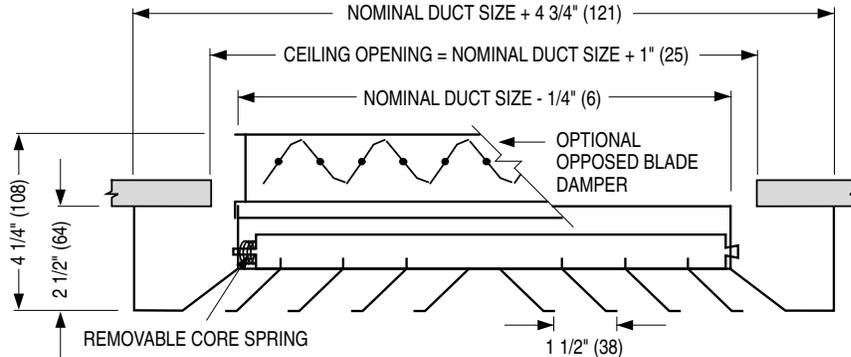
SP Special. Specify \_\_\_\_\_.

<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	6500	5 - 11 - 15	6500-1



**PATTERN CEILING DIFFUSERS**  
**STEEL • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6500 AND 6500-O TYPE D**

**TYPE D DEEP DROP FACE**



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 ↓ (A is greater than B)	<input type="checkbox"/> 3A2 A → B ↓ (B is less than A but greater than A/2)
		<input type="checkbox"/> 3B A → B ↓ (B is equal to A/2)	<input type="checkbox"/> 3E A → B ↓ (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: Corrosion-resistant steel.
2. Model 6500 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 6500-O.

**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:**

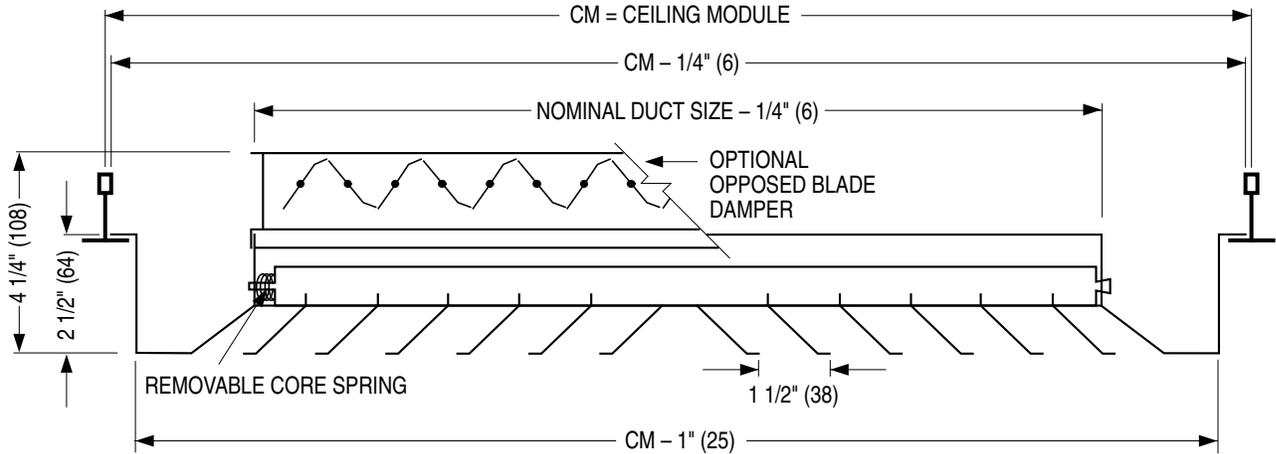
SP Special. Specify \_\_\_\_\_ .

<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	6500	5 - 11 - 15	6500-2	

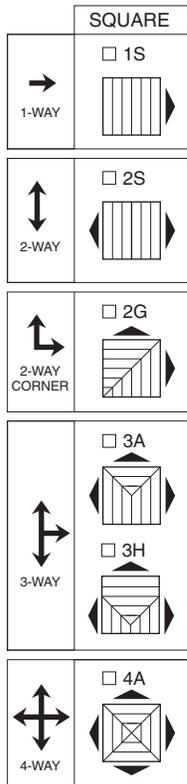


**PATTERN CEILING DIFFUSER**  
**STEEL • SQUARE OR ROUND NECK**  
**MODELS: 6500 AND 6500-O TYPE DL**

**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 24	42 x 18	1219 x 610	1067 x 457	1200 x 600	1067 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: Corrosion-resistant steel.
2. Model 6500 is a high capacity louvered 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 Type DL dropped face outer frame has been designed especially for exposed grid T-Bar ceiling systems. It provides an architecturally pleasing appearance and reduces ceiling smudging.
3. Spring-loaded removable core.
4. Standard finish is AW Appliance White.

**OPTIONS:**

**SQUARE AND RECTANGULAR NECK**

Steel opposed blade damper. Model 6500-O.

**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:**

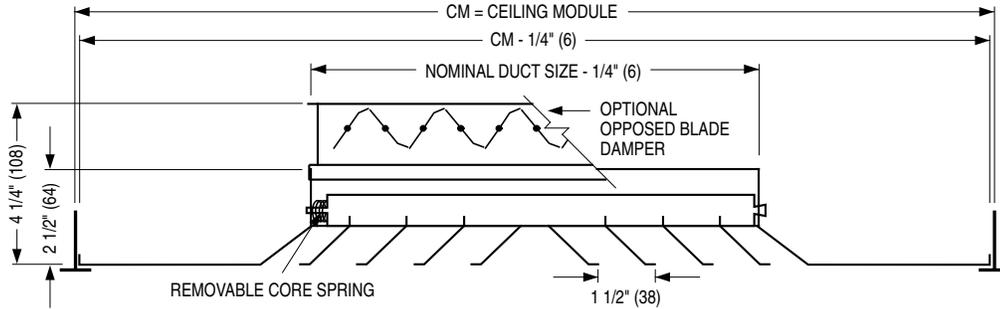
SP Special. Specify \_\_\_\_\_ .

<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	6500	3 - 1 - 16	6500-2A



**PATTERN CEILING DIFFUSERS**  
**STEEL • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6500 AND 6500-O TYPE L**

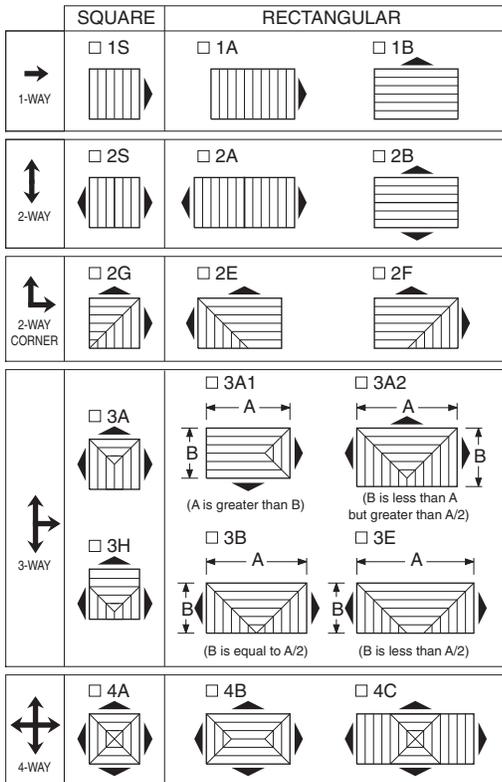
**TYPE L LAY-IN T-BAR**



If the ceiling module is not 3" (76) or 6" (152) larger than the neck size of the diffuser in both dimensions, a 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: Corrosion-resistant steel.
2. Model 6500 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 6500-O.

**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:**

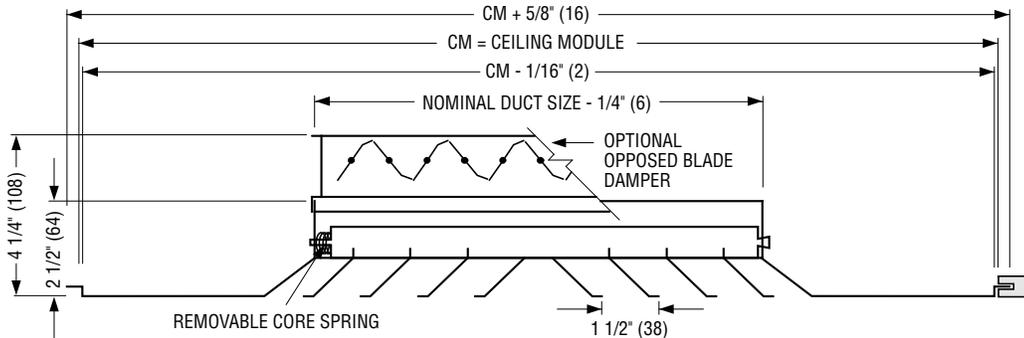
SP Special. Specify \_\_\_\_\_.

<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>	2 - 8 - 18	6500	1 - 16 - 17	6500-3



**PATTERN CEILING DIFFUSERS**  
**STEEL • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6500 AND 6500-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 module sized extended panel will be added.

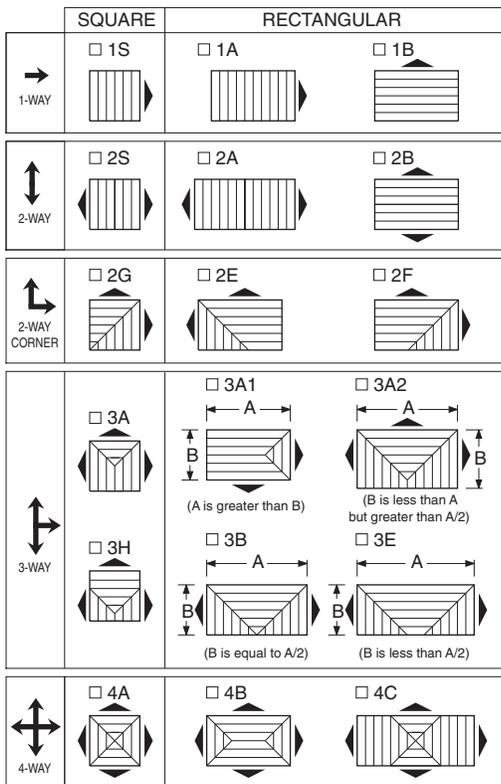
Minimum duct size: 6 x 6 (152 x 152).

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).

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: Corrosion-resistant steel.
2. Model 6500 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 6500-O.

**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 \_\_\_\_\_ .

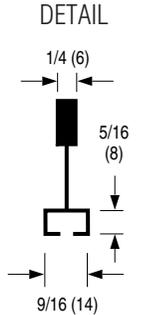
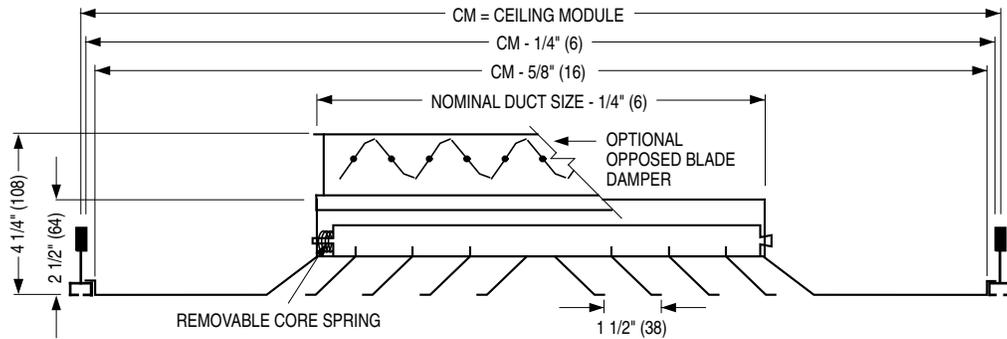
<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6500	11 - 24 - 16	6500-4



**PATTERN CEILING DIFFUSERS**  
**STEEL • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6500 AND 6500-O TYPE F**

**FOR FINELINE® TYPE CEILING SYSTEMS**

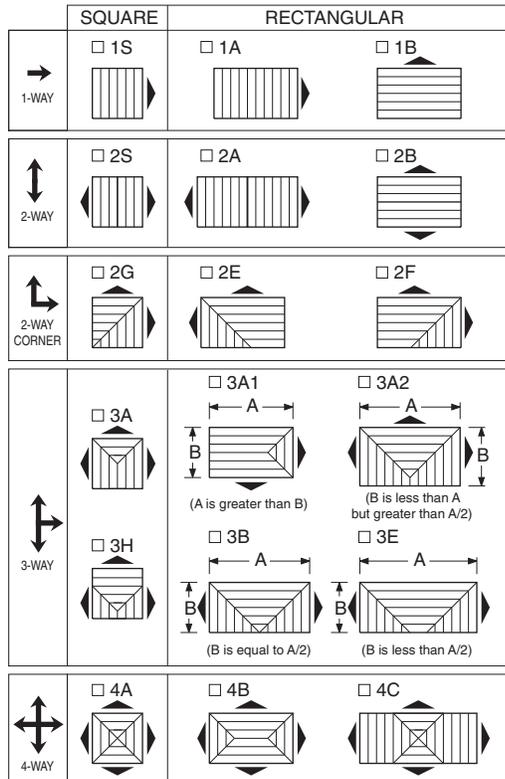
**TYPE F FINELINE® T-BAR**



The diffuser is supplied in a module size 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: Corrosion-resistant steel.
2. Model 6500 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 6500-O.

**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 Interiors Inc..

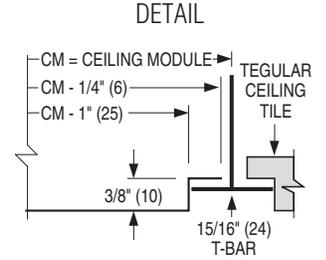
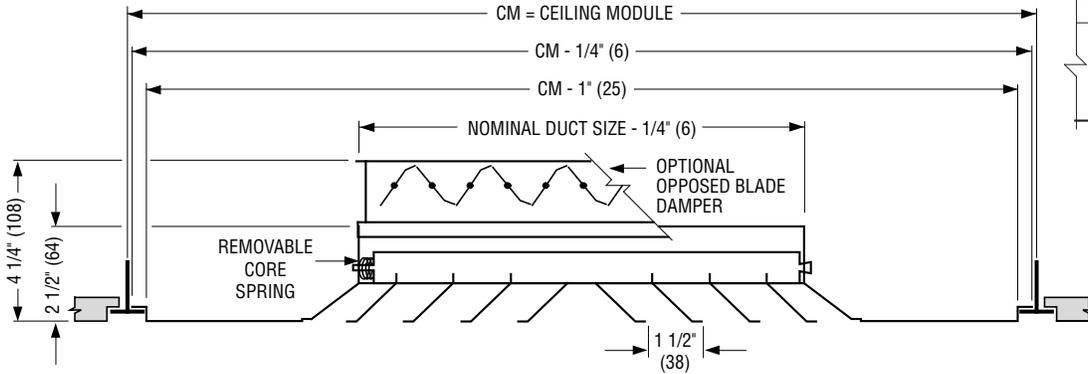
Dimensions are in inches (mm).

<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	6500	8 - 17 - 16	6500-5



**PATTERN CEILING DIFFUSERS**  
**STEEL • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6500 AND 6500-O TYPE TL**

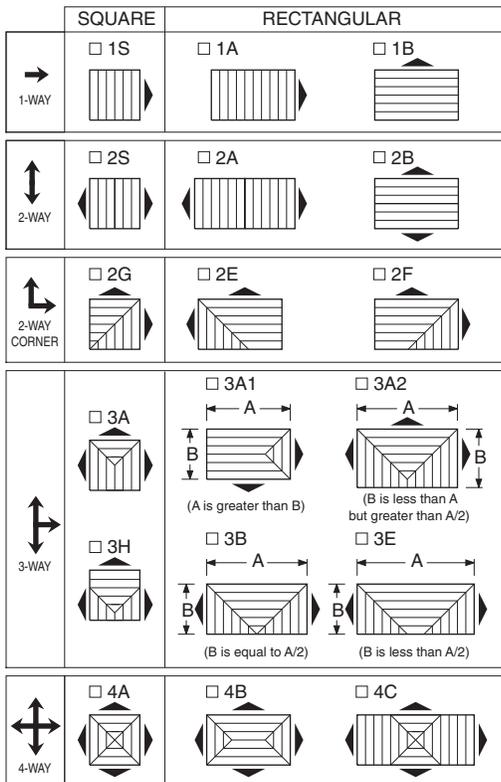
**TYPE TL**  
**REGULAR LAY-IN**



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: Corrosion-resistant steel.
2. Model 6500 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:**

**SQUARE AND RECTANGULAR NECK**

- Steel opposed blade damper. Model 6500-O.

**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:**

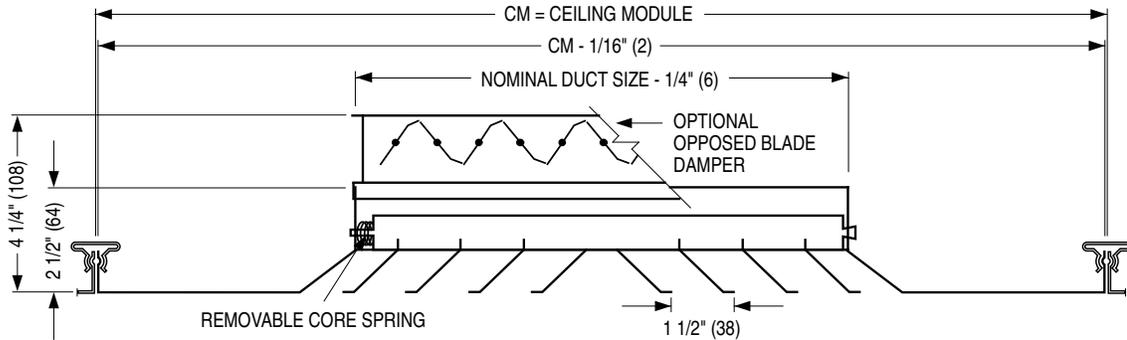
- SP Special. Specify \_\_\_\_\_.

<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	6500	8 - 17 - 16	6500-6



**PATTERN CEILING DIFFUSERS**  
**STEEL • SQUARE, RECTANGULAR OR**  
**ROUND NECK**  
**MODELS: 6500 AND 6500-O TYPE M**

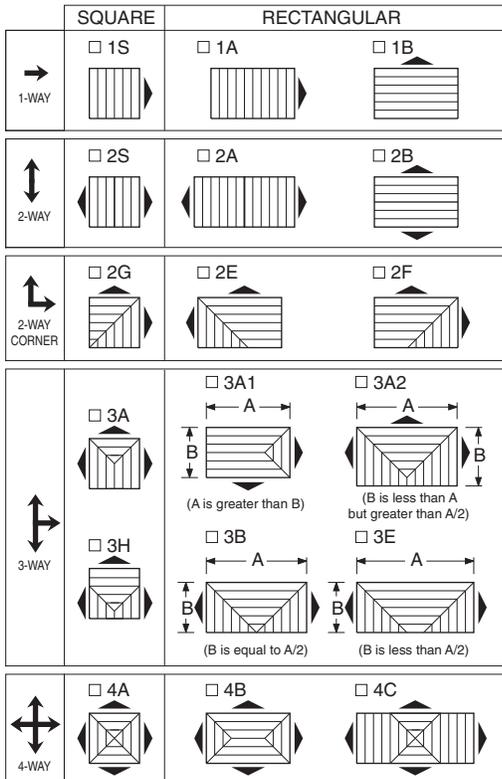
**TYPE M METAL PAN (SNAP-IN)**



If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a 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: Corrosion-resistant steel.
2. Model 6500 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 6500-O.

**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

6500

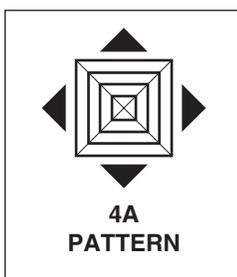
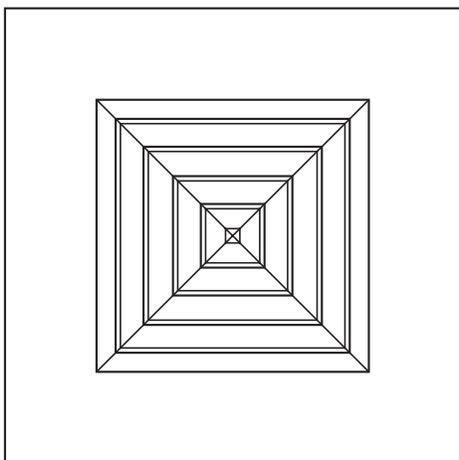
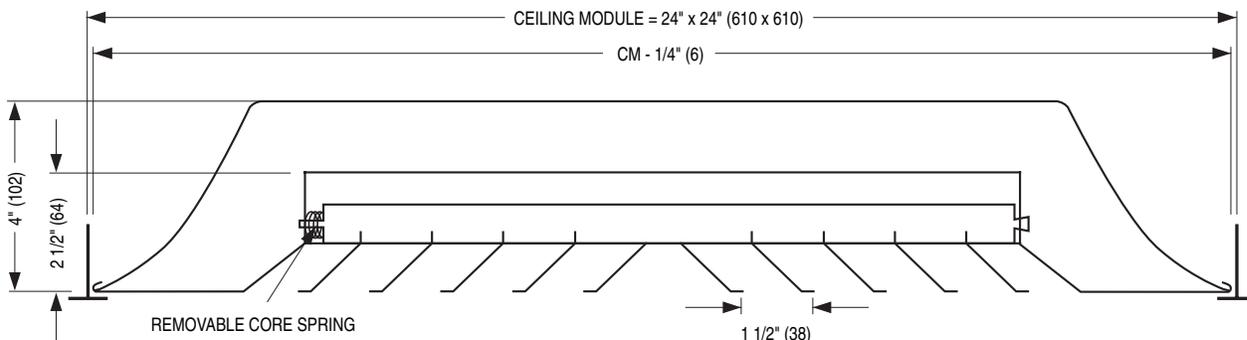
11 - 24 - 16

6500-7



**PATTERN CEILING DIFFUSER**  
**STEEL LOUVERED FACE • FIBERGLASS**  
**PLENUM • 24" x 24" MODULE FOR T-BAR CEILINGS**  
**MODEL: 6500FP TYPE L**

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



**DESCRIPTION:**

1. Corrosion-resistant steel diffuser face and core assembly. One piece molded fiberglass backpan with foil back vapour barrier. 6.0 R-value.
2. Model 6500FP is a high capacity ceiling diffuser with a 4-way blow pattern that provides a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
3. Spring-loaded 15" x 15" (381 x 381) removable core.
4. Pre-scored plenum for 6", 8", 10", 12", 14" or 15" (152, 203, 254, 305, 356 or 381) dia. spin-in or tab lock inlet collar (by others).
5. Standard finish is AW Appliance White.

**ACCESSORIES (OPTIONAL):**

- 4275 Radial Opposed Blade Damper.
  - 4250 Radial Sliding Blade Damper.
- Finish
- SP Special. Specify \_\_\_\_\_ .

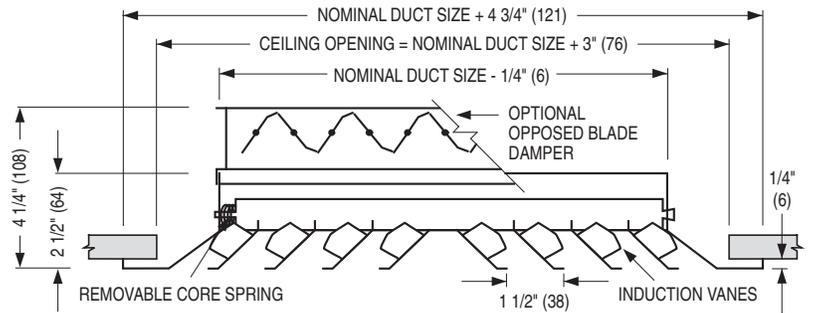
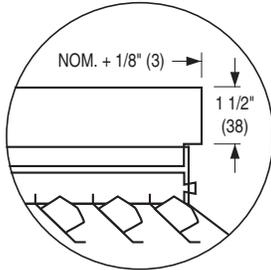
<b>SCHEDULE TYPE:</b>
<b>PROJECT:</b>
<b>ENGINEER:</b>
<b>CONTRACTOR:</b>

Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
3 - 12 - 10	6500FP	NEW	6500FP-1

**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
STEEL • SQUARE, RECTANGULAR OR ROUND NECK  
MODELS: 6500IV AND 6500IV-O TYPES S & B

**OFFSET NECK OPTION**

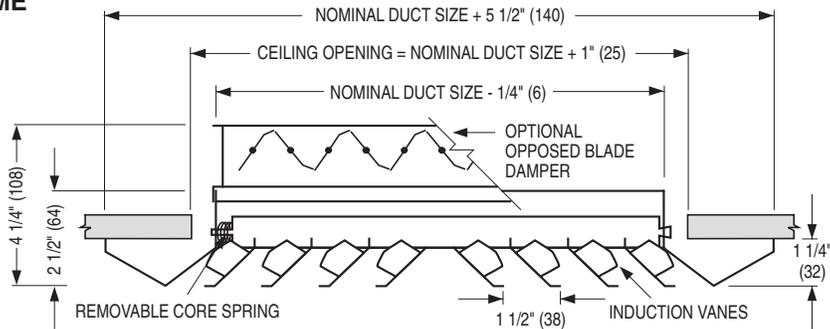


**TYPE S • SURFACE MOUNT • FLAT FRAME**

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 is greater than B)	<input type="checkbox"/> 3A2 (B is less than A but greater than A/2)
		<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: Corrosion-resistant steel.
2. Model 6500IV 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 6500IV-O.
- 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 \_\_\_\_\_.

Dimensions are in inches (mm).

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

**DATE**

**B SERIES**

**SUPERSEDES**

**DRAWING NO.**

11 - 24 - 16

6500

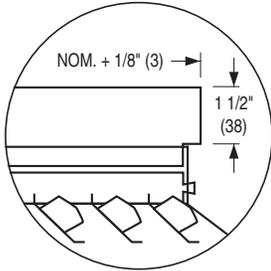
2 - 12 - 16

6500IV-1

## PATTERN CEILING DIFFUSERS WITH IV INDUCTION VANES

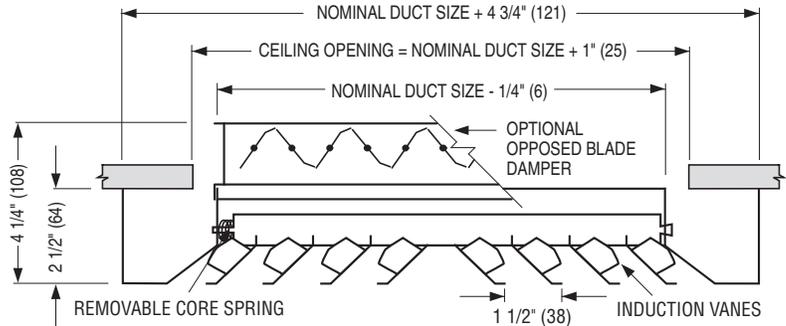
STEEL • SQUARE, RECTANGULAR OR ROUND NECK  
MODELS: 6500IV AND 6500IV-O TYPE D

### OFFSET NECK OPTION



### TYPE D • DEEP DROP FACE

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: Corrosion-resistant steel.
2. Model 6500IV 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 6500IV-O.
- 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

6500

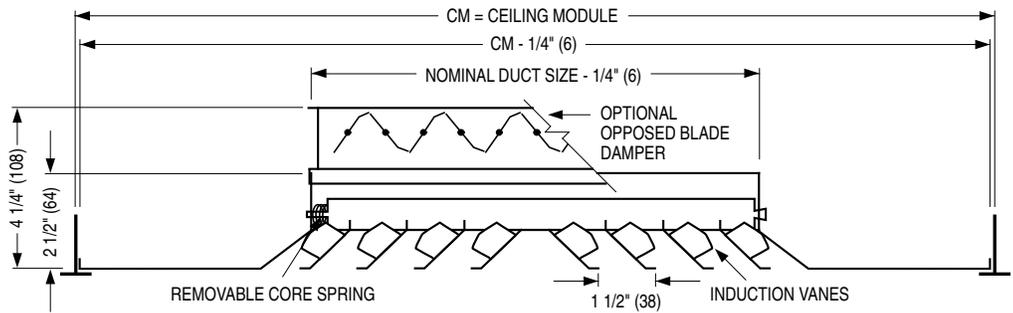
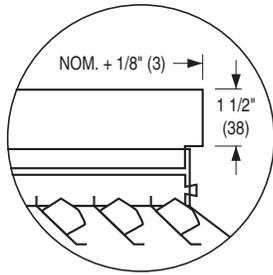
2 - 12 - 16

6500IV-2



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
STEEL • SQUARE, RECTANGULAR OR ROUND NECK  
MODELS: 6500IV AND 6500IV-O TYPE L

**OFFSET NECK OPTION**

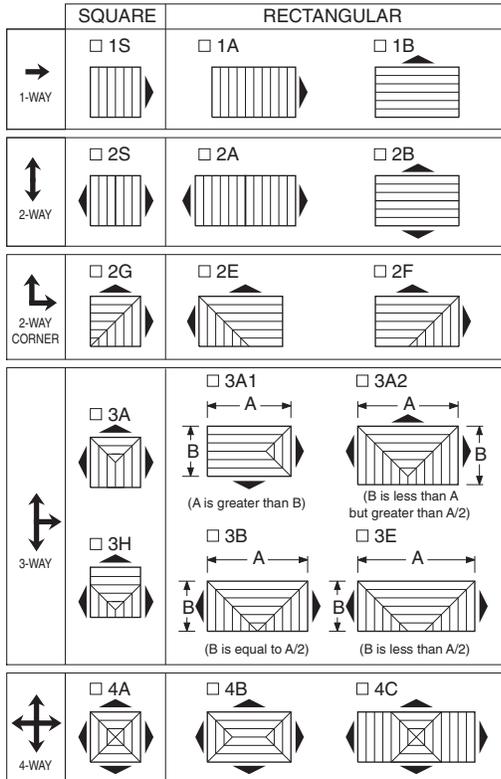


**TYPE L • LAY-IN T-BAR**

If the ceiling module is not 3" (76) or 6" (152) larger than the neck size of the diffuser in both dimensions, a 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: Corrosion-resistant steel.
2. Model 6500IV 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 6500IV-O.
- 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' 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 \_\_\_\_\_ .

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

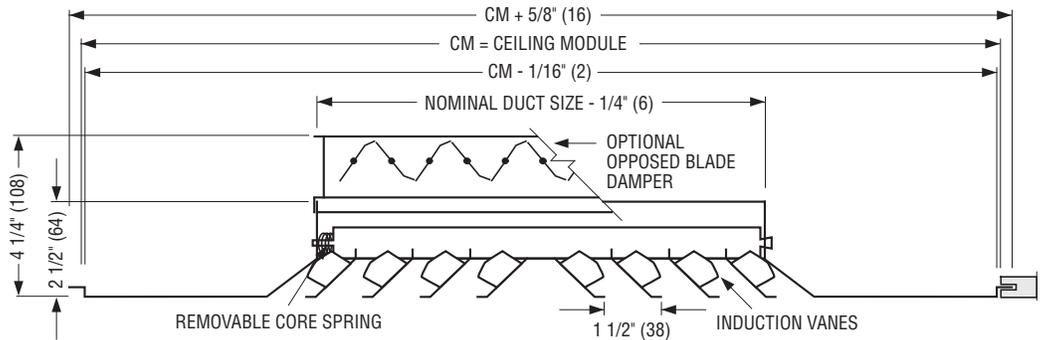
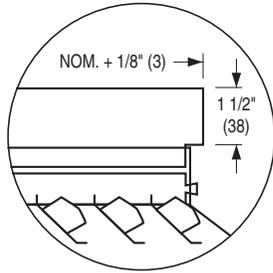
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 8 - 18	6500	1 - 16 - 17	6500IV-3



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
STEEL • SQUARE, RECTANGULAR OR ROUND NECK  
MODELS: 6500IV AND 6500IV-O TYPE SP

**OFFSET NECK OPTION**

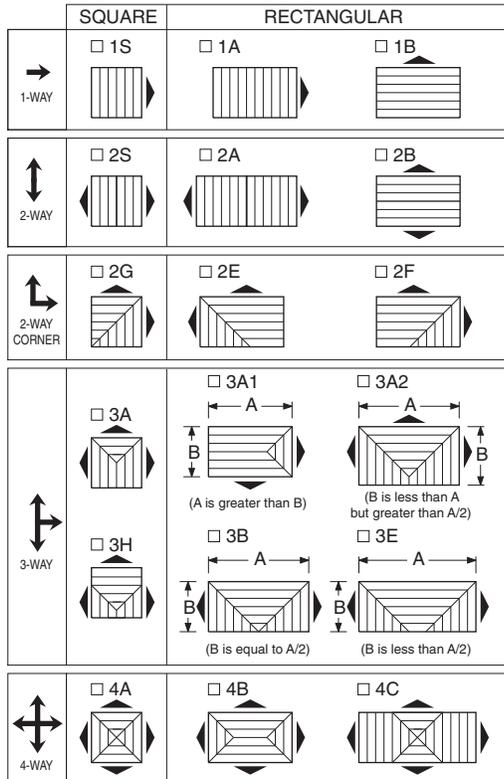


**TYPE SP • SPLINE**

If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a 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: Corrosion-resistant steel.
2. Model 6500IV 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 6500IV-O.
- 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.

**OPTIONAL FINISH:**

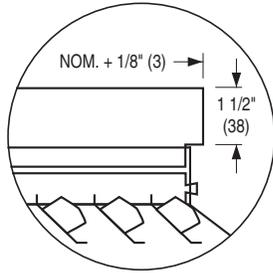
- SP Special. Specify \_\_\_\_\_.

<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	6500	11 - 24 - 16	6500IV-4

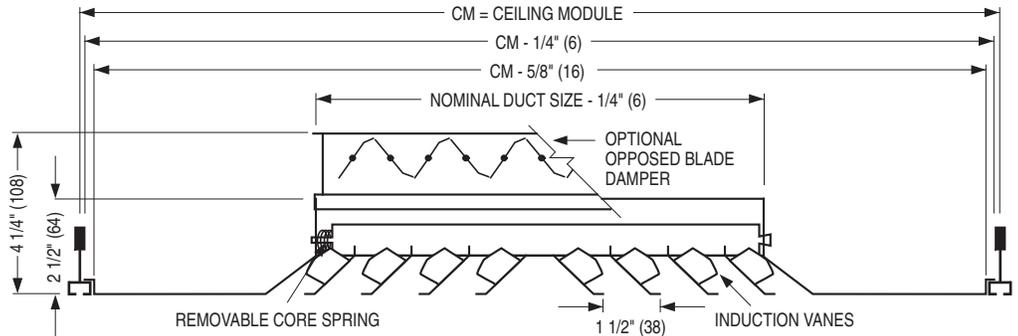


**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
STEEL • SQUARE, RECTANGULAR OR ROUND NECK  
MODELS: 6500IV AND 6500IV-O TYPE F

**OFFSET NECK OPTION**

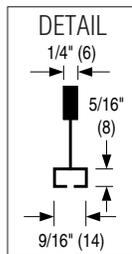


**FOR FINELINE® TYPE CEILING SYSTEMS**



**TYPE F • FINELINE® T-BAR**

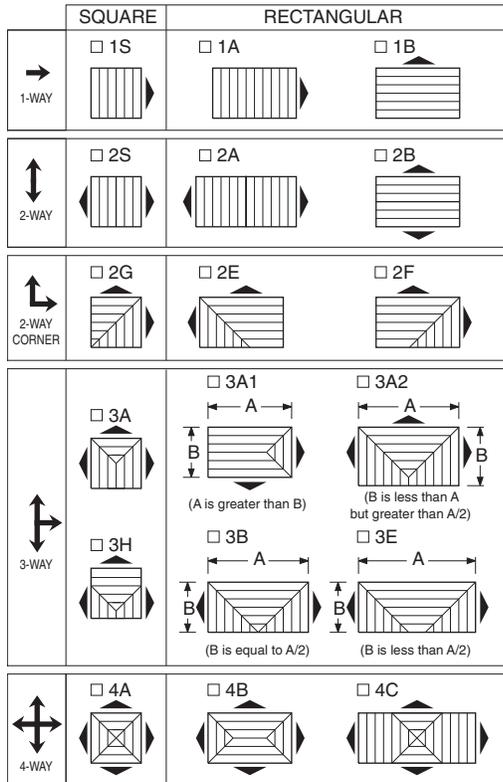
If the ceiling module is not 3" (76) larger than the neck size of the diffuser in both dimensions, a module sized extended panel will be added.  
Minimum duct size: 6 x 6 (152 x 152)  
Maximum duct size: see table.  
Available in 3" (76) increments only.



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

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: Corrosion-resistant steel.
2. Model 6500IV 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 6500IV-O.
- 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' 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 \_\_\_\_\_.

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Dimensions are in inches (mm).

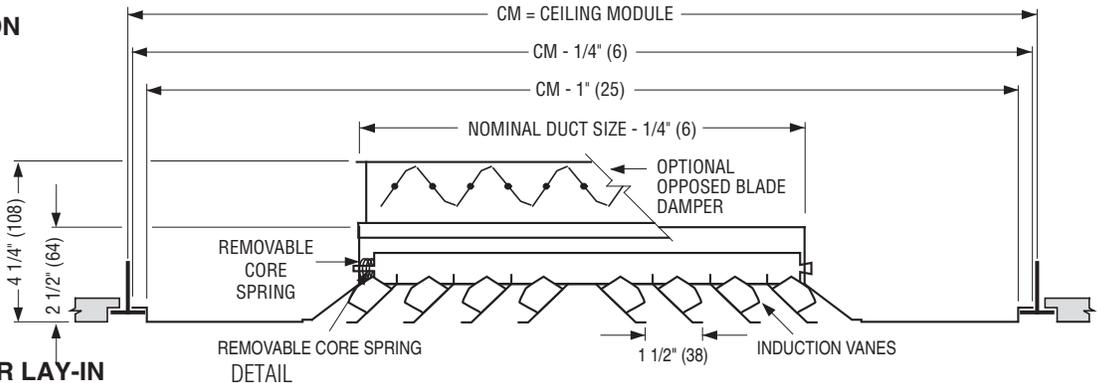
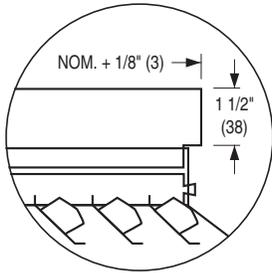
DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 8 - 18	6500	1 - 16 - 17	6500IV-5



# PATTERN CEILING DIFFUSERS WITH IV INDUCTION VANES

STEEL • SQUARE, RECT. OR ROUND NECK  
MODELS: 6500IV AND 6500IV-O TYPE TL

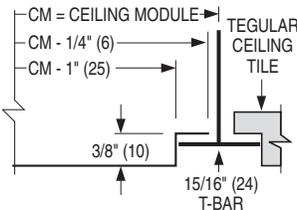
## OFFSET NECK OPTION



### TYPE TL • TEGULAR LAY-IN

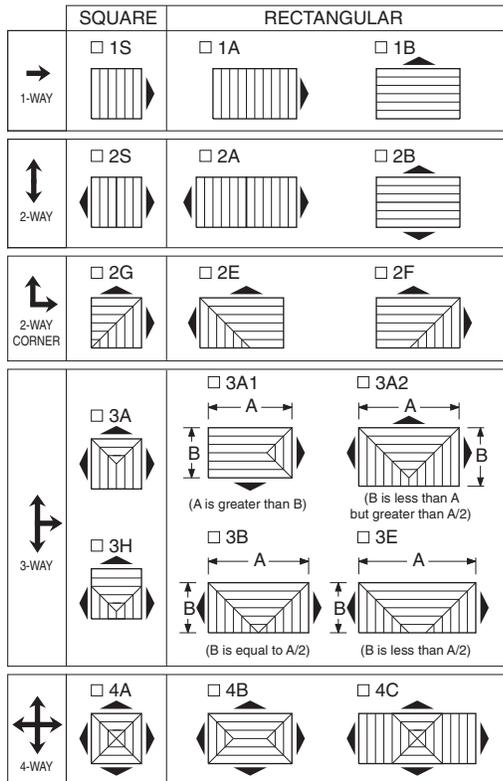
The diffuser is supplied in a module sized extended panel which drops the diffuser face below the T-bar so that it is flush with the tegular ceiling panels.

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: Corrosion-resistant steel.
2. Model 6500IV 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 6500IV-O.
- 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' 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 \_\_\_\_\_.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

1 - 16 - 17

6500

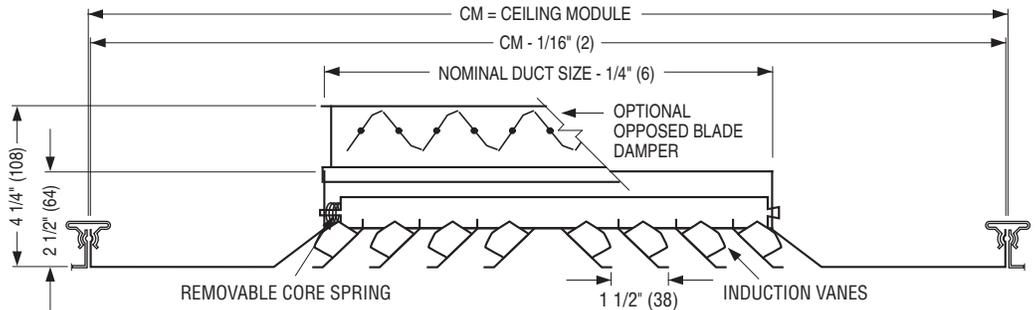
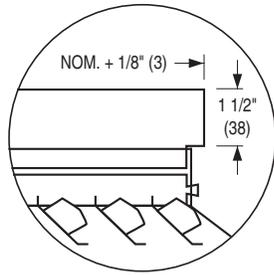
2 - 12 - 16

6500IV-6



**PATTERN CEILING DIFFUSERS  
WITH IV INDUCTION VANES**  
STEEL • SQUARE, RECTANGULAR OR ROUND NECK  
MODELS: 6500IV AND 6500IV-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 module sized extended panel will be added.

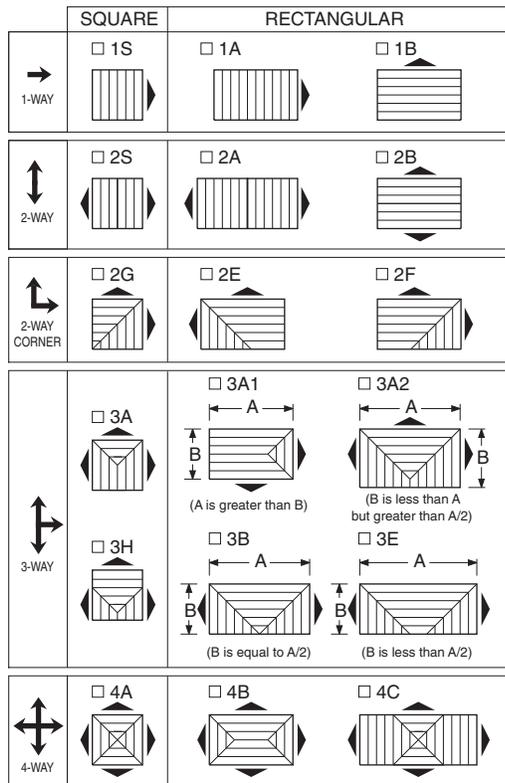
Minimum duct size: 6 x 6 (152 x 152)

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: Corrosion-resistant steel.
2. Model 6500IV 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 6500IV-O.
- 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.

**OPTIONAL FINISH:**

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

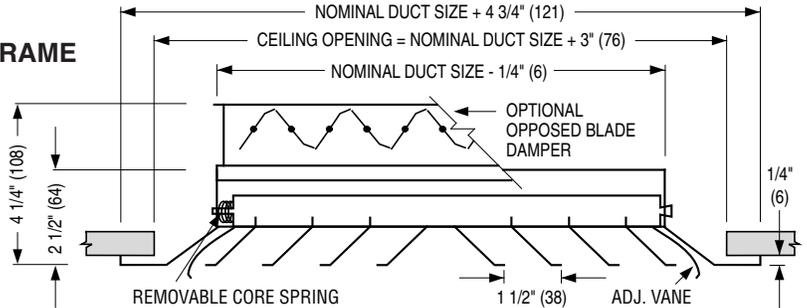
<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6500	11 - 24 - 16	6500IV-7



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • STEEL**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6550 AND 6550-O TYPES S & B**

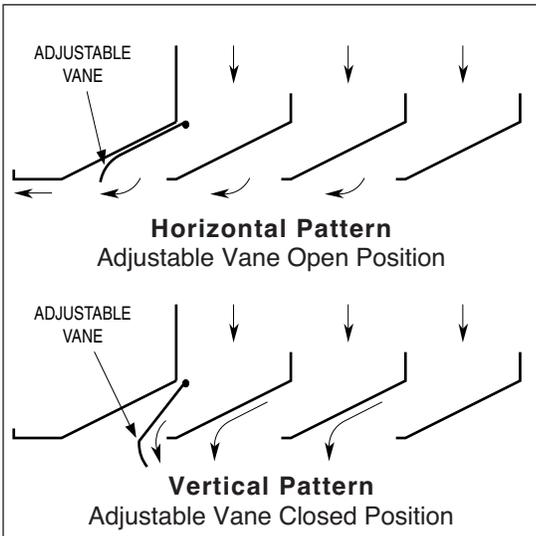
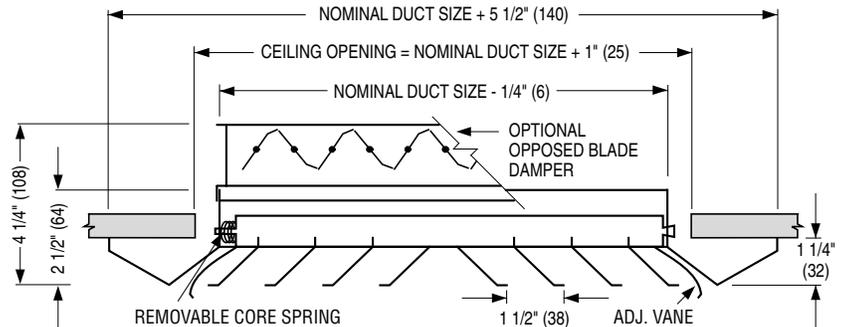
**TYPE S • SURFACE MOUNT • FLAT FRAME**

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: Corrosion-resistant steel.
2. Model 6550 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 6550-O.

**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:**

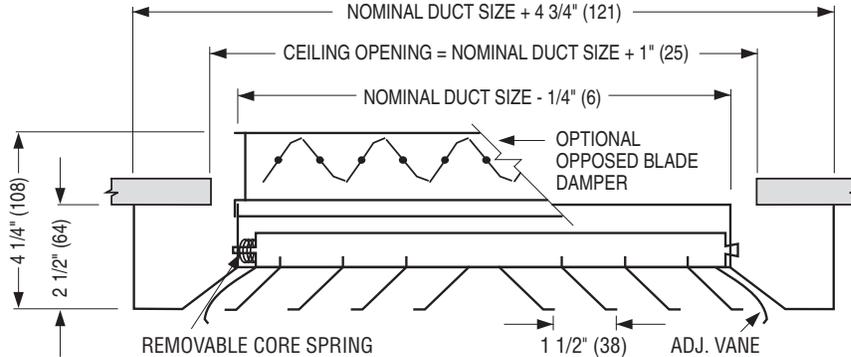
SP Special. Specify \_\_\_\_\_.

<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	6550	5 - 11 - 15	6550-1	



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • STEEL**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6550 AND 6550-O TYPE D**

**TYPE D DEEP DROP FACE**



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: Corrosion-resistant steel.
2. Model 6550 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 6550-O.

**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:**

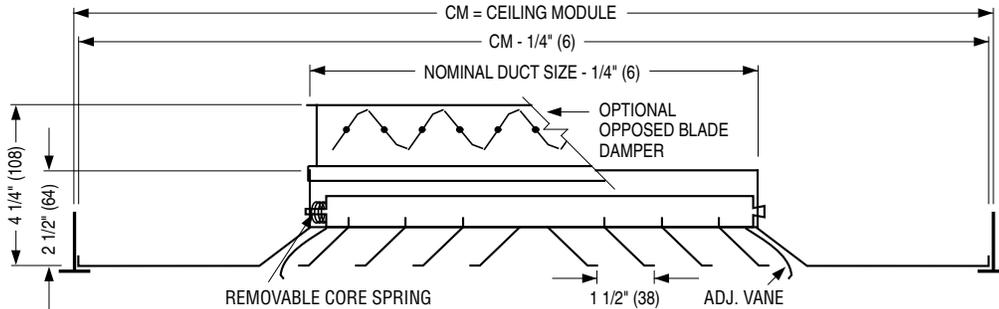
SP Special. Specify \_\_\_\_\_.

<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	6550	5 - 11 - 15	6550-2	



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • STEEL**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6550 AND 6550-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 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: Corrosion-resistant steel.
2. Model 6550 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 6550-O.

**ROUND NECK**

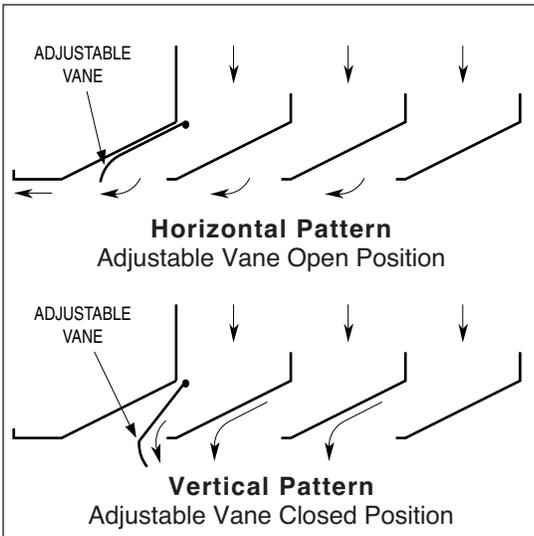
- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**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 \_\_\_\_\_ .



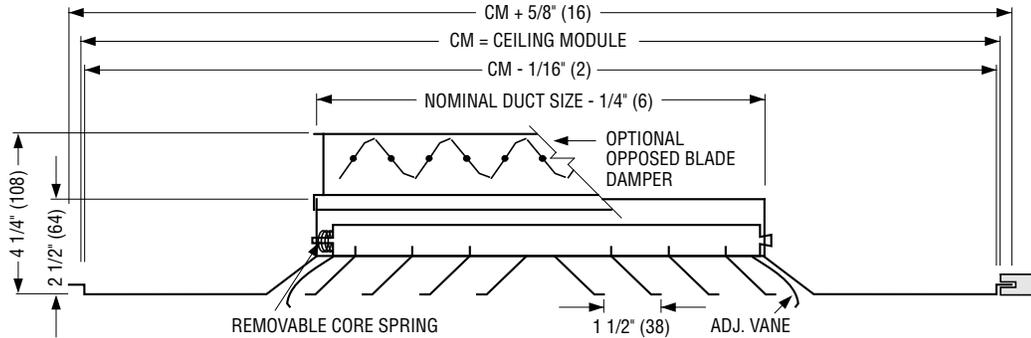
Dimensions are in inches (mm).

<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	6550	1 - 16 - 17	6550-3



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • STEEL**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6550 AND 6550-O TYPE SP**

**TYPE SP SPLINE**



The diffuser is supplied in a 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: Corrosion-resistant steel.
2. Model 6550 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 6550-O.

**ROUND NECK**

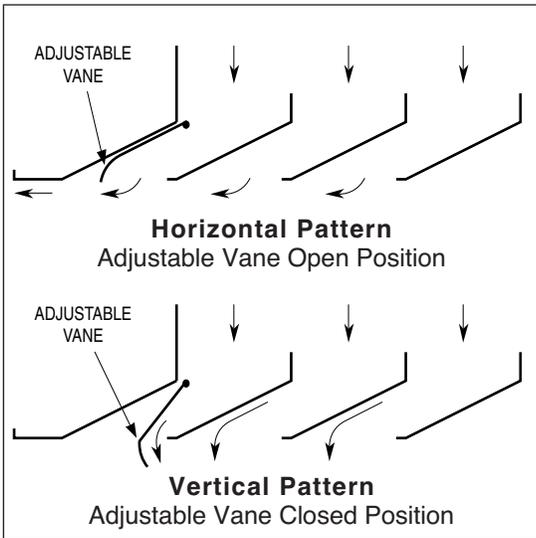
- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**EXTERNAL INSULATION**

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

**OPTIONAL FINISH:**

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



<b>SCHEDULE TYPE:</b>	
<b>PROJECT:</b>	
<b>ENGINEER:</b>	
<b>CONTRACTOR:</b>	

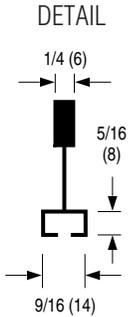
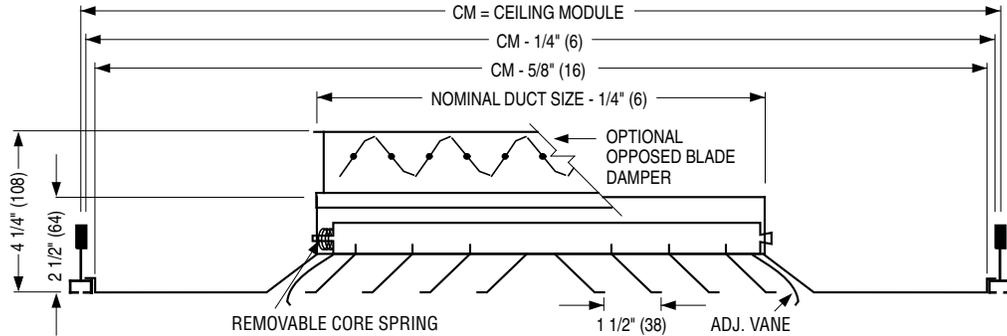
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
11 - 24 - 16	6550	5 - 11 - 15	6550-4



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • STEEL**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6550 AND 6550-O TYPE F**

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



The diffuser is supplied in a 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: Corrosion-resistant steel.
2. Model 6550 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 6550-O.

**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)

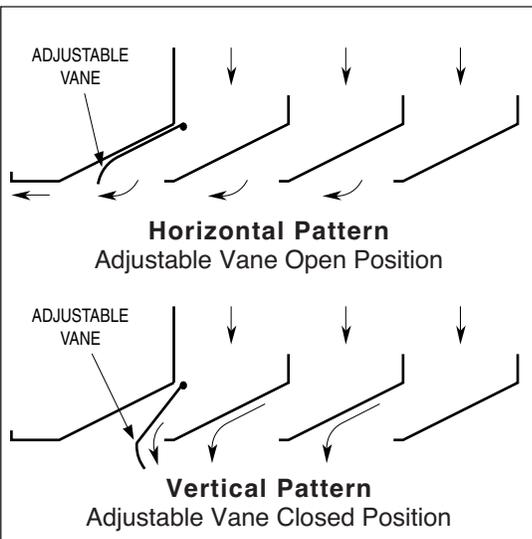
**EXTERNAL INSULATION**

- 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 Interiors Inc..



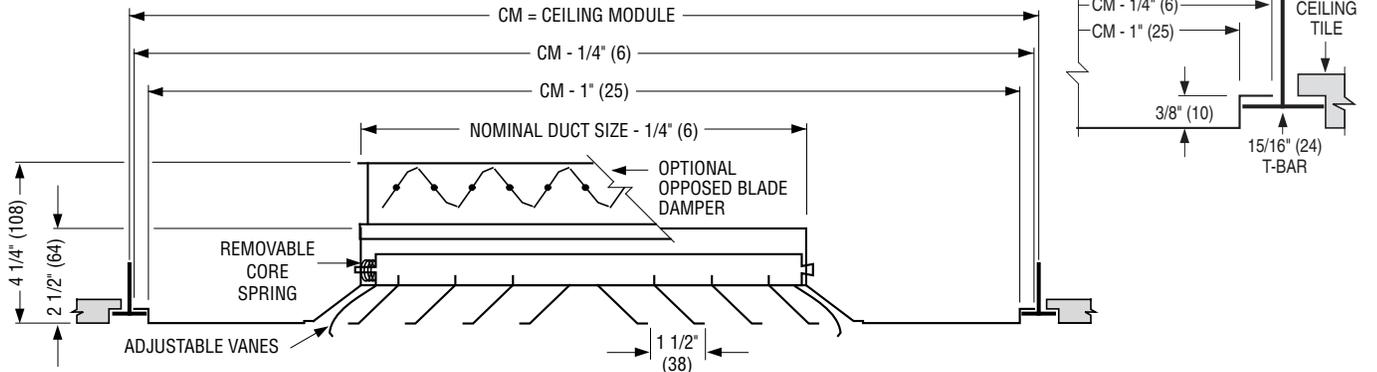
<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).			
<b>PROJECT:</b>					
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	1 - 16 - 17	6550	5 - 11 - 15	6550-5	



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • STEEL**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6550 AND 6550-O TYPE TL**

**TYPE TL**  
**REGULAR LAY-IN**

**DETAIL**



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.

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: Corrosion-resistant steel.
2. Model 6550 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:**

**SQUARE AND RECTANGULAR NECK**

- Steel opposed blade damper. Model 6550-O.

**ROUND NECK**

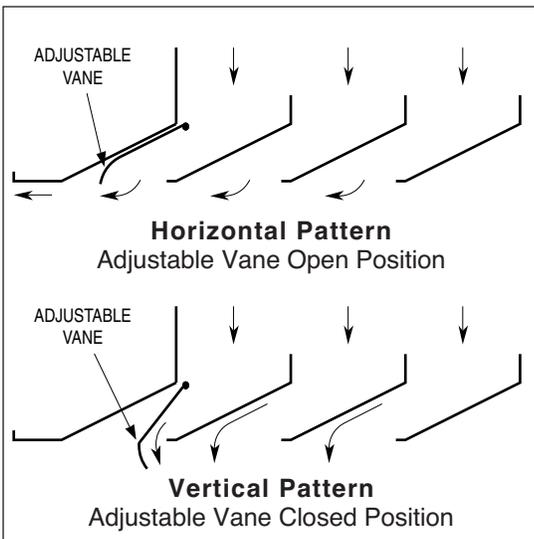
- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

**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 \_\_\_\_\_.

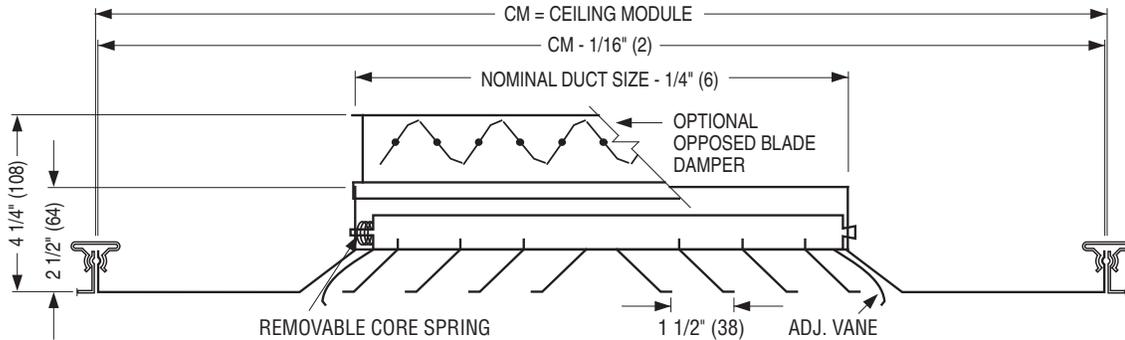


<b>SCHEDULE TYPE:</b>		Dimensions are in inches (mm).			
<b>PROJECT:</b>					
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>	
<b>CONTRACTOR:</b>	1 - 16 - 17	6550	5 - 11 - 15	6550-6	



**PATTERN CEILING DIFFUSERS**  
**ADJUSTABLE VANES • STEEL**  
**• SQUARE OR ROUND NECK**  
**MODELS: 6550 AND 6550-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 module sized extended panel will be added.

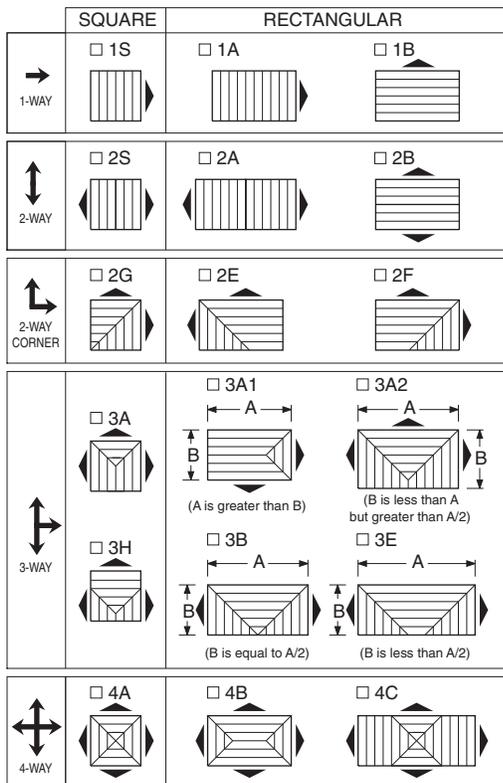
Minimum duct size: 6 x 6 (152 x 152).

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: Corrosion-resistant steel.
2. Model 6550 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 6550-O.

**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 \_\_\_\_\_.

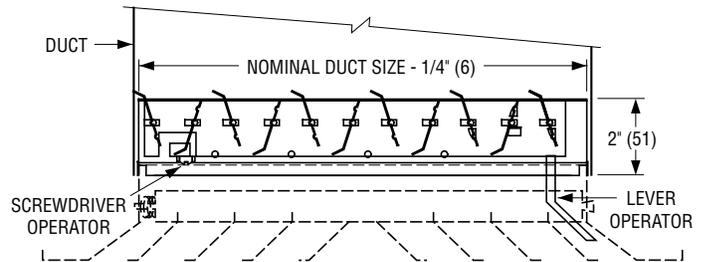
<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 8 - 18	6550	11 - 24 - 16	6550-7

**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

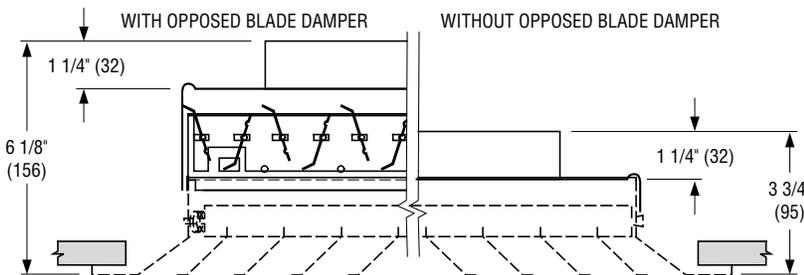
Type SL requires diffuser face removal for access.  
 Type L can be adjusted without removing core.


**SQUARE-TO-ROUND TRANSITION COLLAR**

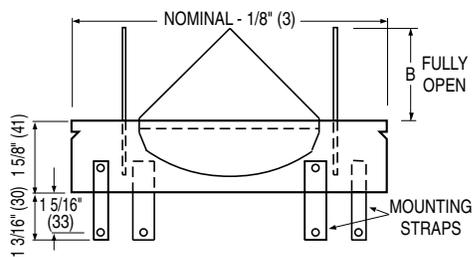
- Model SR (for use with optional round neck damper)
- Model SR-O (for use over opposed blade damper)

CONSTRUCTION:  
 22 ga. corrosion-resistant steel.

SQUARE NECK SIZE (INCHES)	ROUND NECK SIZE (INCHES)
6 x 6	4, 5, 6
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

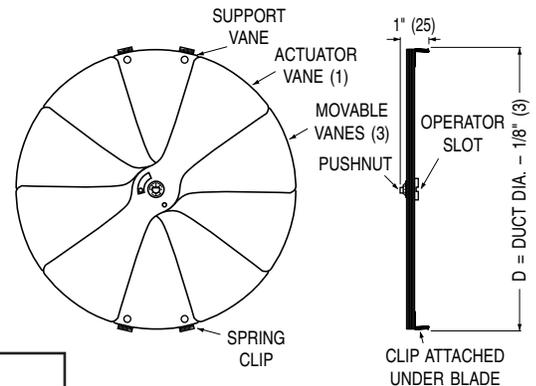

**ROUND NECK DAMPERS**

- 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.
7 - 10 - 15	6500	2 - 13 - 06R	6500-8



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

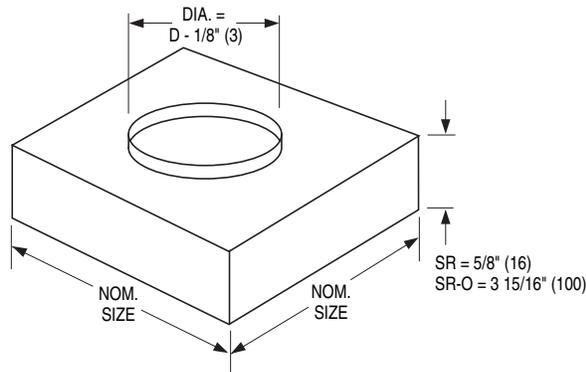
**DESCRIPTION:**

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.

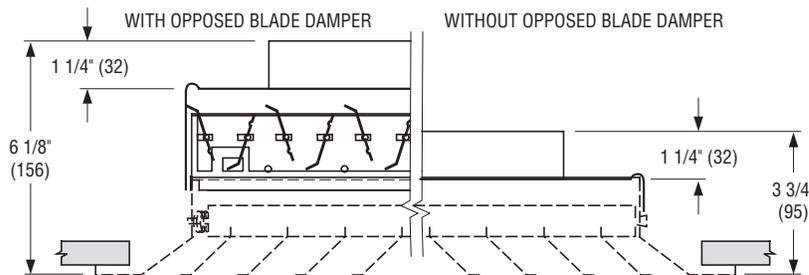
- Model SR  
For direct attachment to diffuser neck. Round dampers may be added to neck.
- Model SR-O  
For use over a square neck opposed blade damper.

**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

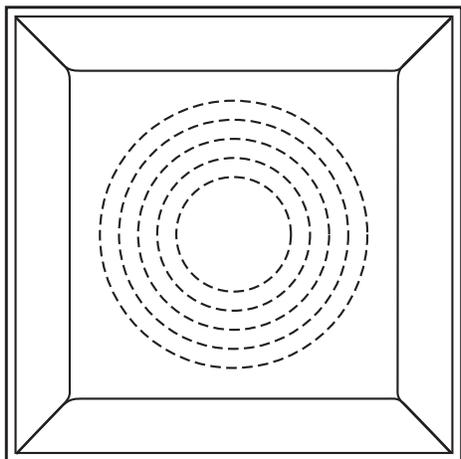
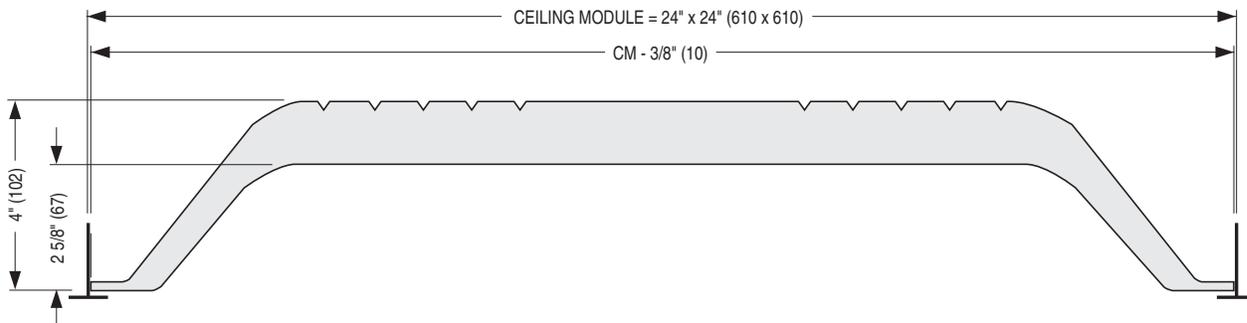


Example illustrated is Model 6500 Pattern Diffuser.

<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**

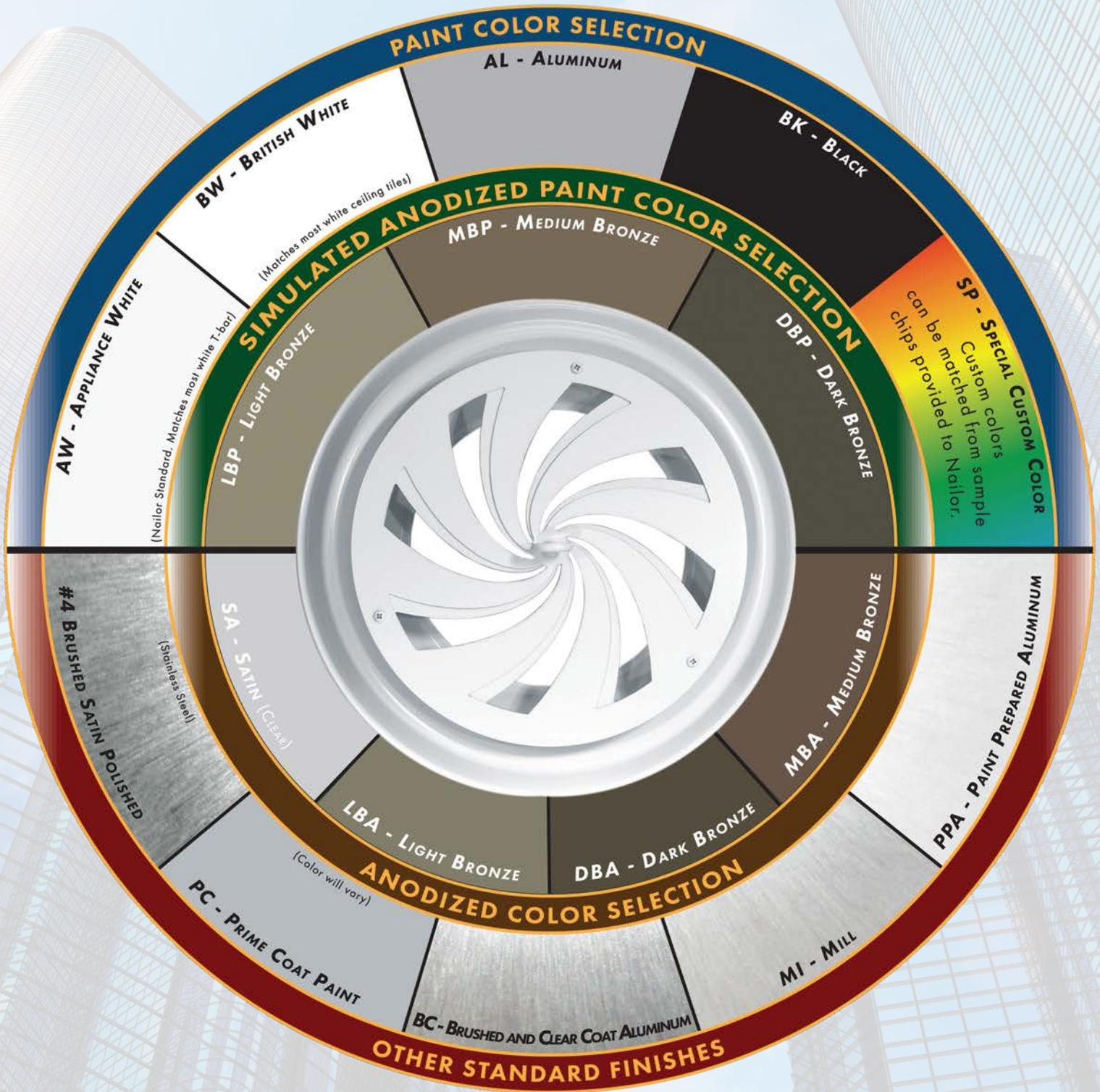
Surface is left untreated and requires cleaning, degreasing, etc. in the field before final finish can be applied if required.



**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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## 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
18 x 18 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 29 2-4-6 2-4-7	29 44 4-7-10 4-8-11	39 59 6-8-11 7-9-12	44 66 7-8-12 8-9-13	49 74 7-8-13 8-9-14	59 88 8-9-14 9-10-15	69 103 8-10-15 9-11-17
	2S  2G	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	
18 x 18 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 52 4-8-10 4-9-11	52 79 6-9-13 7-10-14	70 105 8-10-15 9-11-17	79 118 9-11-15 10-12-17	87 131 9-12-17 10-13-19	105 157 10-13-19 11-14-21	122 183 11-14-0 12-15-22
	2S  2G	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	
18 x 18 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 82 4-8-12 4-9-13	82 123 8-11-17 9-12-19	109 164 10-13-19 11-14-21	123 184 11-14-20 12-15-22	136 204 12-15-21 13-17-23	164 245 12-16-23 13-18-25	191 286 13-17-24 14-19-26
	2S  2G	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	
18 x 18 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.	79 118 6-9-15 7-10-17	118 177 8-11-18 9-12-20	157 236 10-15-23 11-17-25	177 265 13-17-24 14-19-26	196 294 14-18-25 15-20-28	236 353 15-20-28 17-23-31	275 412 17-21-30 19-23-33
	2S  2G	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	
18 x 18 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.	107 160 7-10-19 8-11-21	160 240 10-15-23 11-17-25	214 320 14-19-26 15-21-29	240 360 15-20-29 17-22-32	267 401 17-21-30 19-23-33	320 481 19-23-32 21-25-35	374 561 21-26-38 23-29-42
	2S  2G	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	
18 x 18 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.	140 209 8-12-21 9-13-23	209 314 12-19-26 13-21-29	279 419 17-21-31 19-23-34	314 471 19-23-32 21-25-35	349 523 20-25-35 22-28-39	419 628 22-28-42 24-31-46	488 732 24-30-48 26-33-53
	2S  2G	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:

- Core style 4E is sized to give equal flow as near as possible in directions A and B.
- 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:

- 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 6500**. Apply the following corrections for aluminum construction – **Model 6200**.  
 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 adjustable models - 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:

### 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.

## 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
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
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
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

**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	50	25	62	31	75	37	87	44	100	50	112	56
	3A1	CFM/SIDE THROW, FT.	47	18	62	25	78	31	94	37	109	44	125	50	140	56
	3A2	CFM/SIDE THROW, FT.	42	35	55	47	70	58	84	70	98	82	112	94	126	105
	2A 2B	CFM/SIDE THROW, FT.	56	—	75	—	93	—	112	—	131	—	150	—	168	—
	2C 2E 2D 2F	CFM/SIDE THROW, FT.	75	37	100	50	125	62	150	75	175	87	200	100	225	112
1A 1B	CFM/SIDE THROW, FT.	112	—	150	—	187	—	225	—	262	—	300	—	337	—	
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 4C	CFM/SIDE THROW, FT.	56	18	75	25	94	31	113	37	131	44	150	50	169	56
	3A1	CFM/SIDE THROW, FT.	66	18	87	25	109	31	131	37	153	44	175	50	197	56
	3B	CFM/SIDE THROW, FT.	75	37	100	50	126	62	150	75	176	87	200	100	226	112
	2A 2B	CFM/SIDE THROW, FT.	75	—	100	—	125	—	150	—	175	—	200	—	225	—
	2C 2E 2D 2F	CFM/SIDE THROW, FT.	112	37	150	50	188	62	225	75	263	87	300	100	338	112
1A 1B	CFM/SIDE THROW, FT.	150	—	200	—	250	—	300	—	350	—	400	—	450	—	
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 4C	CFM/SIDE THROW, FT.	75	18	100	25	125	31	150	37	175	44	200	50	225	56
	4E	CFM/SIDE THROW, FT.	56	37	75	50	94	62	113	75	131	87	150	100	169	112
	3A1	CFM/SIDE THROW, FT.	84	18	112	25	140	31	169	37	197	44	225	50	253	56
	2A 2B	CFM/SIDE THROW, FT.	94	—	125	—	156	—	187	—	219	—	250	—	281	—
	2C 2E 2D 2F	CFM/SIDE THROW, FT.	150	37	200	50	250	62	300	75	350	87	400	100	450	112
1A 1B	CFM/SIDE THROW, FT.	188	—	250	—	312	—	375	—	438	—	500	—	563	—	

#### 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
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	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	18-22-31	273 301	20-24-32	312 344	21-25-35	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
	CFM/SIDE THROW, FT.	525 22-27-39	700 25-31-45	875 28-35-50	1050 31-39-55	1225 32-42-59	1400 35-45-62	1575 39-48-66	
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
	CFM/SIDE THROW, FT.	600 24-31-42	800 28-34-48	1000 32-39-55	1200 34-42-57	1400 36-45-62	1600 41-49-66	1800 43-52-70	

#### 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:  $A \times .82 = B$ .

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	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.

## 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
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
	4E	CFM/SIDE THROW, FT.	281	281	375	375	469	469	563	563	657	657	750	750	845	845
	3A1	CFM/SIDE THROW, FT.	478	169	637	225	797	281	956	337	1115	394	1275	450	1434	506
	3A2	CFM/SIDE THROW, FT.	469	327	625	437	782	546	937	656	1093	766	1250	875	1406	984
	2A  2B	CFM/SIDE THROW, FT.	562		750		937		1125		1312		1500		1687	
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	787	337	1050	450	1313	562	1575	675	1838	787	2100	900	2363	1012
1A  1B	CFM/SIDE THROW, FT.	1125		1500		1875		2250		2625		3000		3375		
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
	4E	CFM/SIDE THROW, FT.	339	339	452	452	565	565	678	678	791	791	904	904	1020	1020
	3A1	CFM/SIDE THROW, FT.	591	169	787	225	984	281	1181	337	1378	394	1575	450	1772	506
	3B	CFM/SIDE THROW, FT.	675	337	900	450	1125	562	1350	675	1575	787	1800	900	2025	1012
	2A  2B	CFM/SIDE THROW, FT.	675		900		1125		1350		1575		1800		2025	
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	1010	337	1350	450	1688	562	2025	675	2363	787	2700	900	3038	1012
1A  1B	CFM/SIDE THROW, FT.	1350		1800		2250		2700		3150		3600		4050		
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
	3A1	CFM/SIDE THROW, FT.	410	230	547	306	684	382	820	460	957	535	1094	612	1231	688
	3A2	CFM/SIDE THROW, FT.	375	300	500	400	625	500	750	600	875	700	1000	800	1125	900
	2A  2B	CFM/SIDE THROW, FT.	525		700		875		1050		1225		1400		1575	
	2C  2E  2D  2F	CFM/SIDE THROW, FT.	591	459	788	612	986	764	1180	920	1380	1070	1576	1224	1774	1376
	1A  1B	CFM/SIDE THROW, FT.	1050		1400		1750		2100		2450		2800		3150	

#### Notes:

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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 21 4.375 SQ. FT.	RETURN FACTORS —SP=3.1 TP NC + 8	CFM NC	1310 16	1750 23	2185 29	2625 34	3060 38	3500 41	3935 44								
	4B  4C	CFM/SIDE THROW, FT.	425 230 25-31-42 17-20-29	569 306 24-37-51 19-24-32	710 382 32-41-58 20-27-37	852 460 37-44-61 22-29-39	995 535 37-48-66 24-31-42	1138 612 41-51-71 25-32-44	1279 688 42-54-75 27-37-49								
	4E	CFM/SIDE THROW, FT.	360 295 24-29-41	480 394 27-32-48	600 492 31-37-54	720 591 32-39-58	840 690 37-42-61	960 788 37-44-66	1080 887 41-49-70								
	3A1	CFM/SIDE THROW, FT.	540 230 27-32-48 17-20-29	722 306 31-37-54 19-24-32	901 382 34-42-61 20-27-37	1082 460 37-48-66 22-29-39	1262 535 39-51-71 24-31-42	1444 612 42-54-75 25-32-44	1623 688 48-58-80 27-37-49								
	3A2	CFM/SIDE THROW, FT.	468 422 25-31-42 20-25-34	625 562 29-37-51 24-29-39	782 701 32-41-58 27-32-44	937 844 37-44-61 29-37-49	1093 983 37-48-66 31-37-53	1250 1125 41-51-71 32-41-56	1406 1264 42-54-75 37-42-61								
	2A 2B	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								
	2C 2E	CFM/SIDE THROW, FT.	853 457 31-37-54 24-29-41	1138 612 37-42-61 27-32-48	1421 764 41-49-70 31-37-54	1705 920 44-54-75 32-39-58	1990 1070 48-58-80 37-42-61	2276 1224 51-61-85 37-44-66	2559 1376 54-65-90 41-49-70								
1A 1B	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	2100 24	2625 30	3150 34	3675 38	4200 42	4725 45								
	4B  4C	CFM/SIDE THROW, FT.	558 230 27-32-48 17-20-29	744 306 31-37-54 19-24-32	930 382 34-42-61 20-27-37	1115 460 37-48-66 22-29-39	1306 535 39-51-71 24-31-42	1488 612 42-54-75 25-32-44	1674 688 48-58-80 27-37-49								
	4E	CFM/SIDE THROW, FT.	427 360 25-31-42 25-31-42	568 480 29-37-61 29-37-51	710 600 32-41-58 32-41-58	852 720 37-44-61 37-44-61	945 840 37-48-66 37-48-66	1135 960 41-51-71 41-51-71	1280 1080 42-54-75 42-54-75								
	3A1	CFM/SIDE THROW, FT.	672 230 29-37-51 17-20-29	897 306 34-41-58 19-24-32	1121 382 39-48-66 20-27-37	1345 460 41-51-70 22-29-39	1570 535 44-54-75 24-31-42	1794 612 49-59-80 25-32-44	2018 688 53-63-85 27-37-49								
	3A2	CFM/SIDE THROW, FT.	675 450 25-31-42 22-27-37	900 600 29-37-51 25-31-42	1125 750 32-41-58 29-34-49	1350 900 37-44-61 31-37-54	1575 1050 37-48-66 32-39-58	1800 1200 41-51-71 34-42-61	2025 1350 42-54-75 37-48-65								
	2A 2B	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								
	2C 2E	CFM/SIDE THROW, FT.	1115 460 34-42-59 24-29-41	1488 612 39-49-68 27-32-48	1861 764 44-56-76 31-37-54	2230 920 49-59-83 32-39-58	2605 1070 53-65-88 37-42-61	2976 1224 56-68-97 37-44-66	3349 1376 59-73-102 41-49-70								
1A 1B	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	2000 25	2500 30	3000 35	3500 39	4000 43	4500 46								
	4B  4C	CFM/SIDE THROW, FT.	450 300 25-31-42 19-22-31	600 400 29-37-51 22-25-37	750 500 32-41-58 25-29-41	900 600 33-44-61 27-31-44	1050 700 37-48-66 29-32-48	1200 800 41-51-71 31-37-51	1350 900 42-54-75 32-37-54								
	4E	CFM/SIDE THROW, FT.	375 375 25-31-42 25-31-42	500 500 29-37-51 29-37-51	625 625 32-41-58 32-41-58	750 750 33-44-61 37-44-61	875 875 37-48-66 37-48-66	1000 1000 41-51-71 41-51-71	1125 1125 42-54-75 42-54-75								
	3A1	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								
	3A2	CFM/SIDE THROW, FT.	515 470 31-37-54 25-31-42	687 625 37-42-61 29-37-51	859 782 41-49-70 32-41-58	1031 937 44-54-75 33-44-61	1203 1093 48-58-80 37-48-66	1375 1250 51-61-85 41-51-71	1548 1406 54-65-90 42-54-75								
	2A 2B	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								
	2C 2E	CFM/SIDE THROW, FT.	900 600 37-42-63 29-37-51	1200 800 41-51-71 34-41-58	1500 1000 48-58-82 39-48-66	1800 1200 51-61-87 41-51-70	2100 1400 54-66-85 44-54-75	2400 1600 58-71-99 49-59-80	2700 1800 63-75-107 53-63-85								
1A 1B	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  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