

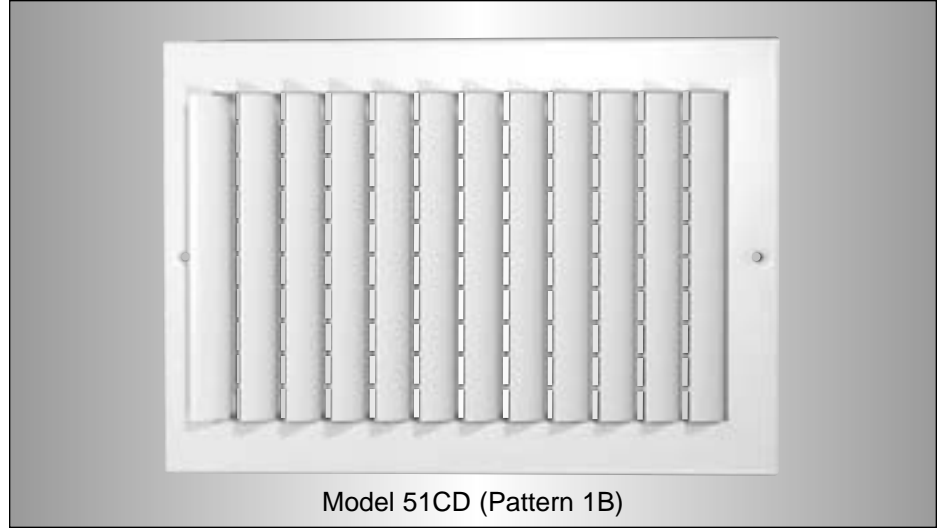
## ALUMINUM CURVED BLADE GRILLES AND REGISTERS

### • SUPPLY

#### Models:

#### 51C and 51CD with One and Two-way Discharge Pattern

- Suffix '-O' adds a steel opposed blade damper
- Suffix '-OA' adds an aluminum opposed blade damper



Model 51CD (Pattern 1B)

Models 51C and 51CD are supply grilles and registers which incorporate individually adjustable curved blades. The blades can be positioned to provide one-way, two-way and two-way corner blow discharge air patterns. They are commonly used in ceiling and/or side wall locations and are recommended for use in both heating and cooling applications.

Both one-way and two-way pattern grilles can be adjusted to full or partial down-blow position. The curved streamlined blades are adjusted to a uniform partially closed position to deflect the air path horizontally while retaining an effective area capacity of 35% of the neck area. In the full down-blow position, grille effective area is increased to 75%.

#### FEATURES:

- High quality, extruded aluminum construction.
- 1 1/4" (32) wide face border with a 1" (25) overlap margin standard, furnished with countersunk screw holes and mounting screws.
- NF Narrow Frame with 1" (25) face border optional. Concealed mounting is optional.
- Heavy gauge extruded aluminum margins, mechanically interlocked with reinforced mitered corners.
- Extruded blades – curved streamlined aluminum blades on 1" (25) centers.

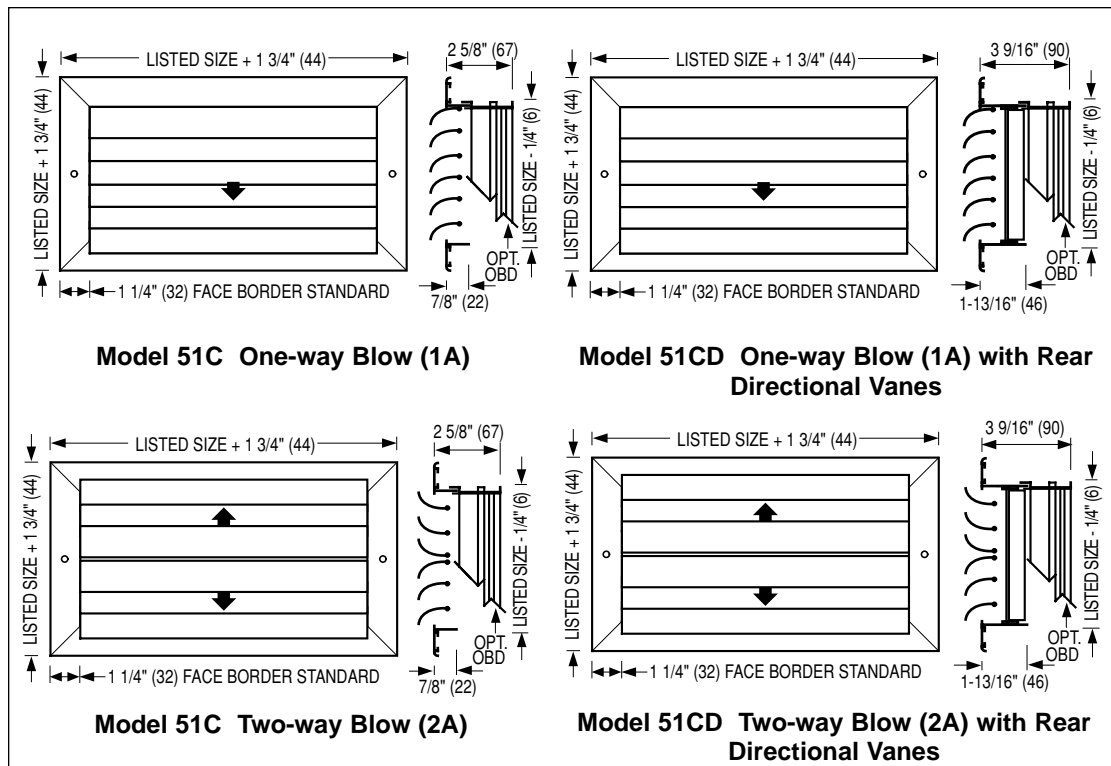
Blades formed with tenons to fit snugly into the side margin, friction loaded to firmly hold deflection setting.

- Steel or aluminum integral dampers are opposed blade design with a screwdriver slot operator.
- Adjustable pattern – grille blades easily adjustable to provide horizontal one-way or two-way air path from a ceiling location.

Adjustable to a full down-blow position as required. Curved blades can be fixed to provide a non-adjustable horizontal air path if specified.

- AW Appliance White baked enamel finish is standard. Other finishes are available.

- Available from 6" x 4" to 36" x 36" (152 x 102 to 914 x 914).



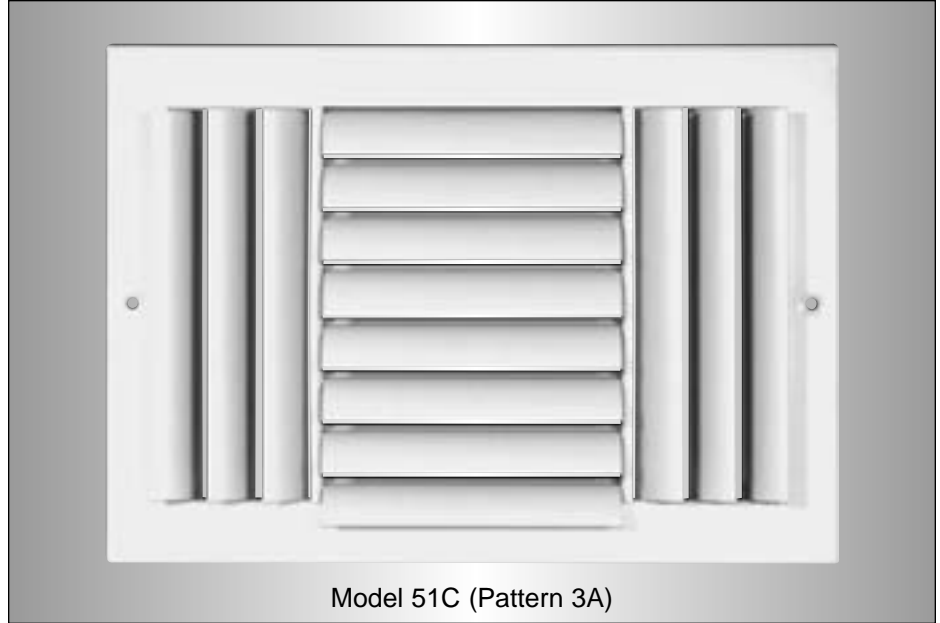
## ALUMINUM CURVED BLADE GRILLES AND REGISTERS

### • SUPPLY

#### Model:

#### 51C with Three and Four-way Discharge Pattern

- Suffix '-O' adds a steel opposed blade damper
- Suffix '-OA' adds an aluminum opposed blade damper



Model 51C (Pattern 3A)

**Model 51C Pattern 3A, 3B or 3C Supply Ceiling Grilles and Registers** have individually adjustable curved blades arranged to provide a three-way ceiling air pattern. **Model 51C Pattern 4A, 4B or 4C Supply Ceiling Grilles and Registers** have individually adjustable curved blades arranged to provide a four-way ceiling air pattern. They are recommended for applications in ceiling locations for heating and cooling systems.

Both three-way and four-way pattern grilles can be adjusted to full or partial down-blow position. The curved streamlined blades are adjusted to a uniform partially closed position to deflect the air path horizontally while retaining an effective area capacity of 35% of the neck area. In the full down-blow position, grille effective area is increased to 75%.

#### FEATURES:

- High quality, extruded aluminum construction.
- 1 1/4" (32) wide face border with a 1" (25) overlap margin standard, furnished with countersunk screw holes and mounting screws.

NF Narrow Frame with 1" (25) face border optional. Concealed mounting is optional.

- Heavy gauge extruded aluminum margins, mechanically interlocked

with reinforced mitered corners.

- Extruded blades – curved streamlined aluminum blades on 1" (25) centers. Blades formed with tenons to fit snugly into the side margin, friction loaded to firmly hold deflection setting.

• Steel or aluminum integral dampers are opposed blade design with a screwdriver slot operator.

- Adjustable pattern – grille blades easily adjustable to provide horizontal

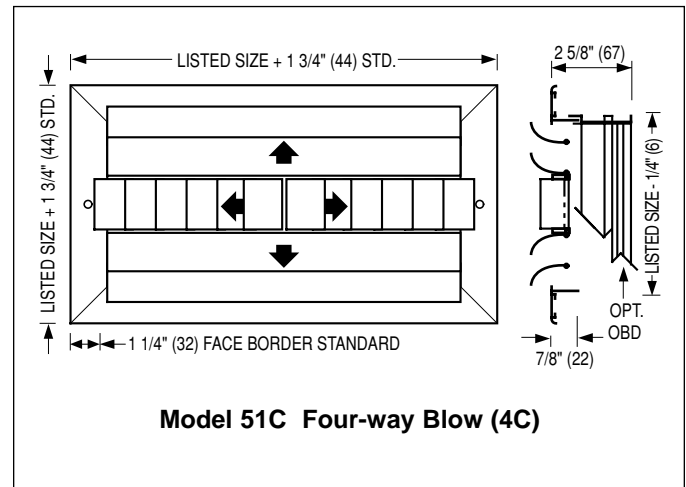
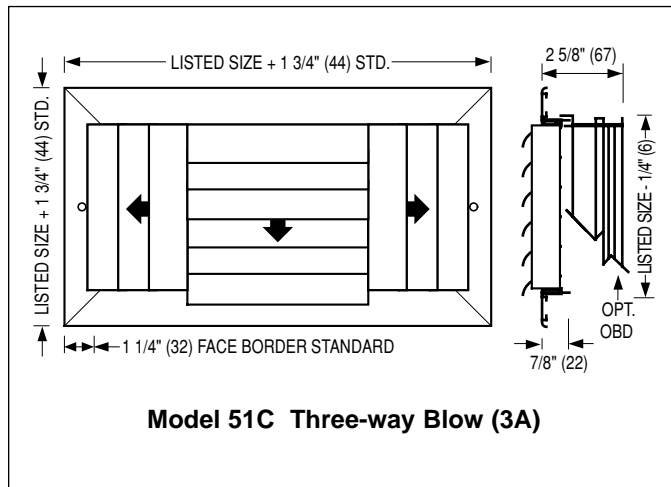
three-way or four-way air path from a ceiling location. Adjustable to a full down-blow position as required. Curved blades can be fixed to provide a non-adjustable horizontal air path if specified.

• AW Appliance White baked enamel finish is standard. Other finishes are available.

- Available from 6" x 4" to 36" x 36" (152 x 102 to 914 x 914).

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GRILLES AND REGISTERS



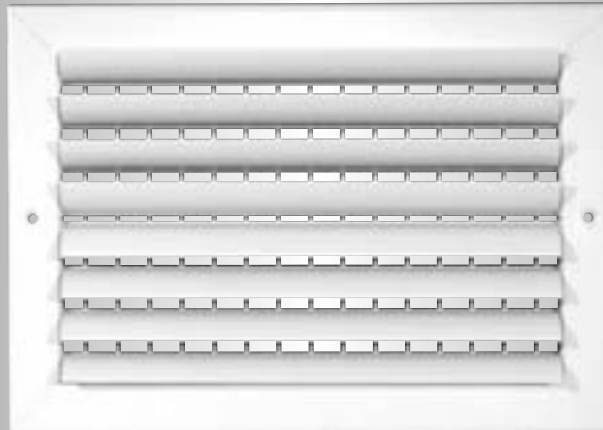
## STEEL CURVED BLADE GRILLES AND REGISTERS

### • SUPPLY

#### Models:

#### 61C and 61CD with One and Two-way Discharge Pattern

- Suffix '-O' adds a steel opposed blade damper



Model 61CD (Pattern 2A)

**Models 61C and 61CD** are supply grilles and registers which incorporate individually adjustable curved blades. The blades can be positioned to provide one-way, two-way and two-way corner blow discharge air patterns. They are commonly used in ceiling and/or side wall locations and are recommended for use in both heating and cooling applications.

Both one-way and two-way pattern grilles can be adjusted to full or partial down-blow position. The curved streamlined blades are adjusted to a uniform partially closed position to deflect the air path horizontally while retaining an effective area capacity of 35% of the neck area. In the full down-blow position, grille effective area is increased to 75%.

#### FEATURES:

- Cost effective, corrosion-resistant steel construction.
- 1 1/4" (32) wide face border with a 1" (25) overlap margin standard, furnished with countersunk screw holes and mounting screws.

Concealed mounting is optional.

- Heavy gauge, roll-formed steel margins, mechanically interlocked with reinforced mitered corners.
- Extruded blades – curved streamlined aluminum blades on 1" (25) centers. Blades formed with tenons to fit snugly into the side margin, friction loaded to

firmly hold deflection setting.

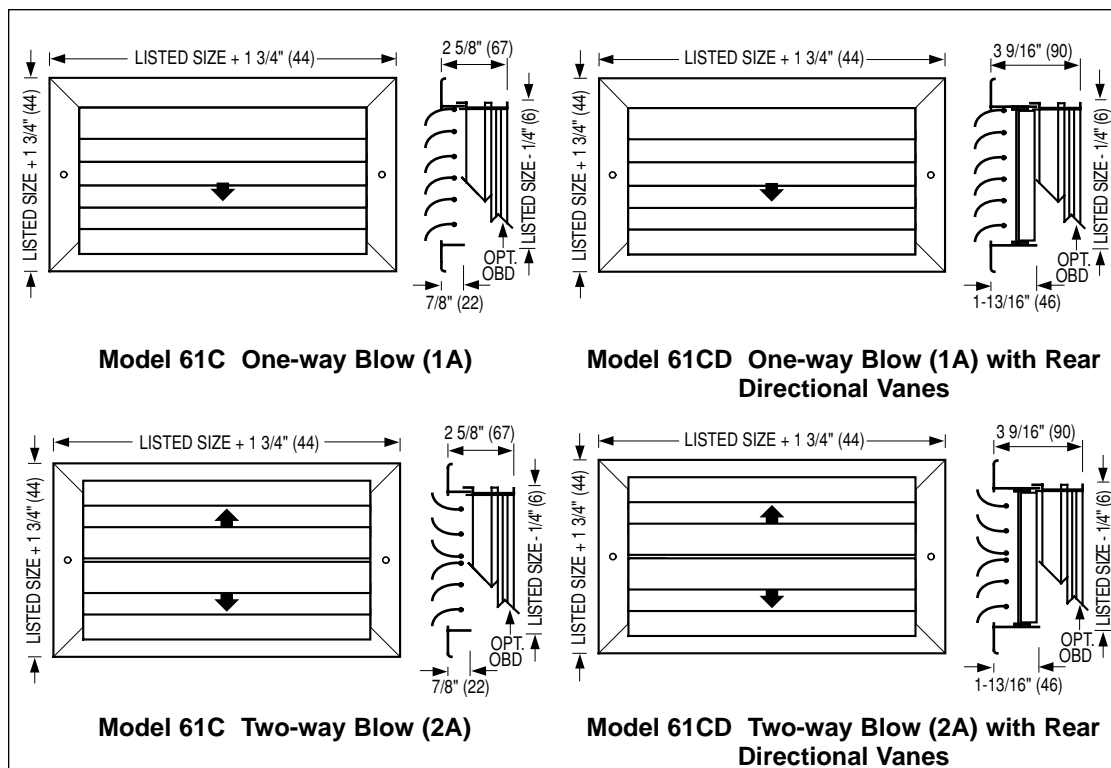
- Integral dampers – roll-formed steel blades. Opposed blade design with a screwdriver slot operator.

- Adjustable pattern – grille blades easily adjustable to provide horizontal one-way or two-way air path from a ceiling

location. Adjustable to a full down-blow position as required. Curved blades can be fixed to provide a non-adjustable horizontal air path if specified.

- AW Appliance White baked enamel finish is standard. Other finishes are available.

- Available from 6" x 4" to 36" x 36" (152 x 102 to 914 x 914).



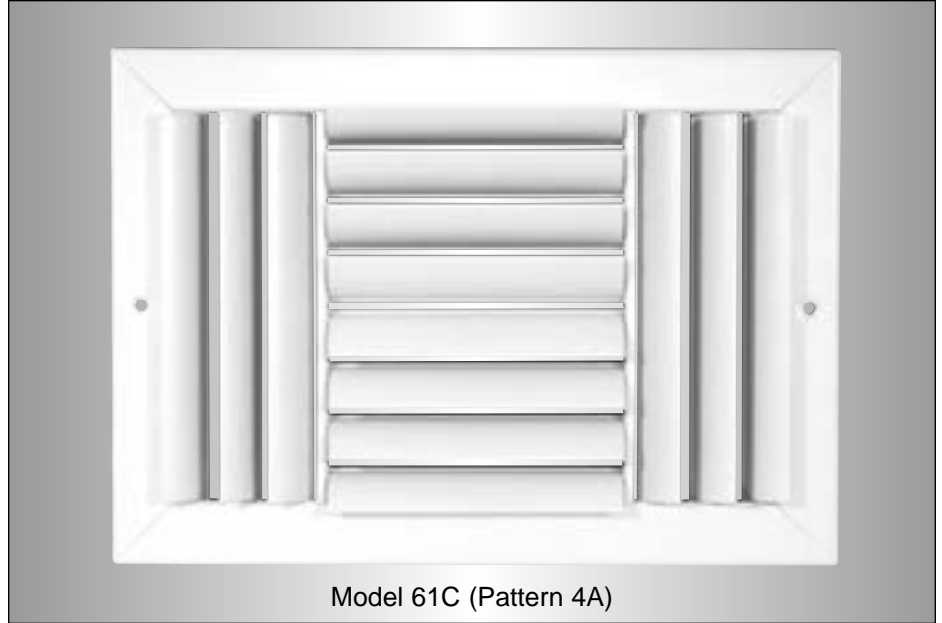
## STEEL CURVED BLADE GRILLES AND REGISTERS

### • SUPPLY

#### Model:

### 61C with Three and Four-way Discharge Pattern

- Suffix '-O' adds a steel opposed blade damper



**Model 61C Patterns 3A, 3B or 3C Supply Ceiling Grilles and Registers** have individually adjustable curved blades arranged to provide a three-way ceiling air pattern. **Model 61C Patterns 4A, 4B or 4C Supply Ceiling Grilles and Registers** have individually adjustable curved blades arranged to provide a four-way ceiling air pattern. They are recommended for applications in ceiling locations for heating and cooling systems.

Both three-way and four-way pattern grilles can be adjusted to full or partial down-blow position. The curved streamlined blades are adjusted to a uniform partially closed position to deflect the air path horizontally while retaining an effective area capacity of 35% of the neck area. In the full down-blow position, grille effective area is increased to 75%.

#### FEATURES:

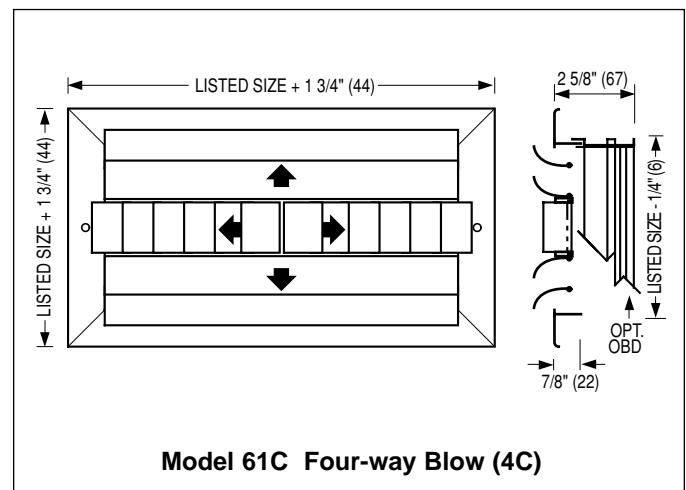
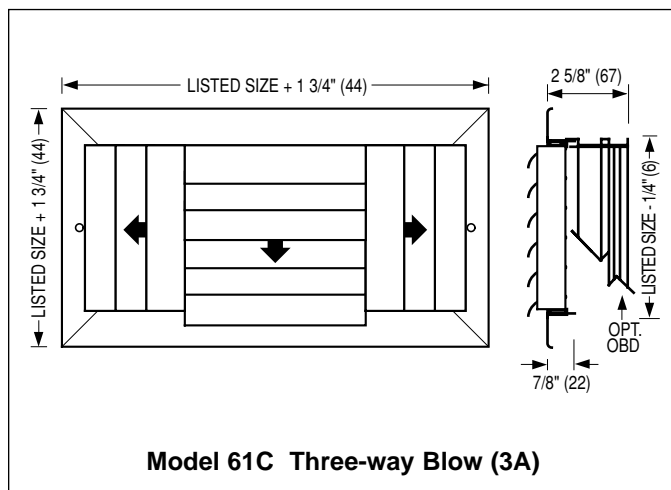
- Cost effective, corrosion-resistant steel construction.
- 1 1/4" (32) wide face border with a 1" (25) overlap margin standard, furnished with countersunk screw holes and mounting screws. Concealed mounting is optional.
- Heavy gauge roll-formed steel margins, mechanically interlocked with reinforced mitered corners.
- Extruded blades – curved streamlined aluminum blades on 1" (25) centers.

Blades formed with tenons to fit snugly into the side margin, friction loaded to firmly hold deflection setting.

- Integral dampers – roll-formed steel blades. Opposed blade design with a screwdriver slot operator.
- Adjustable pattern – grille blades easily adjustable to provide horizontal three-way or four-way air path from a ceiling location. Adjustable to a full down-blow position as required. Curved blades can be fixed to provide a non-

adjustable horizontal air path if specified.

- AW Appliance White baked enamel finish is standard. Other finishes are available.
- Available from 6" x 4" to 36" x 36" (152 x 102 to 914 x 914).



## HOW TO SPECIFY OR TO ORDER

(Show complete Model Number and Size, unless "Default" is desired).

### Aluminum Curved Blade Grilles and Registers – Model Series 51C

**51C - O - 24 x 12 - S - AW - A - 4C - AB - —**

<p><b>MODEL</b></p> <ul style="list-style-type: none"> <li>- Aluminum Construction 51C</li> <li>- Aluminum Construction with Rear Vanes 51CD</li> </ul> <p><b>DAMPER (OBD)</b></p> <ul style="list-style-type: none"> <li>- Steel (standard) O</li> <li>- Aluminum OA</li> <li>- No Damper —</li> </ul> <p><b>WIDTH x HEIGHT</b> inches (mm) x inches (mm)</p> <p><b>FRAME / BORDER TYPE</b></p> <p><b>Surface Mount:</b></p> <ul style="list-style-type: none"> <li>- Standard 1 1/4" (32) (default) S</li> <li>- Narrow 1" (25) NF</li> </ul>	<p><b>ACCESSORIES</b></p> <ul style="list-style-type: none"> <li>- None (default) —</li> <li>- Plaster Sub-frame PF</li> <li>- Foam Gasket GK</li> </ul> <p><b>FRONT BLADES</b></p> <ul style="list-style-type: none"> <li>- Adjustable (default) AB</li> <li>- Fixed FB</li> </ul> <p><b>BLOW PATTERN</b></p> <ul style="list-style-type: none"> <li>- 1-way long 1A</li> <li>- 1-way short 1B</li> <li>- 2-way long 2A</li> <li>- 2-way short 2B</li> <li>- 2-way corner 2C</li> <li>- 2-way corner 2D</li> <li>- 3-way short 3A</li> <li>- 3-way long 3B</li> <li>- 3-way long 3C</li> <li>- 4-way long 4A</li> <li>- 4-way equal 4B</li> <li>- 4-way short 4C</li> </ul> <p><b>FASTENING</b></p> <ul style="list-style-type: none"> <li>- Screw Holes (default) A</li> <li>- Concealed Mounting Straps C</li> <li>- Concealed Screw Holes in Neck D</li> <li>- None N</li> </ul> <p><b>FINISH</b></p> <ul style="list-style-type: none"> <li>- Appliance White (default) AW</li> <li>- Aluminum AL</li> <li>- Special Custom Color SP</li> <li>- Satin (clear) Anodized SA</li> </ul>	
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AVAILABLE DISCHARGE PATTERNS			
→ 1-WAY			
↕ 2-WAY			
↙↘ 2-WAY CORNER			
↔↕ 3-WAY			
↕↔↕ 4-WAY			

**G**  
GRILLES AND REGISTERS

**Note:**  
1. Model 51CD is only available with Blow Patterns 1-way and 2-way.

**SUGGESTED SPECIFICATION:**

Furnish and install **Nailor Model** (select one) **51C** or **51CD (with rear vanes) Curved Blade Supply Grilles** of the type and size as shown on the plans and air distribution schedules. The blades shall be aluminum, extruded into a streamlined curved shape, and assembled in a one, two, three or four-way pattern (specify pattern). The frames shall be heavy gauge extruded aluminum and mechanically interlocked for reinforcement, with hairline mitered corners. The finish shall be AW Appliance White baked enamel (optional finishes are available).

(Optional) An opposed blade damper, constructed of heavy gauge corrosion-resistant steel (aluminum is optional) and operable from the face of the grille, shall be provided with all units.

The manufacturer shall provide published performance data for the grille, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

## HOW TO SPECIFY OR TO ORDER

(Show complete Model Number and Size, unless "Default" is desired).

### Steel Curved Blade Grilles and Registers – Model Series 61C

**61C - O - 24 x 12 - S - AW - A - 4C - AB - —**

#### MODEL

- Steel Construction 61C
- Steel Construction with Rear Vanes 61CD

#### DAMPER (OBD)

- Steel O
- No Damper —

#### WIDTH x HEIGHT

inches (mm) x inches (mm)

#### FRAME/BORDER TYPE

- Surface Mount (default) S

#### ACCESSORIES

- None (default) —
- Plaster Sub-frame PF
- Foam Gasket GK

#### FRONT BLADES

- Adjustable (default) AB
- Fixed FB

#### BLOW PATTERN

- 1-way long 1A
- 1-way short 1B
- 2-way long 2A
- 2-way short 2B
- 2-way corner 2C
- 2-way corner 2D
- 3-way short 3A
- 3-way long 3B
- 3-way long 3C
- 4-way long 4A
- 4-way equal 4B
- 4-way short 4C

#### FASTENING

- Screw Holes (default) A
- Concealed Mounting Straps C
- Concealed Screw Holes in Neck D
- None N

#### FINISH

- Appliance White (default) AW
- Aluminum AL
- Special Custom Color SP

G

GRILLES AND REGISTERS

AVAILABLE DISCHARGE PATTERNS			
→ 1-WAY	 1A	 1B	
↕ 2-WAY	 2A	 2B	
↖↗ 2-WAY CORNER	 2C	 2D	
↔↕ 3-WAY	 3A	 3B	 3C
↕↔↕ 4-WAY	 4A	 4B	 4C

#### Note:

1. Model 61CD is only available with Blow Patterns 1-way and 2-way.

#### SUGGESTED SPECIFICATION:

Furnish and install **Nailor Model** (select one) **61C** or **61CD (with rear vanes)** **Curved Blade Supply Grilles** of the type and size as shown on the plans and air distribution schedules. The blades shall be aluminum, extruded into a streamlined curved shape, and assembled in a one, two, three or four-way pattern (specify pattern). Frames shall be heavy gauge roll-formed steel and mechanically interlocked for reinforcement, with hairline mitered corners. The finish shall be AW Appliance White baked enamel (optional finishes are available).

(Optional) An opposed blade damper, constructed of heavy gauge corrosion-resistant steel and operable from the face of the grille, shall be provided with all units.

The manufacturer shall provide published performance data for the grille, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

# CURVED BLADE GRILLES AND REGISTERS



## Performance Data

Curved Blade • Supply Grilles and Registers • 51C and 61C Series

Models: 51C, 51CD

61C, 61CD

Core Area, Square Feet	Nominal Duct Size, Inches	Core Velocity, FPM	100	200	300	400	500	600	700	800	900	1000	
		TP	.003	.015	.032	.058	.094	.136	.182	.234	.302	.369	
.12	6 x 4	CFM	10	25	35	50	60	70	85	95	110	120	
		NC	—	—	—	14	20	23	27	30	33	36	
		T	4-Way				5-7-11	5-8-13	7-10-16	8-12-18	9-13-20	10-15-23	11-16-25
			3-Way				5-7-12	6-9-14	7-11-16	8-12-19	10-14-22	10-16-24	12-17-27
			2-Way				5-8-13	7-10-16	8-12-18	9-14-21	10-16-24	12-17-27	13-18-30
1-Way					7-10-16	8-12-18	10-14-22	11-16-26	12-18-29	14-20-33	15-22-36		
.16	8 x 4	CFM	15	30	50	65	80	95	110	130	145	160	
		NC	—	—	—	15	20	25	29	31	34	37	
		T	4-Way			4-6-9	5-7-12	6-9-14	7-11-16	8-12-19	9-14-21	10-16-24	12-17-27
			3-Way			4-6-10	5-8-13	6-9-15	8-12-18	9-14-21	10-15-23	11-16-26	12-18-29
			2-Way			5-7-11	6-9-14	7-11-16	9-13-20	10-15-23	11-16-26	12-18-29	14-20-32
1-Way				5-8-13	7-11-16	9-13-20	10-16-24	12-17-28	13-19-31	15-21-35	16-24-39		
.20	10 x 4 6 x 6	CFM	20	40	60	80	100	120	140	160	180	200	
		NC	—	—	—	15	21	26	29	32	35	38	
		T	4-Way			4-6-9	5-8-13	6-9-15	8-11-17	9-13-20	10-15-23	11-16-26	12-17-28
			3-Way			4-6-10	6-9-14	7-10-16	8-12-19	10-14-22	11-16-25	12-17-28	13-19-31
			2-Way			5-7-11	6-9-15	8-11-17	9-14-21	10-16-24	12-17-28	13-19-31	15-21-39
1-Way				6-9-14	8-11-17	9-14-21	11-16-25	12-18-29	14-20-33	16-23-37	17-25-41		
.26	12 x 4 8 x 6	CFM	25	50	80	105	130	155	180	210	235	260	
		NC	—	—	—	16	22	27	30	33	36	39	
		T	4-Way		3-4-7	4-6-10	6-9-14	7-10-16	8-12-19	10-14-22	11-16-25	12-17-29	13-19-31
			3-Way		3-4-7	5-7-11	6-9-15	8-11-17	9-13-20	10-15-23	11-16-26	13-18-30	14-20-33
			2-Way		3-5-8	5-7-12	7-10-16	8-12-19	10-15-23	11-16-26	13-18-30	14-20-33	16-23-37
1-Way			4-6-10	6-9-15	8-12-18	10-15-23	12-17-27	13-19-31	15-22-36	16-25-40	17-27-44		
.30	14 x 4	CFM	30	60	90	120	150	180	210	240	270	300	
		NC	—	—	—	17	22	27	31	34	37	40	
		T	4-Way		3-4-7	4-6-10	6-9-14	7-11-16	9-13-20	10-15-23	11-16-26	12-18-29	14-20-32
			3-Way		3-5-8	5-7-11	6-9-15	8-12-18	9-14-21	10-16-24	12-17-28	13-19-31	15-21-34
			2-Way		3-5-8	5-8-13	7-11-16	9-13-20	10-15-23	12-17-27	13-19-31	16-23-37	16-23-38
1-Way			4-6-10	6-9-15	8-12-19	10-16-24	12-17-28	14-20-33	16-23-37	17-26-42	19-28-46		
.35	16 x 4 10 x 6 8 x 8	CFM	35	70	105	140	175	210	245	280	315	350	
		NC	—	—	10	18	23	28	31	35	37	40	
		T	4-Way		3-4-7	5-7-11	6-9-15	8-11-17	9-13-20	10-16-24	12-17-27	13-18-30	14-20-33
			3-Way		3-5-8	5-7-12	6-9-15	8-12-18	10-14-22	11-16-25	14-18-29	14-20-32	15-22-36
			2-Way		4-6-9	5-8-13	7-11-16	9-13-20	10-16-24	12-17-28	14-20-32	15-22-36	16-25-40
1-Way			4-6-10	7-10-16	9-13-20	10-16-24	12-18-29	15-21-34	17-24-39	17-26-43	19-30-48		
.40	18 x 4 12 x 6	CFM	40	80	120	160	200	240	280	320	360	400	
		NC	—	—	12	19	24	29	32	35	38	41	
		T	4-Way		3-5-8	5-7-11	6-9-15	8-12-18	9-14-21	11-16-25	12-17-28	13-19-31	15-21-34
			3-Way		3-5-8	5-7-12	7-10-16	8-12-19	10-15-23	11-16-26	13-18-30	15-21-34	16-23-37
			2-Way		4-6-9	6-9-14	8-11-17	9-14-21	11-16-25	12-18-29	14-20-33	16-23-37	17-25-41
1-Way			5-7-11	7-10-16	9-14-21	11-16-25	13-18-30	15-21-35	16-25-40	18-28-45	20-31-49		
.45	20 x 4 14 x 6 10 x 8	CFM	45	90	135	180	225	270	315	360	405	450	
		NC	—	—	12	19	25	29	32	36	39	42	
		T	4-Way		3-5-8	5-7-12	6-9-15	8-12-18	10-14-22	11-16-25	12-18-29	14-20-32	15-22-36
			3-Way		3-5-8	5-8-13	7-11-16	9-13-20	10-15-23	12-17-27	13-19-31	15-21-35	16-23-38
			2-Way		4-6-9	6-9-14	8-12-18	10-14-22	11-16-26	13-18-30	15-21-34	16-23-38	17-26-43
1-Way			5-7-11	7-11-16	9-14-21	11-16-26	13-19-31	15-22-36	17-25-41	19-28-46	21-32-51		
.55	24 x 4 16 x 6 12 x 8	CFM	55	110	165	220	275	330	385	440	495	550	
		NC	—	—	13	20	25	29	33	37	39	42	
		T	4-Way	2-3-4	3-5-8	5-7-12	7-10-16	8-12-19	10-15-23	12-17-27	13-18-30	15-22-34	16-23-38
			3-Way	2-3-5	4-6-9	5-8-13	8-11-17	9-14-21	11-16-25	12-18-29	14-20-32	16-23-37	16-25-40
			2-Way	2-3-5	4-6-10	6-9-15	8-12-19	10-15-23	12-17-28	14-26-32	15-22-36	16-25-40	18-28-45
1-Way	2-4-6		5-7-12	8-11-17	10-14-22	12-17-28	14-20-33	16-23-38	17-26-43	20-3-49	22-34-54		



GRILLES AND REGISTERS

# CURVED BLADE GRILLES AND REGISTERS



## Performance Data

Curved Blade • Supply Grilles and Registers • 51C and 61C Series

Models: 51C, 51CD

61C, 61CD

Core Area, Square Feet	Nominal Duct Size, Inches	Core Velocity, FPM											
		TP	100	200	300	400	500	600	700	800	900	1000	
.62	18 x 6 10 x 10	CFM	60	125	185	250	310	370	435	495	560	620	
		NC	—	—	12	20	26	30	34	37	40	43	
		T	4-Way	2-3-4	4-6-9	5-8-13	7-11-16	9-13-20	10-16-24	12-17-27	13-19-21	15-21-35	16-24-39
			3-Way	2-3-5	4-6-9	6-9-14	8-11-17	9-14-21	11-16-26	13-18-30	14-20-33	16-24-38	17-26-42
			2-Way	2-3-5	4-6-10	6-9-15	8-12-19	10-16-24	12-17-28	14-20-33	16-23-37	17-26-42	19-28-46
1-Way	2-4-6		5-7-12	8-11-17	10-15-27	12-18-29	15-21-24	17-25-40	18-28-45	20-31-49	23-35-55		
.70	30 x 4 20 x 6 14 x 8 12 x 10	CFM	70	140	210	280	350	420	490	560	630	700	
		NC	—	—	14	20	26	30	34	38	40	43	
		T	4-Way	2-3-5	4-6-9	5-8-13	7-11-16	9-13-20	10-16-24	12-19-28	14-20-32	15-22-36	16-25-40
			3-Way	2-3-5	4-6-9	6-9-14	8-12-18	10-14-22	11-16-26	13-19-31	15-21-35	16-24-39	17-26-43
			2-Way	2-4-6	5-7-11	7-10-16	9-13-20	10-16-24	12-18-29	15-21-34	17-24-39	17-26-43	19-30-48
1-Way	3-4-7		5-8-13	8-12-18	10-16-24	12-18-29	15-21-35	17-25-41	19-28-46	21-32-52	24-36-57		
.81	36 x 4 24 x 6 16 x 8 14 x 10	CFM	80	160	245	325	405	485	565	650	730	810	
		NC	—	—	15	21	27	31	35	38	41	44	
		T	4-Way	2-3-5	4-6-9	6-9-14	8-11-17	9-14-21	11-16-25	12-18-29	14-20-33	16-23-37	17-26-42
			3-Way	2-3-5	4-6-10	6-9-15	8-12-19	11-16-25	12-17-27	14-20-32	15-22-36	16-25-40	18-28-45
			2-Way	2-4-6	5-7-11	7-10-16	9-14-21	11-16-25	13-18-30	15-21-35	17-25-40	18-28-45	20-31-49
1-Way	3-4-7		5-8-13	8-12-18	11-16-25	13-19-31	16-23-37	17-26-43	19-30-48	22-33-53	25-38-60		
.87	18 x 8 12 x 12	CFM	85	175	260	350	435	520	610	695	785	870	
		NC	—	—	15	21	27	31	35	38	41	44	
		T	4-Way	2-3-5	4-6-9	6-9-14	8-12-18	10-14-22	11-16-26	13-18-30	15-21-34	16-23-38	17-26-42
			3-Way	2-3-5	4-6-10	6-9-15	8-12-19	10-16-24	12-17-28	14-20-32	16-23-37	17-25-41	19-28-46
			2-Way	2-4-6	5-7-11	7-11-16	9-14-21	11-16-26	13-19-31	15-22-36	17-25-41	19-28-46	21-31-51
1-Way	3-4-7		6-9-14	8-12-19	11-16-25	13-19-30	16-23-38	18-27-44	20-30-49	22-35-55	25-38-62		
1.02	30 x 6 20 x 8 16 x 10 14 x 12	CFM	100	205	305	410	510	610	715	815	920	1020	
		NC	—	—	15	22	28	32	36	39	42	45	
		T	4-Way	2-3-5	4-6-10	6-9-15	8-12-18	10-15-23	12-17-27	13-19-31	15-21-35	16-25-40	18-27-44
			3-Way	2-4-6	4-6-10	7-10-16	9-13-20	10-16-24	12-18-29	15-21-34	16-23-38	17-26-43	19-29-47
			2-Way	2-4-6	5-7-12	7-11-16	10-14-22	12-17-27	14-20-32	16-23-38	17-26-42	19-30-48	22-33-53
1-Way	3-4-7		6-9-14	9-13-20	11-16-26	14-20-33	16-24-39	18-28-45	21-31-50	24-46-57	26-40-63		
1.15	24 x 8 18 x 10 16 x 12	CFM	115	230	345	460	575	690	805	920	1040	1150	
		NC	—	—	16	23	29	32	36	40	43	46	
		T	4-Way	2-3-5	4-6-10	6-9-15	8-12-19	10-16-24	12-17-28	14-20-32	16-23-37	17-25-41	18-28-45
			3-Way	2-4-6	5-7-11	7-10-16	9-13-20	11-16-25	13-18-30	15-21-35	16-25-40	18-27-44	20-30-49
			2-Way	2-4-6	5-7-12	8-11-17	10-14-22	12-17-28	14-20-33	16-24-39	18-27-44	20-30-49	22-34-54
1-Way	3-5-8		6-9-15	9-14-21	12-17-27	15-21-34	17-25-40	19-28-46	21-33-53	24-36-58	27-41-66		
1.25	36 x 6 20 x 10 14 x 14	CFM	125	250	375	500	625	750	875	1000	1120	1250	
		NC	—	—	16	23	29	33	37	40	43	46	
		T	4-Way	2-3-5	4-6-10	6-9-15	8-12-19	10-16-24	12-17-28	14-20-33	16-23-37	17-26-42	19-28-46
			3-Way	2-4-6	5-7-11	7-10-16	9-14-21	11-16-26	13-19-31	15-22-36	16-25-40	18-28-45	20-31-49
			2-Way	2-4-6	5-7-12	8-11-17	10-15-23	12-18-29	15-21-34	16-25-40	18-28-45	20-31-49	23-35-55
1-Way	3-5-8		6-9-15	9-14-20	12-17-28	15-21-34	17-25-40	19-29-47	22-33-53	25-38-60	28-42-67		
1.35	16 x 14 18 x 12	CFM	135	270	405	540	675	810	945	1080	1220	1350	
		NC	—	—	16	23	29	33	37	40	43	46	
		T	4-Way	2-4-6	4-6-10	7-10-16	9-13-20	10-16-24	12-18-29	15-21-34	16-23-38	17-26-38	19-29-47
			3-Way	2-4-6	5-7-11	7-11-16	9-14-21	11-16-28	13-19-31	15-22-36	17-25-41	19-27-46	21-31-50
			2-Way	3-4-7	5-8-13	8-12-18	10-16-24	12-18-29	15-21-35	17-25-41	19-28-46	21-32-51	24-36-57
1-Way	3-5-8		6-9-15	10-14-22	12-17-28	15-21-35	17-26-42	20-30-49	22-34-54	25-38-61	28-43-68		
1.53	30 x 8 24 x 10 18 x 14 16 x 16	CFM	155	305	460	610	765	920	1070	1220	1380	1530	
		NC	—	—	17	24	29	34	38	41	44	47	
		T	4-Way	2-4-6	5-7-11	7-10-16	9-13-20	11-16-25	13-18-30	15-21-35	16-24-39	18-27-44	20-30-49
			3-Way	2-4-6	5-7-12	7-11-16	10-14-22	12-17-27	14-20-32	16-23-38	17-26-43	19-30-48	21-33-52
			2-Way	3-4-7	5-8-13	8-12-18	10-16-24	13-19-31	15-22-36	17-26-42	19-29-46	22-33-53	24-36-58
1-Way	3-5-8		7-10-16	10-14-22	12-18-29	15-22-36	17-26-43	20-31-49	23-35-49	26-40-63	29-45-71		

GRILLES AND REGISTERS



## Performance Data

Curved Blade • Supply Grilles and Registers • 51C and 61C Series

Models: 51C, 51CD

61C, 61CD

Core Area, Square Feet	Nominal Duct Size, Inches	Core Velocity, FPM	100	200	300	400	500	600	700	800	900	1000	
			TP	.003	.015	.032	.058	.094	.136	.182	.234	.302	.369
1.82	36 x 8 30 x 10 24 x 12 20 x 14 18 x 16	CFM	182	365	545	730	910	1090	1270	1460	1640	1820	
		NC	—	—	18	25	30	34	38	42	45	48	
		T	4-Way	2-4-6	5-7-11	7-11-16	9-14-21	11-16-26	13-19-31	15-22-36	17-25-41	19-28-46	21-32-51
			3-Way	2-4-6	5-7-12	8-11-17	10-15-23	12-17-28	15-21-34	16-24-39	18-27-44	20-31-49	23-35-55
			2-Way	3-4-7	6-9-14	8-12-19	11-16-26	14-20-32	16-23-38	18-27-44	20-30-49	23-35-55	25-38-61
			1-Way	3-5-8	7-10-16	10-15-23	13-19-31	16-23-38	18-28-45	21-33-52	24-36-58	28-41-66	31-47-74
2.10	24 x 14 20 x 16 18 x 18	CFM	210	420	630	840	1050	1260	1470	1680	1890	2100	
		NC	—	—	19	25	30	35	39	42	45	48	
		T	4-Way	2-4-6	5-7-12	8-11-17	10-14-22	12-17-27	14-20-33	16-23-43	17-26-43	19-30-48	22-33-53
			3-Way	3-4-7	5-8-13	8-12-18	10-16-24	12-18-29	15-21-35	17-25-41	19-28-46	21-32-51	24-36-57
			2-Way	3-4-7	6-9-14	9-13-20	12-17-29	14-20-33	17-24-39	18-28-45	21-31-50	24-36-57	27-40-64
			1-Way	4-6-9	7-11-16	10-16-24	14-20-32	16-24-39	20-39-47	22-33-53	25-38-60	28-43-68	32-49-78
2.35	36 x 10 30 x 12 24 x 16 20 x 18	CFM	235	470	705	940	1180	1410	1640	1880	2120	2350	
		NC	—	—	19	26	31	35	39	43	46	49	
		T	4-Way	2-4-6	5-7-12	8-11-17	10-15-23	12-17-28	15-21-34	16-24-39	18-27-44	20-30-49	23-35-55
			3-Way	3-4-7	5-8-13	8-12-19	10-16-24	13-18-30	15-22-36	17-26-42	19-30-48	22-33-53	24-36-58
			2-Way	3-5-8	6-9-15	9-14-21	12-17-27	15-21-34	17-25-41	19-29-47	21-33-52	24-37-59	33-49-80
			1-Way	4-6-9	7-11-16	11-16-25	14-20-33	17-25-41	19-30-48	23-35-55	26-39-62	29-44-70	33-49-80
2.68	36 x 12 30 x 14 24 x 18 20 x 20	CFM	270	535	805	1070	1340	1610	1880	2140	2410	2680	
		NC	—	—	19	26	31	36	40	43	46	48	
		T	4-Way	3-4-7	5-8-13	8-12-18	10-16-24	12-18-29	15-21-35	17-25-41	19-28-46	21-31-50	24-36-57
			3-Way	3-4-7	6-9-14	8-12-19	11-16-25	14-20-32	16-23-38	18-27-44	20-30-49	23-35-55	25-38-61
			2-Way	3-5-8	6-9-15	9-14-21	12-17-28	15-21-35	19-29-47	19-30-48	22-34-54	25-38-60	27-43-68
			1-Way	4-6-9	8-11-17	11-16-26	15-21-34	17-26-42	20-31-49	24-36-57	27-40-64	30-46-73	34-51-82
3.15	36 x 14 30 x 16 24 x 20	CFM	315	630	945	1260	1580	1890	2200	2520	2840	3150	
		NC	—	10	20	27	32	37	41	44	47	49	
		T	4-Way	3-4-7	5-8-13	8-12-18	11-16-25	13-18-30	15-22-36	17-26-42	19-30-48	22-34-53	25-38-60
			3-Way	3-4-7	6-9-14	9-13-20	11-16-26	14-20-33	16-24-39	18-28-45	21-31-50	24-37-57	27-40-64
			2-Way	3-5-8	7-10-16	10-15-23	12-18-29	16-23-37	18-27-44	20-31-49	23-35-56	26-41-63	29-45-71
			1-Way	4-6-10	8-12-18	12-17-27	15-20-37	18-27-44	21-32-51	25-38-60	28-42-67	32-49-77	36-54-86
3.65	36 x 16 30 x 18 24 x 24	CFM	365	730	1100	1460	1820	2190	2560	2920	3280	3650	
		NC	—	10	20	28	33	37	41	45	48	50	
		T	4-Way	3-4-7	6-9-14	8-12-19	11-16-26	14-20-32	16-23-38	18-27-44	20-30-49	23-35-55	26-39-62
			3-Way	3-5-8	6-9-15	9-14-21	12-17-27	15-21-34	17-25-41	19-29-47	22-33-53	24-37-59	27-41-66
			2-Way	3-5-8	7-10-16	10-15-23	13-19-31	16-23-38	18-28-45	21-33-52	24-36-58	27-41-66	31-47-74
			1-Way	4-6-10	8-12-19	12-17-28	15-22-36	18-28-45	22-33-53	26-39-62	29-44-70	33-50-80	37-55-89
4.05	36 x 18 30 x 20	CFM	405	810	1220	1620	2020	2430	2830	3240	3640	4050	
		NC	—	11	21	28	33	38	42	45	48	50	
		T	4-Way	3-4-7	6-9-14	9-13-20	11-16-26	14-20-33	16-24-39	18-28-45	21-31-50	24-36-57	27-40-64
			3-Way	3-5-8	6-9-15	9-14-21	12-17-28	15-21-35	17-26-42	19-30-48	22-34-54	25-38-61	28-43-68
			2-Way	4-6-9	7-11-16	10-15-24	13-19-31	16-24-39	19-28-46	22-33-53	25-38-60	28-43-68	32-48-77
			1-Way	4-6-10	8-12-19	12-18-29	16-23-38	19-28-46	23-35-55	27-40-64	30-45-72	34-50-81	38-57-91
4.72	36 x 20 30 x 24	CFM	470	945	1420	1890	2360	2830	3300	3780	4250	4720	
		NC	—	12	21	30	34	38	42	46	48	51	
		T	4-Way	3-5-8	6-9-15	9-14-21	12-17-27	15-21-34	17-26-41	19-29-47	31-33-52	24-37-59	27-41-66
			3-Way	3-5-8	7-10-16	10-14-23	12-18-29	16-23-37	18-27-44	21-31-50	23-35-56	27-40-64	30-45-72
			2-Way	4-6-9	7-11-16	11-16-25	14-20-33	17-25-41	19-30-48	23-35-55	26-39-62	29-45-71	33-49-80
			1-Way	5-7-11	9-13-20	13-18-30	16-24-39	19-30-48	24-36-57	27-41-66	31-48-76	36-53-85	40-59-95
5.82	36 x 24 30 x 30	CFM	580	1160	1750	2330	2910	3490	4070	4660	5240	5820	
		NC	—	12	22	29	35	39	43	47	49	52	
		T	4-Way	3-5-8	6-9-15	10-14-22	12-18-29	15-22-36	17-26-43	20-31-49	23-35-56	26-39-62	29-44-70
			3-Way	4-6-9	7-10-16	10-16-24	13-19-31	16-24-39	19-28-46	22-33-53	24-37-59	28-43-68	31-48-76
			2-Way	4-6-9	8-11-17	11-16-26	15-21-34	17-26-43	21-31-50	24-36-58	27-41-66	31-47-75	35-52-84
			1-Way	5-7-11	9-14-21	13-19-31	11-25-41	21-31-50	25-38-60	28-44-70	33-49-80	38-56-90	43-64-102

## Performance Data

### Curved Blade • Supply Grilles and Registers • 51C and 61C Series

Models: 51C, 51CD

61C, 61CD

Core Area, Square Feet	Nominal Duct Size, Inches	Core Velocity, FPM	100	200	300	400	500	600	700	800	900	1000	
		TP	.003	.015	.032	.058	.094	.136	.182	.234	.302	.369	
7.17	36 x 30	CFM	715	1430	2150	2870	3580	4300	5020	5740	6450	7170	
		NC	—	14	23	29	35	40	44	48	50	53	
		T	4-Way	3-5-8	7-10-16	10-15-23	13-19-31	16-22-38	18-28-45	21-33-52	24-36-58	27-41-66	31-47-74
			3-Way	4-6-9	7-11-16	11-16-25	14-20-33	17-25-41	20-30-49	23-35-55	26-40-63	29-45-71	33-49-80
			2-Way	4-6-10	8-12-19	12-17-28	15-22-36	18-28-45	22-33-53	26-39-62	29-44-70	33-49-80	37-55-89
			1-Way	5-7-12	10-14-22	14-20-33	17-26-43	22-33-53	27-40-64	31-47-75	35-52-84	40-59-95	45-67-107
8.63	36 x 36	CFM	865	1730	2590	3450	4320	5180	6040	6900	7700	8630	
		NC	—	14	24	30	36	41	45	48	50	53	
		T	4-Way	4-6-9	7-11-16	10-16-24	14-20-32	16-25-40	19-30-48	22-34-54	26-39-62	29-43-69	32-49-78
			3-Way	4-6-10	8-11-17	11-16-26	15-21-34	17-28-43	21-31-50	24-36-58	27-41-66	31-47-75	35-52-85
			2-Way	4-6-10	8-12-19	12-18-29	16-23-38	19-30-47	23-35-56	27-41-65	31-47-66	35-52-83	39-59-93
			1-Way	5-8-13	10-15-23	15-21-35	18-28-45	23-35-57	28-43-68	32-49-78	37-55-88	42-62-100	47-70-113

CFM - cubic feet per minute

FPM - feet per minute velocity

TP - total pressure - inches w.g.

T - throw in feet

NC - Noise Criteria (values) based on 10 dB room absorption, re 10<sup>-12</sup> watts.

#### Performance Notes:

1. Throw values are given for terminal velocities of 150, 100 and 50 fpm, with a cooling temperature differential ( $\Delta T$ ) of 20°F and are based on surface mount units benefiting from the ceiling coanda effect. The blade settings were set for optimum discharge, parallel to the face of the grille, which has the outer blades closest to the frame, set with an opening of 1/8" (3) and progressively wider spacings between blades away from the frame. (**Note:** The throw values may be increased or decreased by as much as 20% by changing the blade setting).
2. Blades in the full open position
  - reduce the NC by 6.
  - multiply the total pressure x 0.3.
3. The NC values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts.
4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.