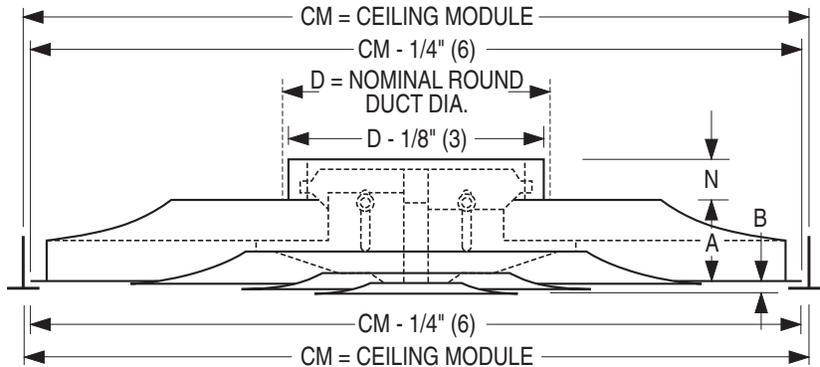




SQUARE CEILING DIFFUSERS
 ADJUSTABLE PATTERN • LOUVERED FACE
 STEEL • ROUND NECK • 4 CONE
 MODEL: RNSA1 'SLIDING TYPE'

TYPE L Lay-in T-Bar



Dimensional Data

Ceiling Module CM		Imperial Units (inches)			Metric Units (mm)				
Imperial Modules	Metric Modules	Duct Size D	N	A	B	Duct Size D	N	A	B
12 x 12	300 x 300	4*, 5*	3 1/4	2 1/4	0 to 1/2	102*, 127*	83	57	0 to 13
		6, 7, 8	1 1/4			152, 178, 203	32		
24 x 24	600 x 600	6, 8, 10, 12, 14, 15	1 1/4	3 3/4	0 to 3/8	152, 203, 254, 305, 356, 381	32	95	0 to 10

* Supplied with a reducer.

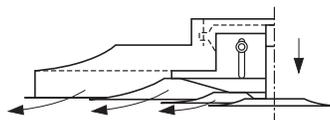
DESCRIPTION:

1. Material: Heavy-gauge corrosion-resistant steel.
2. The air discharge pattern on RNSA diffusers may be adjusted from horizontal to vertical by gradually moving the position of the inner three cone assembly from the down to an up (recessed) position - allowing a variable pattern adjustment. Model RNSA1 has a 'sliding type' (friction) arrangement.
3. The diffuser delivers the supply air in a true 360° streamline pattern. Excellent for VAV systems.
4. The RNSA consists of four die-formed concentric cones in all sizes which eliminate mitered corners and provide uniform appearance in all neck sizes. Outer cone is one piece construction.
5. A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
6. Diffuser has a removable plug for screwdriver adjustment of the optional damper without removing the inner core.
7. Standard finish is AW Appliance White.

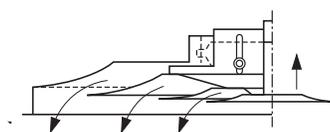
OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2
 - EXB External Foil-Back Insulation, ships loose - R-4.2
 - EQT Earthquake Tabs
- Finish:
- SP Special. Specify _____.
 - QB Quadrant Blanks:
 - QB3 3-Way Blow
 - QC2 2-Way Corner Blow
 - QB2 2-Way Opposite Blow
 - QB1 1-Way Blow

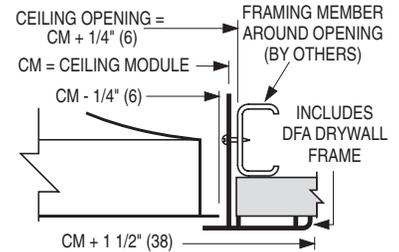
Horizontal Air Pattern



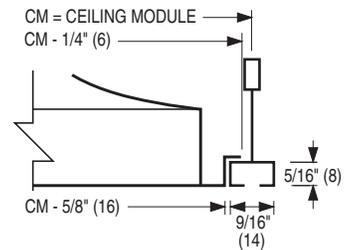
Vertical Air Pattern



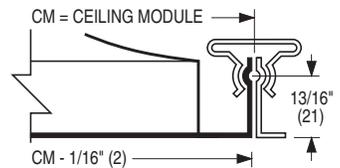
TYPE S Surface Mount
(allows ceiling access)



TYPE F Fineline®

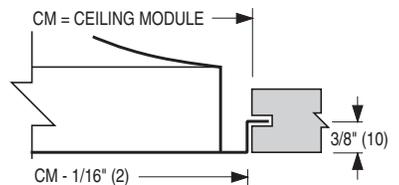


TYPE M Metal Pan (Snap-in)



TYPE SP Spline

For one directional exposed T-Bar or fully concealed grid. 1 spline on two opposite sides. Steel lift brackets on other.



Fineline® is a registered trademark of USG Interiors Inc.

Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

2 - 6 - 17

RNSA

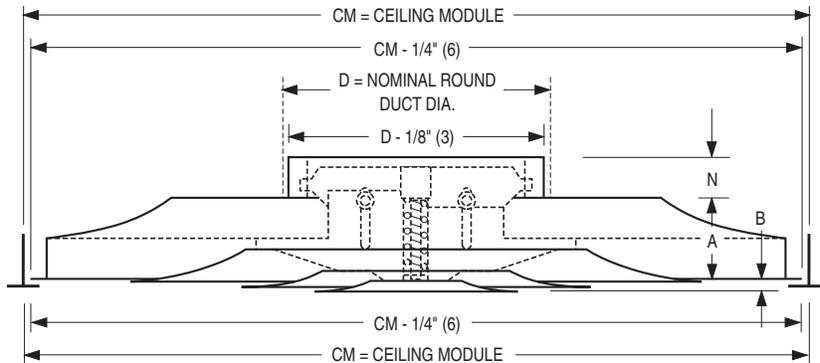
3 - 1 - 16

4200-5A



SQUARE CEILING DIFFUSERS
 ADJUSTABLE PATTERN • LOUVERED FACE
 STEEL • ROUND NECK • 4 CONE
MODEL: RNSA2 'ROTATING TYPE'

TYPE L Lay-in T-Bar



Dimensional Data

Ceiling Module CM		Imperial Units (inches)			Metric Units (mm)				
Imperial Modules	Metric Modules	Duct Size D	N	A	B	Duct Size D	N	A	B
12 x 12	300 x 300	4*, 5*	3 1/4	2 1/4	0	102*, 127*	83	57	0
		6, 7, 8	1 1/4		1/2	152, 178, 203	32		to 13
24 x 24	600 x 600	6, 8, 10, 12, 14, 15	1 1/4	3 3/4	0	152, 203, 254, 305, 356, 381	32	95	0 to 10

* Supplied with a reducer.

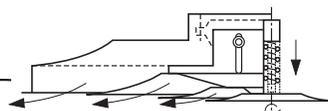
DESCRIPTION:

1. Material: Heavy-gauge corrosion-resistant steel.
2. The air discharge pattern on RNSA2 diffusers may be adjusted from horizontal to vertical by gradually moving the position of the inner three cone assembly from the down to an up (recessed) position - allowing a variable pattern adjustment. Model RNSA2 has a 'screw type' arrangement where the angle of discharge is varied by rotating the center cone.
3. The diffuser delivers the supply air in a true 360° streamline pattern. Excellent for VAV systems.
4. The RNSA2 consists of four die-formed concentric cones in all sizes which eliminate mitered corners and provide uniform appearance in all neck sizes. Outer cone is one piece construction.
5. A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
6. Diffuser has a removable plug for screwdriver adjustment of the optional damper without removing the inner core.
7. Standard finish is AW Appliance White.

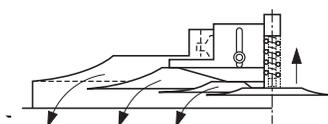
OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2
- EXB External Foil-Back Insulation, ships loose - R-4.2
- EQT Earthquake Tabs
- Finish:
- SP Special. Specify _____.
- QB Quadrant Blanks:
- QB3 3-Way Blow
- QC2 2-Way Corner Blow
- QB2 2-Way Opposite Blow
- QB1 1-Way Blow

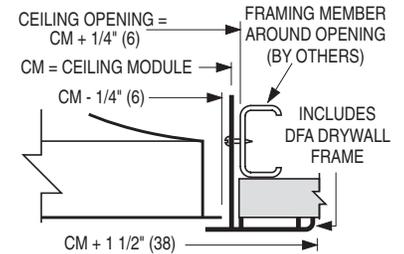
Horizontal Air Pattern



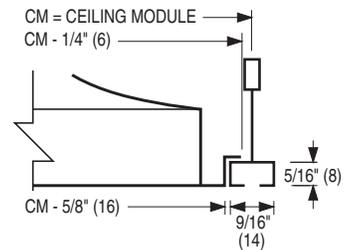
Vertical Air Pattern



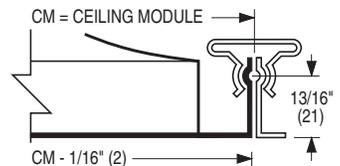
TYPE S Surface Mount
(allows ceiling access)



TYPE F Fineline®

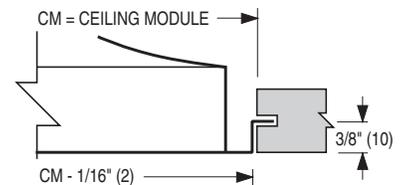


TYPE M Metal Pan (Snap-in)



TYPE SP Spline

For one directional exposed T-Bar or fully concealed grid. 1 spline on two opposite sides. Steel lift brackets on other.



Fineline® is a registered trademark of USG Interiors Inc.

Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

2 - 6 - 17

RNSA

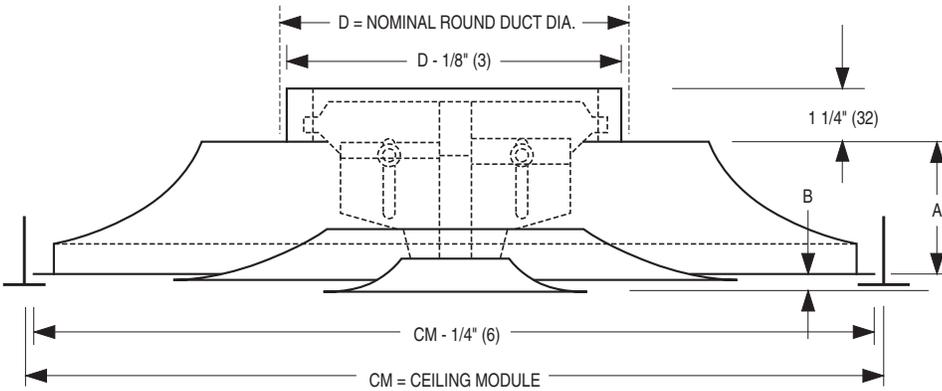
3 - 1 - 16

4200-5B

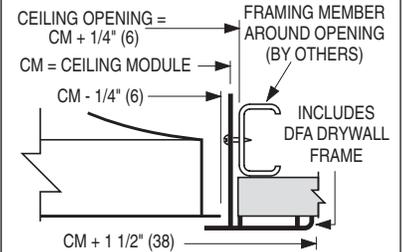


SQUARE CEILING DIFFUSERS
 ADJUSTABLE PATTERN • LOUVERED FACE
 STEEL • ROUND NECK • 3 CONE
MODEL: RNSA1 20 x 20 MODULE

TYPE L Lay-in T-Bar 'Sliding Type'



TYPE S Surface Mount
 (allows ceiling access)



Dimensional Data for Available Frame

	Imperial Modules		Metric Modules			
	Imperial Units (inches)	SI Units (mm)	SI Units (mm)			
Listed Neck Size	CM = 20 x 20	CM = 508 x 508	CM = 500 x 500			
	A	B	A	B	A	B
6 (152)		0		0		0
8 (203)	3 1/8	to	79	to	79	to
10 (254)		3/8		10		10

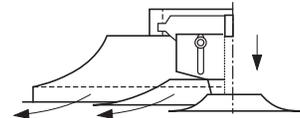
DESCRIPTION:

1. Material: Heavy-gauge corrosion-resistant steel.
2. The air discharge pattern on RNSA diffusers may be adjusted from horizontal to vertical by gradually moving the position of the inner two cone assembly from the down to an up (recessed) position - allowing a variable pattern adjustment. Model RNSA1 has a 'sliding type' (friction) arrangement.
3. The diffuser delivers the supply air in a true 360° streamline pattern. Excellent for VAV systems.
4. The RNSA consists of three die-formed concentric cones in all sizes which eliminate mitered corners and provide uniform appearance in all neck sizes. Outer cone is one piece construction.
5. A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
6. Diffuser has a removable plug for screwdriver adjustment of the optional damper without removing the inner core.
7. Standard finish is AW Appliance White.

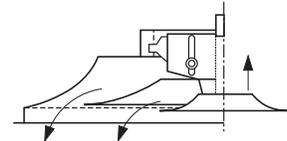
OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - EQT Earthquake Tabs
- Finish:
- SP Special. Specify _____.
- QB Quadrant Blanks:
- QB3 3-Way Blow
 - QC2 2-Way Corner Blow
 - QB2 2-Way Opposite Blow
 - QB1 1-Way Blow

Horizontal Air Pattern



Vertical Air Pattern



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

2 - 6 - 17

RNSA

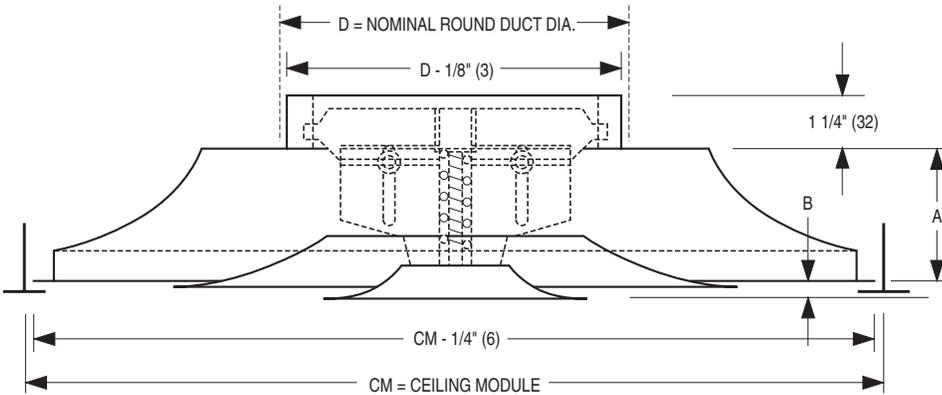
3 - 10 - 16

4200-6A

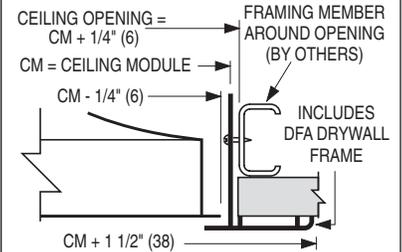


SQUARE CEILING DIFFUSERS
 ADJUSTABLE PATTERN • LOUVERED FACE
 STEEL • ROUND NECK • 3 CONE
MODEL: RNSA2 20 x 20 MODULE

TYPE L Lay-in T-Bar 'Rotating Type'



TYPE S Surface Mount
 (allows ceiling access)



Dimensional Data for Available Frame

	Imperial Modules		Metric Modules	
	Imperial Units (inches)	SI Units (mm)	SI Units (mm)	SI Units (mm)
Listed Neck Size	CM = 20 x 20	CM = 508 x 508	CM = 500 x 500	
	A	B	A	B
6 (152)		0		0
8 (203)	3 1/8	to	79	to
10 (254)		3/8		10

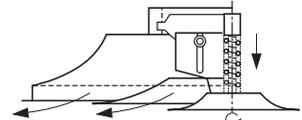
DESCRIPTION:

1. Material: Heavy-gauge corrosion-resistant steel.
2. The air discharge pattern on RNSA diffusers may be adjusted from horizontal to vertical by gradually moving the position of the inner two cone assembly from the down to an up (recessed) position - allowing a variable pattern adjustment. Model RNSA2 has a unique 'screw type' arrangement where the angle of discharge is varied by rotating the center cone.
3. The diffuser delivers the supply air in a true 360° streamline pattern. Excellent for VAV systems.
4. The RNSA consists of three die-formed concentric cones in all sizes which eliminate mitered corners and provide uniform appearance in all neck sizes. Outer cone is one piece construction.
5. A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
6. Diffuser has a removable plug for screwdriver adjustment of the optional damper without removing the inner core.
7. Standard finish is AW Appliance White.

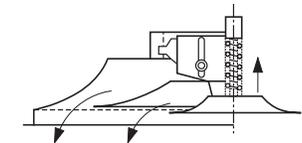
OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - EQT Earthquake Tabs
- Finish:
- SP Special. Specify _____.
- QB Quadrant Blanks:
- QB3 3-Way Blow
 - QC2 2-Way Corner Blow
 - QB2 2-Way Opposite Blow
 - QB1 1-Way Blow

Horizontal Air Pattern



Vertical Air Pattern



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

2 - 6 - 17

RNSA

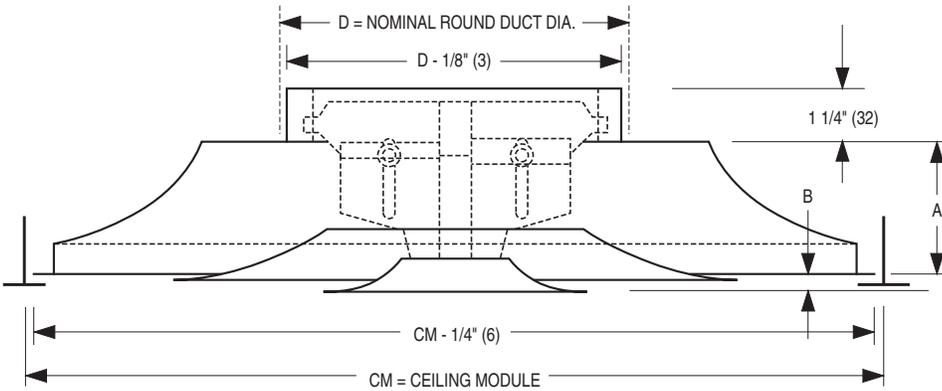
3 - 10 - 16

4200-6B

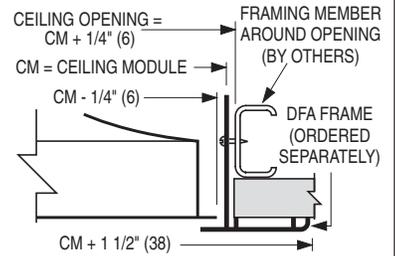


SQUARE CEILING DIFFUSERS
 ADJUSTABLE PATTERN • LOUVERED FACE
 ALUMINUM • ROUND NECK • 3 CONE
MODEL: ARNSA 20 x 20 MODULE

TYPE L Lay-in T-Bar 'Sliding Type'



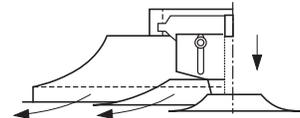
TYPE L Surface Mount (allows ceiling access)



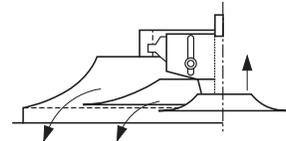
Dimensional Data for Available Frame

	Imperial Modules		Metric Modules			
	Imperial Units (inches)	SI Units (mm)	SI Units (mm)			
Listed Neck Size	CM = 20 x 20	CM = 508 x 508	CM = 500 x 500			
	A	B	A	B	A	B
6 (152)		0		0		0
8 (203)	3 1/8	to	79	to	79	to
10 (254)		3/8		10		10

Horizontal Air Pattern



Vertical Air Pattern



DESCRIPTION:

1. Material: Aluminum construction with corrosion-resistant steel neck bracketry.
2. The air discharge pattern on ARNSA diffusers may be adjusted from horizontal to vertical by gradually moving the position of the inner two cone assembly from the down to an up (recessed) position - allowing a variable pattern adjustment. Model ARNSA has a 'sliding type' (friction) arrangement.
3. The diffuser delivers the supply air in a true 360° streamline pattern. Excellent for VAV systems.
4. The ARNSA consists of three die-formed concentric cones in all sizes which eliminate mitered corners and provide uniform appearance in all neck sizes. Outer cone is one piece construction.
5. A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
6. Diffuser has a removable plug for screwdriver adjustment of the optional damper without removing the inner core.
7. Standard finish is AW Appliance White.

OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - EQT Earthquake Tabs
- Finish:
- SP Special. Specify _____.
- QB Quadrant Blanks:
- QB3 3-Way Blow
 - QC2 2-Way Corner Blow
 - QB2 2-Way Opposite Blow
 - QB1 1-Way Blow

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

2 - 6 - 17

RNSA

3 - 10 - 16

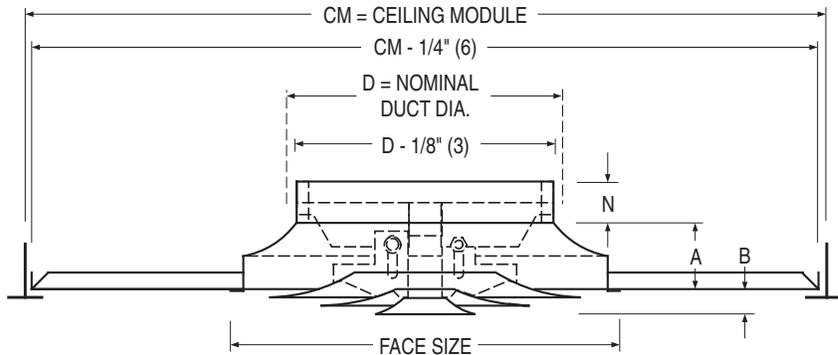
4200-6C



SQUARE CEILING DIFFUSERS

ADJUSTABLE PATTERN • LOUVERED FACE • PANEL MOUNTED • STEEL • ROUND NECK • 4 CONE MODEL: RNSA1 'SLIDING TYPE' TYPE PL

TYPE PL Panel Mounted Lay-in T-Bar



Dimensional Data

Listed Neck Size	Imperial Modules (inches)				SI Units (mm)			
	Face Size = 12 x 12				Face Size = 305 x 305			
	D	N	A	B	D	N	A	B
4*	4	3 1/4	2 1/4	0	102	83	57	0
5*	5				127			
6	6	1 1/4	3 3/4	TO 1/2	152	32	95	TO 13
7	7				178			
8	8				203			
Face Size = 24 x 24				Face Size = 610 x 610				
6	6	1 1/4	3 3/4	0 TO 3/8	152	83	95	0
8	8				203			
10	10				254			
12	12				305			
14	14				356			
15	15				381			

Available Ceiling Modules CM		
Imperial Modules		Metric Modules
Imperial Units (inches)	SI Units (mm)	SI Units (mm)
Face Size 12 x 12 (305 x 305) Listed Neck Sizes 4, 5, 6, 7, 8 (102, 127, 152, 178, 203)		
20 x 20	508 x 508	500 x 500
24 x 12	610 x 305	600 x 300
24 x 24	610 x 610	600 x 600
Face Size 24 x 24 (610 x 610) Listed Neck Sizes 6, 8, 10, 12, 14, 15 (152, 203, 254, 305, 356, 381)		
30 x 30	762 x 762	750 x 750
48 x 24	1219 x 610	1200 x 600

* Supplied with a reducer.

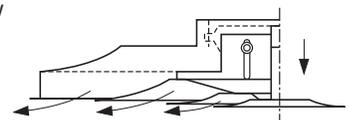
DESCRIPTION:

1. Material: Heavy gauge, corrosion-resistant steel.
2. The air discharge pattern on RNSA diffusers may be adjusted from horizontal to vertical by gradually moving the position of the inner three cone assembly from the down to an up (recessed) position - allowing a variable pattern adjustment. Model RNSA1 has a 'sliding type' (friction) arrangement.
3. The diffuser delivers the supply air in a true 360° streamline pattern. Excellent for VAV systems.
4. The RNSA consists of four die-formed concentric cones in all sizes which eliminate mitered corners and provide uniform appearance in all neck sizes. Outer cone is one piece construction.
5. A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
6. Diffuser has a removable plug for screwdriver adjustment of the optional damper without removing the inner core.
7. Standard finish is AW Appliance White.

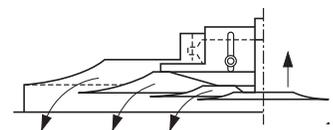
OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - EQT Earthquake Tabs
- Finish:
- SP Special. Specify _____ .
- QB Quadrant Blanks:
- QB3 3-Way Blow
 - QC2 2-Way Corner Blow
 - QB2 2-Way Opposite Blow
 - QB1 1-Way Blow

Horizontal Air Pattern



Vertical Air Pattern



Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

3 - 21 - 16

RNSA

10 - 31 - 07

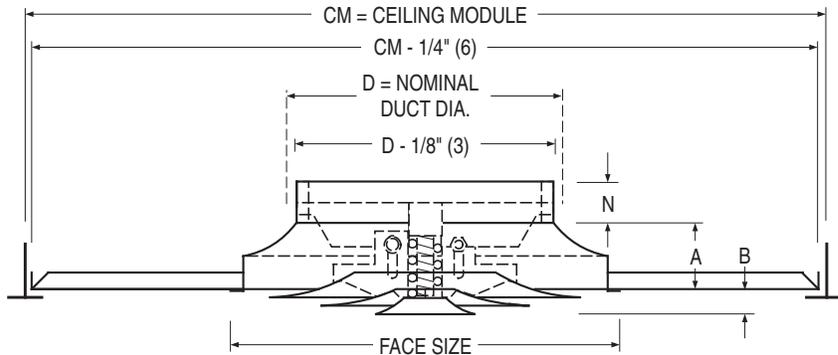
4200-7A



SQUARE CEILING DIFFUSERS

ADJUSTABLE PATTERN • LOUVERED FACE • PANEL MOUNTED • STEEL • ROUND NECK • 4 CONE MODEL: RNSA2 'ROTATING TYPE' TYPE PL

TYPE PL Panel Mounted Lay-in T-Bar



Dimensional Data

Listed Neck Size	Imperial Modules (inches)				SI Units (mm)			
	Face Size = 12 x 12				Face Size = 305 x 305			
	D	N	A	B	D	N	A	B
4*	4	3 1/4	2 1/4	0	102	83	57	0
5*	5				127			
6	6	1 1/4	3 3/4	TO 1/2	152	32	95	TO 13
7	7				178			
8	8				203			
Face Size = 24 x 24				Face Size = 610 x 610				
6	6	1 1/4	3 3/4	0 TO 3/8	152	83	95	0
8	8				203			
10	10				254			
12	12				305			
14	14				356			
15	15				381			

Available Ceiling Modules CM		
Imperial Modules		Metric Modules
Imperial Units (inches)	SI Units (mm)	SI Units (mm)
Face Size 12 x 12 (305 x 305) Listed Neck Sizes 4, 5, 6, 7, 8 (102, 127, 152, 178, 203)		
20 x 20	508 x 508	500 x 500
24 x 12	610 x 305	600 x 300
24 x 24	610 x 610	600 x 600
Face Size 24 x 24 (610 x 610) Listed Neck Sizes 6, 8, 10, 12, 14, 15 (152, 203, 254, 305, 356, 381)		
30 x 30	762 x 762	750 x 750
48 x 24	1219 x 610	1200 x 600

* Supplied with a reducer.

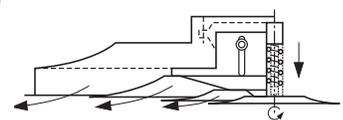
DESCRIPTION:

1. Material: Heavy gauge, corrosion-resistant steel.
2. The air discharge pattern on RNSA diffusers may be adjusted from horizontal to vertical by gradually moving the position of the inner three cone assembly from the down to an up (recessed) position - allowing a variable pattern adjustment. Model RNSA2 has a unique 'screw type' arrangement where the angle of discharge is varied by rotating the center cone.
3. The diffuser delivers the supply air in a true 360° streamline pattern. Excellent for VAV systems.
4. The RNSA consists of four die-formed concentric cones in all sizes which eliminate mitered corners and provide uniform appearance in all neck sizes. Outer cone is one piece construction.
5. A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
6. Diffuser has a removable plug for screwdriver adjustment of the optional damper without removing the inner core.
7. Standard finish is AW Appliance White.

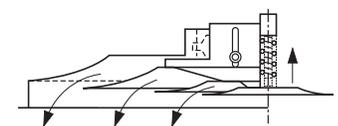
OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.)
 - EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.)
 - EQT Earthquake Tabs
- Finish:
- SP Special. Specify _____ .
- QB Quadrant Blanks:
- QB3 3-Way Blow
 - QC2 2-Way Corner Blow
 - QB2 2-Way Opposite Blow
 - QB1 1-Way Blow

Horizontal Air Pattern



Vertical Air Pattern



Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

3 - 21 - 16

RNSA

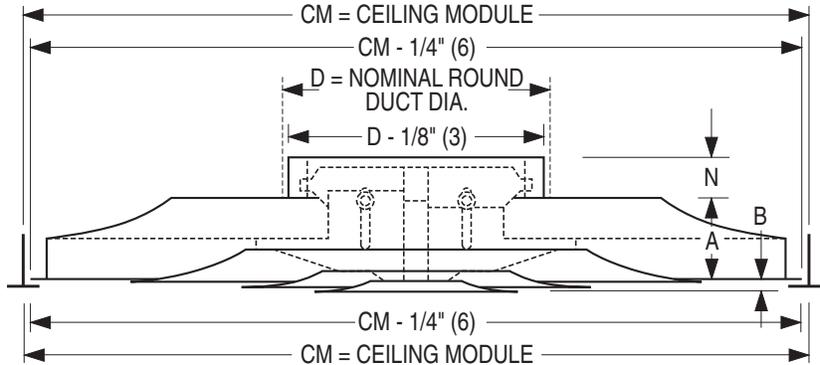
10 - 31 - 07

4200-7B

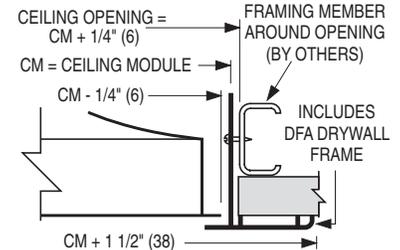


SQUARE CEILING DIFFUSERS
 ADJUSTABLE PATTERN • LOUVERED FACE
 ALUMINUM • ROUND NECK • 4 CONE
MODEL: ARNSA 'SLIDING TYPE'

TYPE L Lay-in T-Bar



TYPE S Surface Mount
 (allows ceiling access)



Dimensional Data

Ceiling Module CM		Imperial Units (inches)				Metric Units (mm)			
Imperial Modules	Metric Modules	Duct Size D	N	A	B	Duct Size D	N	A	B
12 x 12	300 x 300	4*, 5*	3 1/4	2 1/4	0 to 1/2	102*, 127*	83	57	0 to 13
		6, 7, 8	1 1/4			152, 178, 203	32		
24 x 24	600 x 600	6, 8, 10, 12, 14, 15	1 1/4	3 3/4	0 to 3/8	152, 203, 254, 305, 356, 381	32	95	0 to 10

* Supplied with a reducer.

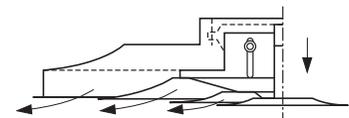
DESCRIPTION:

1. Material: Aluminum construction with corrosion-resistant steel neck braketery.
2. The air discharge pattern on ARNSA diffusers may be adjusted from horizontal to vertical by gradually moving the position of the inner three cone assembly from the down to an up (recessed) position - allowing a variable pattern adjustment. Model ARNSA has a 'sliding type' (friction) arrangement.
3. The diffuser delivers the supply air in a true 360° streamline pattern. Excellent for VAV systems.
4. The ARNSA consists of four die-formed concentric cones in all sizes which eliminate mitered corners and provide uniform appearance in all neck sizes. Outer cone is one piece construction.
5. A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
6. Diffuser has a removable plug for screwdriver adjustment of the optional damper without removing the inner core.
7. Standard finish is AW Appliance White.

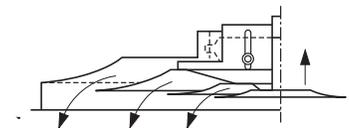
OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2
- EXB External Foil-Back Insulation, ships loose - R-4.2
- EQT Earthquake Tabs
- Finish:
- SP Special. Specify _____.
- QB Quadrant Blanks:
- QB3 3-Way Blow
- QC2 2-Way Corner Blow
- QB2 2-Way Opposite Blow
- QB1 1-Way Blow

Horizontal Air Pattern



Vertical Air Pattern



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 6 - 17	RNSA	3 - 1 - 16	4200-8



AIR BALANCING DEVICE RADIAL OPPOSED BLADE DAMPER STEEL • FOR ROUND NECK DIFFUSERS MODEL: 4275 (5" - 16" DIA.)

DESCRIPTION:

A unique method of controlling volume through a diffuser providing premium design quality and performance. The multi-blade perimeter design offers true radial flow at any setting.

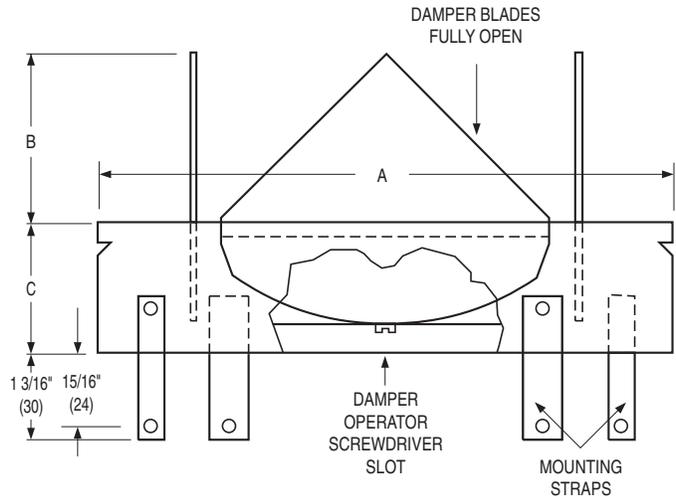
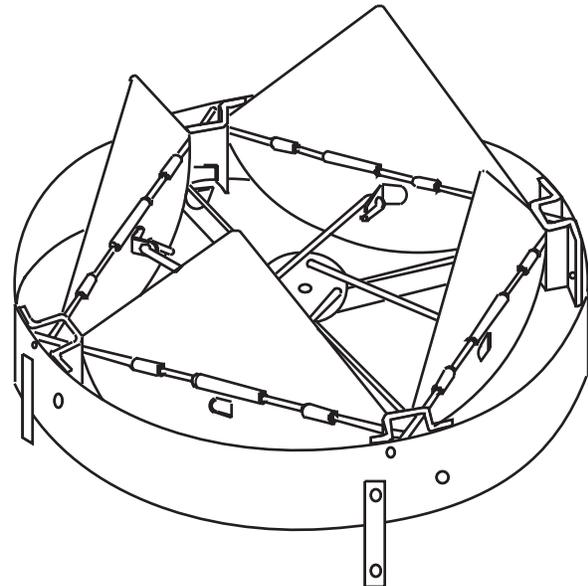
A screwdriver slot, accessible through the diffuser, requires only a half turn to adjust from fully closed to fully open. The damper is designed to fit directly on the neck of the diffuser. Simple convenient and accurate installation and operation.

OPERATION:

Size 5 through 8 are friction type. Use screwdriver and turn operator to adjust damper setting.

Size 10 through 16 use a detent mechanism to positively hold damper setting. Using screwdriver, lift up and turn operator to desired damper setting.

1. Material: Corrosion-resistant steel construction.
2. Damper mounts directly to diffuser collar.
3. Standard Finish: Mill.



	Nominal Size (inches)								Nominal Size (mm)							
	5	6	8	10	12	14	15	16	127	152	203	254	305	356	381	406
A	4 7/8	5 7/8	7 7/8	9 7/8	11 7/8	13 7/8	14 7/8	15 7/8	124	149	200	251	302	352	378	403
B	1 1/8	1 5/8	2 1/2	2 1/4	2 7/8	3 3/8	3 3/4	4 3/8	29	41	64	57	73	86	95	111
C	1 5/8				2 1/2				41				64			

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

8 - 29 - 05

ABD

3 - 1 - 02

ABD-4275-1

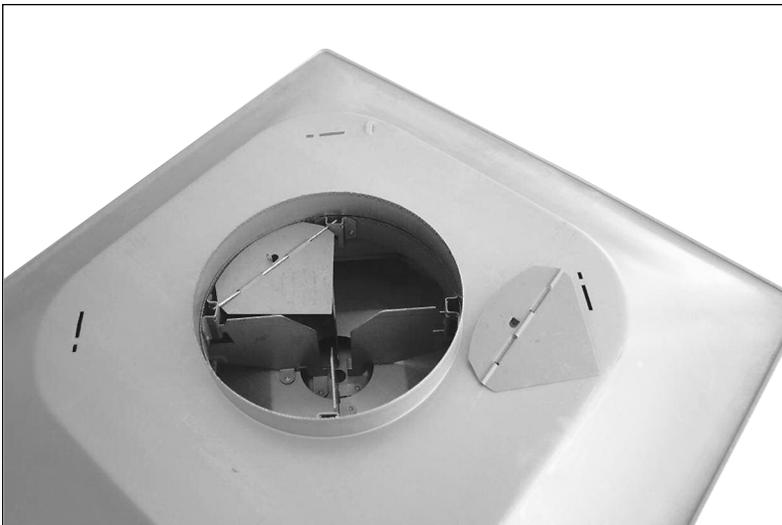


**QUADRANT BLANKS FOR MODEL SERIES
RNS AND RNSA ROUND NECK DIFFUSERS
CEILING DIFFUSER ACCESSORY
MODEL/ACCESSORY: 4295/QB**



Model 4295 Quadrant Blanks are designed specifically for use with the RNS Series Stamped Square Ceiling Diffusers. The Quadrant Blanks are constructed of steel, featuring a pie-shaped piece with a hinge pin that is pre-installed through pre-set holes in the diffuser, providing 1, 2, or 3-way discharge as required. Quadrant Blanks are available in all neck sizes, (to blank-off areas greater than 90° [3-way blow], multiple quantities must be ordered. 2-way blow requires a quantity of two and 1-way blow requires a quantity of three, per diffuser. Quadrant Blanks are shipped loose from the factory for trouble-free installation in the field [by others]).

Nailor recommends that ALL Quadrant Blanks are affixed prior to installation of the diffuser

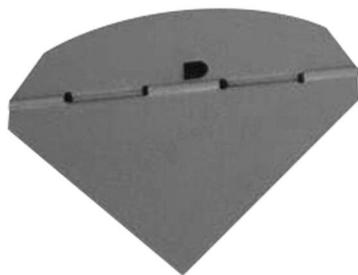


Required Items

1. Protective eyewear or safety glasses
2. Pair of work gloves

Installation Instructions

1. The steel, pie-shaped Quadrant Blank is shipped loose with a hinge pin pre-installed through pre-set holes, to provide trouble-free installation, in the field (by others).
2. Prior to installation, properly position the QB around the neck of the diffuser for desired directional blow. The elevated eyehole located above the hinged pin on the quadrant blank, shall be facing in the upright position before the piece is installed in the diffuser. The round edge of the QB shall face the outside of the inlet collar, while the knife edge shall face the center of the inlet.
3. The hinge pins on the QB shall slide securely into the pre-set holes of the riveted neck bracketry located in the diffuser inlet collar. Once in place, the knife edge of the QB shall rest on top of the concealed neck bracketry.
4. For additional Quadrant Blank installation, repeat steps 1 – 3.



Quadrant Blanks
4295 QB for Models RNS, ARNS,
RNS2, RNSA1, RNSA2, ARNSA
Round Neck Diffusers

- QB3 3-Way Blow
- QB2 2-Way Blow
- QC2 2-Way Corner Blow
- QB1 1-Way Blow

SCHEDULE TYPE:		Dimensions are in inches (mm).			
PROJECT:					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	7 - 29 - 16	QB	NEW	QB-4	

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

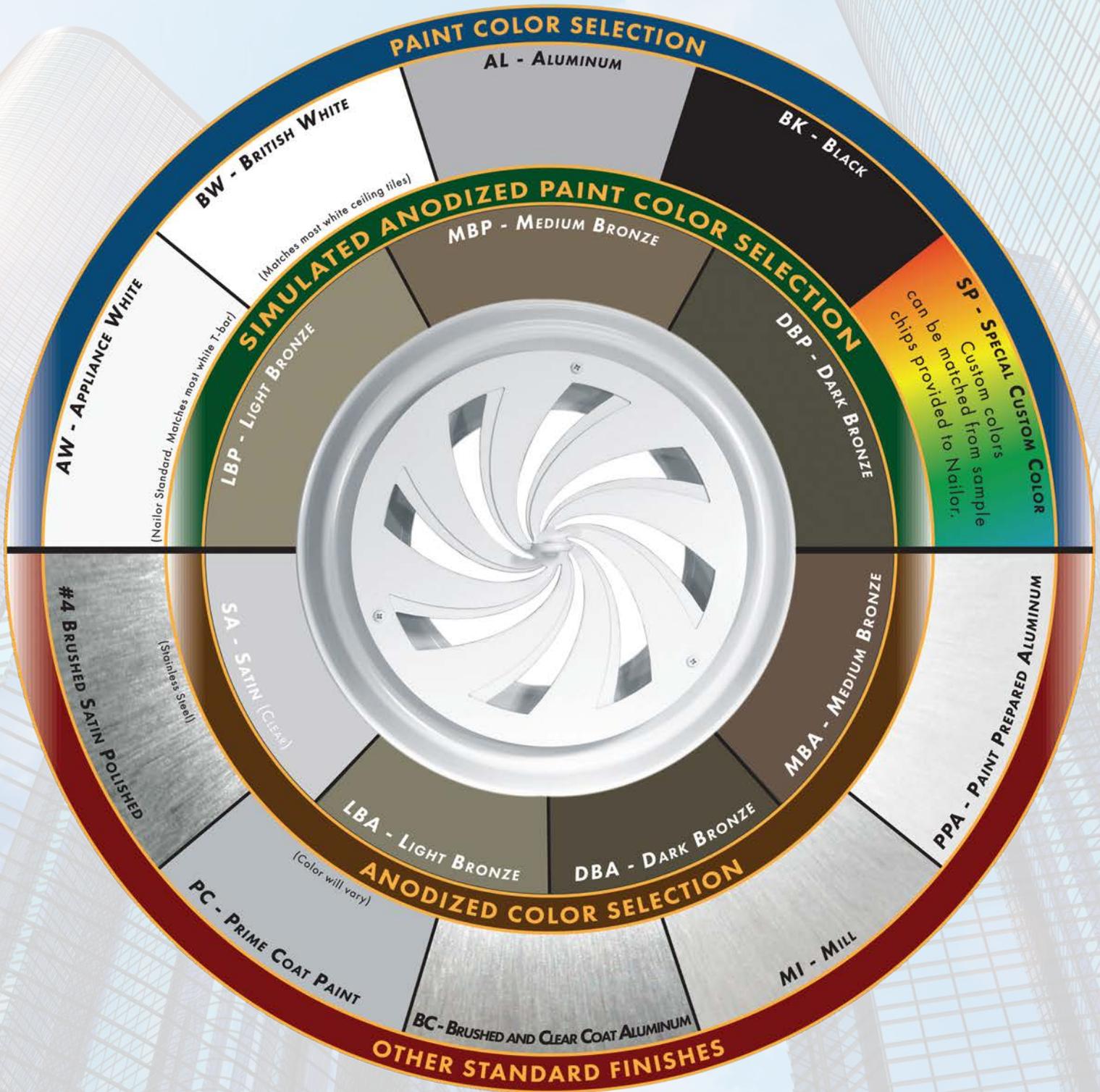
Surface is left untreated and requires cleaning, degreasing, etc. in the field before final finish can be applied if required.



Nailor[®]
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."

WGDSOF2015

www.nailor.com

PERFORMANCE DATA:

Models RNSA and ARNSA • 12 x 12 (300 x 300) Face Size

Nominal Neck Size	Neck Velocity, FPM		400	500	600	700	800	900	1000	1200	1400	1600
	Velocity Pressure		.010	.016	.023	.031	.040	.051	.063	.090	.122	.160
6" Dia.	Total Pressure	Horizontal	.019	.028	.039	.057	.074	.093	.121	.150	.192	.247
		Vertical	.023	.034	.057	.086	.110	.146	.168	.246	.316	.415
	Airflow, CFM		80	100	120	140	160	180	200	235	275	315
	Throw	Horizontal	1-2-4	2-3-6	2-3-6	3-4-7	3-5-7	4-5-8	4-6-10	6-7-11	6-8-11	6-9-12
		Vertical	1-1-2	2-2-5	2-2-6	2-3-5	2-3-5	3-5-6	3-4-7	4-5-8	5-6-9	5-7-10
Noise Criteria	Horizontal	—	—	12	17	21	23	24	32	38	41	
	Vertical	—	—	16	21	25	27	28	36	42	45	
8" Dia.	Total Pressure	Horizontal	.020	.031	.043	.059	.071	.090	.110	.150	.200	.259
		Vertical	.032	.052	.063	.096	.12	.159	.186	.258	.342	.443
	Airflow, CFM		140	175	210	245	280	315	350	420	490	560
	Throw	Horizontal	2-3-6	3-5-8	4-5-8	4-7-10	5-7-12	6-9-14	8-9-15	8-10-16	10-12-18	11-14-20
		Vertical	2-2-3	3-4-7	3-5-6	4-6-9	4-6-9	5-7-10	6-8-11	7-9-12	8-9-13	9-10-14
Noise Criteria	Horizontal	—	11	17	22	25	27	29	36	44	47	
	Vertical	—	—	21	26	29	31	33	40	48	51	

Models RNSA and ARNSA • 20 x 20 (500 x 500) Face Size

Nominal Neck Size	Neck Velocity, FPM		400	500	600	700	800	900	1000	1200	1400	1600
	Velocity Pressure		.010	.016	.023	.031	.040	.051	.063	.090	.122	.160
6" Dia.	Total Pressure	Horizontal	.017	.026	.038	.051	.067	.085	.105	.149	.202	.264
		Vertical	.023	.036	.052	.070	.091	.116	.143	.201	.274	.359
	Airflow, CFM		80	100	120	140	160	180	200	235	275	315
	Throw	Horizontal	1-2-4	2-2-5	2-3-6	2-4-6	3-5-6	4-5-7	4-5-7	4-6-8	5-6-8	5-7-9
		Vertical	1-1-2	2-2-3	2-2-4	2-3-5	2-4-5	3-5-6	3-5-7	4-5-8	4-6-9	5-7-10
Noise Criteria	Horizontal	—	12	17	22	25	29	32	37	41	45	
	Vertical	—	17	22	26	29	32	35	40	44	48	
8" Dia.	Total Pressure	Horizontal	.019	.031	.044	.059	.077	.098	.120	.173	.235	.307
		Vertical	.031	.049	.070	.094	.122	.155	.192	.275	.373	.489
	Airflow, CFM		140	175	210	245	280	315	350	420	490	560
	Throw	Horizontal	2-3-5	2-3-7	3-4-8	3-5-8	3-5-9	4-6-9	4-7-10	5-8-11	6-8-12	7-9-12
		Vertical	1-1-4	1-2-5	2-3-6	3-4-6	3-4-8	4-5-8	4-6-9	4-7-10	5-7-10	6-8-12
Noise Criteria	Horizontal	—	—	15	20	24	28	31	38	43	47	
	Vertical	14	19	24	29	32	35	38	44	48	52	
10" Dia.	Total Pressure	Horizontal	.024	.039	.056	.076	.098	.125	.153	.220	.299	.391
		Vertical	.041	.065	.094	.127	.165	.209	.258	.370	.502	.657
	Airflow, CFM		220	270	330	380	435	490	545	655	765	875
	Throws	Horizontal	2-4-7	3-5-8	4-6-9	4-7-10	5-7-10	6-8-11	6-8-12	7-9-13	8-10-14	9-11-15
		Vertical	1-2-4	1-3-6	3-5-7	3-5-8	4-5-9	4-6-10	5-6-10	5-7-11	6-8-12	7-9-12
Noise Criteria	Horizontal	—	—	16	21	26	30	33	39	45	49	
	Vertical	—	20	25	29	33	36	39	44	48	52	

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. All pressures are in inches w.g..
3. Horizontal throws are with ceiling coanda effect. For exposed duct mounting, multiply table values by x 0.7. Vertical throw is a free jet.
4. Noise Criteria (NC) are based on a room absorption of 10 dB, re 10⁻¹² watts. Dash (—) in space denotes an Noise Criteria level less than 10.
5. Data derived from independent tests conducted in accordance with ANSI/ASHRAE Standard 70-2023.

PERFORMANCE DATA:

Models RNSA and ARNSA • 24 x 24 (600 x 600) Face Size

Nominal Neck Size	Neck Velocity, FPM		400	500	600	700	800	900	1000	1200	1400	1600
	Velocity Pressure		.010	.016	.023	.031	.040	.051	.063	.090	.122	.160
6" Dia.	Total Pressure	Horizontal	.016	.024	.034	.047	.061	.078	.098	.129	.182	.240
		Vertical	.020	.031	.052	.080	.097	.124	.151	.218	.289	.390
	Airflow, CFM		80	100	120	140	160	180	200	235	275	315
	Throw	Horizontal	1-2-5	2-3-5	2-3-6	3-4-7	3-5-8	4-5-8	4-6-9	6-8-10	6-10-11	7-10-12
		Vertical	1-1-2	2-2-3	2-2-4	2-3-5	2-4-5	3-5-6	3-5-7	4-5-8	4-6-9	5-7-10
	Noise Criteria	Horizontal	—	—	—	13	17	20	22	28	32	36
Vertical		—	—	—	15	19	22	24	30	34	38	
8" Dia.	Total Pressure	Horizontal	.017	.026	.037	.049	.062	.08	.102	.131	.185	.243
		Vertical	.025	.04	.057	.077	.1	.126	.153	.221	.297	.393
	Airflow, CFM		140	175	210	245	280	315	350	420	490	560
	Throw	Horizontal	1-2-5	2-4-6	3-5-7	3-5-8	4-6-9	4-7-10	4-7-11	5-8-12	6-9-13	7-10-14
		Vertical	1-1-4	1-2-5	2-3-6	3-4-6	3-4-8	4-5-8	4-6-9	5-7-10	5-7-11	6-8-12
	Noise Criteria	Horizontal	—	—	13	18	21	22	26	32	38	42
Vertical		—	—	17	20	25	26	30	36	42	46	
10" Dia.	Total Pressure	Horizontal	.014	.021	.030	.039	.052	.065	.080	.112	.152	.194
		Vertical	.030	.048	.070	.092	.120	.161	.196	.264	.360	.450
	Airflow, CFM		220	270	330	380	435	490	545	655	765	870
	Throw	Horizontal	1-4-6	3-5-9	3-6-9	4-7-10	5-7-11	5-9-13	6-10-14	7-11-15	8-11-16	9-12-17
		Vertical	1-2-4	1-3-6	3-5-7	3-5-8	4-5-9	4-6-10	5-6-10	5-7-11	6-8-12	7-9-12
	Noise Criteria	Horizontal	—	10	15	21	26	30	33	38	43	45
Vertical		—	14	19	25	31	34	37	42	47	49	
12" Dia.	Total Pressure	Horizontal	.016	.025	.032	.043	.056	.072	.085	.129	.163	.216
		Vertical	.045	.069	.088	.120	.155	.204	.240	.360	.455	.585
	Airflow, CFM		315	390	470	550	630	705	785	950	1100	1255
	Throw	Horizontal	2-3-7	3-6-9	4-7-10	5-8-12	6-9-14	6-10-15	7-10-16	8-11-17	9-12-18	10-14-19
		Vertical	2-3-5	2-4-6	3-6-7	5-6-9	5-7-10	5-7-10	6-7-12	7-8-12	8-10-14	8-9-15
	Noise Criteria	Horizontal	—	15	22	25	30	33	36	43	45	48
Vertical		12	18	25	28	33	36	39	46	48	51	
14" Dia.	Total Pressure	Horizontal	.022	.037	.049	.057	.073	.092	.115	.147	.208	.262
		Vertical	.063	.101	.135	.160	.203	.261	.326	.411	.583	.640
	Airflow, CFM		425	530	635	745	855	960	1070	1285	1500	1710
	Throw	Horizontal	2-4-8	4-5-8	5-6-10	6-8-12	7-10-14	8-10-16	9-11-17	10-11-18	11-12-20	12-14-21
		Vertical	2-3-5	4-4-6	4-5-9	5-7-10	6-9-12	7-9-13	8-9-14	9-10-15	10-11-16	10-13-18
	Noise Criteria	Horizontal	—	16	22	25	29	33	36	40	42	48
Vertical		11	19	25	28	32	36	39	43	45	51	
15" Dia.	Total Pressure	Horizontal	.030	.041	.054	.062	.080	.100	.128	.155	.224	.308
		Vertical	.068	.110	.143	.165	.210	.271	.330	.425	.590	.660
	Airflow, CFM		490	615	735	860	985	1110	1230	1470	1720	1965
	Throw	Horizontal	5-6-8	5-8-9	8-9-11	9-10-12	10-10-13	11-12-15	12-12-16	12-14-18	14-15-20	15-17-23
		Vertical	3-4-6	3-4-7	5-6-8	6-7-9	6-8-10	8-9-11	10-11-12	11-12-14	11-14-16	12-16-18
	Noise Criteria	Horizontal	10	18	24	30	34	37	40	42	48	51
Vertical		13	21	27	33	37	40	43	45	51	54	

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. All pressures are in inches w.g..

3. Horizontal throws are with ceiling coanda effect. For exposed duct mounting, multiply table values by x 0.7. Vertical throw is a free jet.

4. Noise Criteria (NC) are based on a room absorption of 10 dB, re 10⁻¹² watts. Dash (—) in space denotes an Noise Criteria level less than 10.

5. Data derived from independent tests conducted in accordance with ANSI/ASHRAE Standard 70-2023.

D
CEILING DIFFUSERS