



# AIR DISTRIBUTION PRODUCT OVERVIEW



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Contact your Nailor representative to verify current product details.

**FLOWLINE™**

FlowLine™ is a custom architectural linear diffuser system designed to integrate and blend supply and return air openings into interior commercial building designs. FlowLine™ can be used inconspicuously to hide the air distribution system or it may be used as an architectural design element, using straight lines and/or curves to enhance the interior of the building.

Nailor can custom fabricate FlowLine™ to meet the most demanding architectural and engineering performance requirements. Engineered for outstanding performance and tested in accordance with ASHRAE Standard 70.

**KEY FEATURES**

- High capacity single slot linear diffuser available in five slot widths, offers an attractive alternative to traditional multi-slot designs. Available slot widths are 1" (25), 1 1/2" (38), 2" (51), 2 1/2" (64) and 3" (76). A two slot option is also available.
- Comprehensive selection of frame/border styles and associated mounting hardware allows FlowLine™ to be installed either before or after ceiling installation.
- Fabricated using sturdy heavy wall aluminum extrusions.
- Mitered end borders are available to maximize aesthetic appeal.
- Available in single sections up to 12 ft. (3658) in length. Longer lengths supplied in multiple sections with alignment strips for field assembly.
- Custom colors and anodized finishes are also available.

**FLH SERIES**

Designed primarily for continuous linear slot ceiling applications requiring horizontal air patterns. Tight, high induction air pattern maximizes coanda effect under a wide range of airflow volumes for maximum occupant comfort. Typical applications would include open office perimeter zones, entrance foyers and lobbies, mall and office entrance atriums and conference meeting rooms.



**FLH Series**  
Frame/Border Type AA Exposed flange frame



**FLV Series**  
Frame/Border Type CC Concealed tape and spackle frame

**FLV SERIES**

Designed primarily for continuous linear slot ceiling applications requiring an adjustable extended throw vertical air pattern. Typical applications would include perimeter glass curtain walls and high bays for heated and/or cooled air, which may be directed downwards, terminating at the floor at a comfortable velocity. Also suitable for interior zones with high ceilings, such as entrance foyers and lobbies, mall and office entrance atriums, convention center and theaters.

This model may also be used in high sidewall applications with long throw requirements.

**FLP(I) SERIES**

Nailor offers factory built supply air plenum boots in various lengths to suit the application in both uninsulated and insulated versions. Nailor engineered plenums save on costly field labor and ensure cataloged performance and a sure-fit trouble free installation.



**FLP(I) Series**

## LINEAR SLOT DIFFUSERS AND BAR GRILLES

Linear type diffusers and bar grilles have been developed to satisfy architectural and engineering applications that require a continuous length appearance, aesthetically pleasing design and high engineering performance with premium quality aluminum products. Installations can be equally effective where lengths are continuous around the periphery of a wall, floor or ceiling space and certain sections of the unit are active with regard to airflow, satisfying mechanical and architectural requirements. Individual discreet lengths may be separately installed at a reduced cost and offer the same engineering performance. The proposed application and installed location will usually dictate whether a slot, bar or louvered type product is the most suitable choice. When the ideal product type has been chosen, the airflow and performance requirements will dictate the style and sizing selections from a comprehensive range of available sizes and capacities.

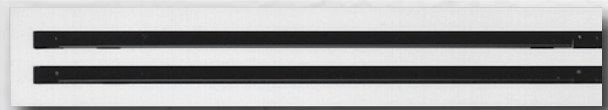
### MODEL SERIES 5000

**SUPPLY AIR - 5050, 5075, 5010, 5015**

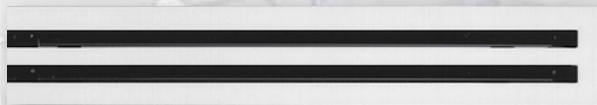
**RETURN AIR - 5050R, 5075R, 5010R, 5015R**

#### LINEAR SLOT DIFFUSERS

The Nailor Model Series 5000 provides architectural excellence and outstanding performance flexibility. Available in four different slot opening widths, a range of 1 to 10 slots and a wide choice of border/frame styles that coordinate with ceiling and installation details. The diffusers feature 'ice tong' style individual pattern controllers in each slot that not only offers a 180° air pattern adjustment, but can also be used to dampen airflow. Designed primarily for ceiling and high sidewall installation, they are eminently suited to, and recommended for, VAV applications. They maintain a tight and stable horizontal air pattern over a wide range of air volumes by utilizing the maximum ceiling coanda effect. Also commonly used in overhead heating applications, the versatile pattern controllers allow vertical projection of heated air to meet almost any perimeter condition.



5000 Series



5000TZ Series

### MODEL SERIES 5000TZ

**SUPPLY AIR - 5075TZ**

**RETURN AIR - 5075TZR**

#### LINEAR SLOT DIFFUSERS FOR TECHZONE™ TYPE CEILINGS

The Nailor Model Series 5000TZ provides architectural excellence and outstanding performance flexibility. Available choice of 4" (102) wide with 1 to 2 slots or 6" (152) wide with 1 to 4 slots are available to suit capacity requirements and three frame styles for Armstrong® Techzone™ and USG Logix™ ceiling systems. The diffusers feature 'ice tong' style individual pattern controllers in each slot that not only offers a 180° air pattern adjustment, but can also be used to dampen airflow. Designed primarily for ceiling and high sidewall installation, they are eminently suited to, and recommended for, VAV applications. They maintain a tight and stable horizontal air pattern over a wide range of air volumes by utilizing the maximum ceiling coanda effect. Also commonly used in overhead heating applications, the versatile pattern controllers allow vertical projection of heated air to meet almost any perimeter condition.

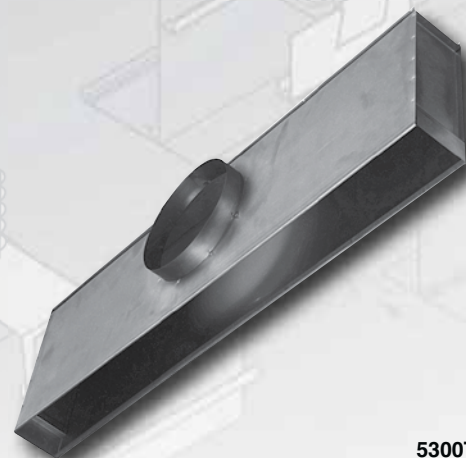
### MODEL SERIES 5300TZ

**STANDARD PERFORMANCE (NON-INSULATED OR INSULATED)**

**MODIFIED PERFORMANCE (NON-INSULATED OR INSULATED)**

#### PLENUMS FOR LINEAR SLOT DIFFUSERS FOR TECHZONE™ TYPE CEILINGS

Nailor's Model Series 5300TZ Plenums are designed to fit the 5000TZ series slot diffusers. The plenums are constructed from corrosion-resistant steel and are available in two different styles for an extensive performance range. Available choice of 1 to 4 slots are available to meet capacity requirements and three frame styles for Armstrong® Techzone™ and USG Logix™ ceiling systems. The standard constructed plenum is suited for applications that require longer throws and shorter spreads, whereas the modified plenum increases the spread and reduces the throw. Specially designed end caps can be turned up for continuous runs. All styles are offered with internal or external insulation.

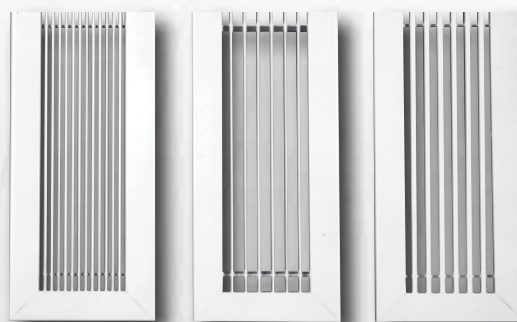


5300TZ Series

## MODEL SERIES 4900 LINEAR BAR GRILLES

The Nailor 4900 Series provides an extruded aluminum bar grille that offers beautiful styling and efficient performance.

Linear bar grilles offer a choice of fixed air patterns with 0°, 15° or 30° air deflection, a choice of bar widths and spacing and a wide choice of border/frame style combinations to suit most types of installation. They are available with an optional opposed blade damper for volume control. Linear bar grilles are recommended for supply air applications in floors, window sills, and high sidewall locations. They are not generally suited for ceiling mounted supply applications (other than for directional spot heating or cooling as an air curtain) as they are not designed for horizontal projection from the face.



Model Series 4900 - Model 49-240, 49-280, 49-480

## PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

The Plenum Slot Ceiling Diffusers and Light Troffer Diffusers have been developed for an extremely unobtrusive method of air distribution. Nailor offers various types of this very discreet, cost effective, air distribution product. The Plenum Slot Diffusers are for use in suspended ceiling grid systems and are offered in four distinctive performance styles. The Light Troffer Diffusers are available in many standard sizes and can be custom built to suit most types of air handling light fixtures.

The Nailor line of Plenum Slot Diffusers have been designed to integrate and blend with T-Bar suspended grid systems. They are available for Standard Lay-in T-Bar systems as well as the Narrow Regressed T-Bar systems. Four different styles are available in a wide range of sizes and capacities for an optimum combination of application flexibility, and performance requirements. All models are available with external foil back or internal insulation. Matching return air diffusers are available for all models.

## MODEL SERIES 5700, 5800 AND 5600 • SUPPLY AIR STANDARD LAY-IN T-BAR (INSULATED OR UNINSULATED) NARROW REGRESSED T-BAR (STRADDLE MOUNT OR FLAT FACE T-BAR) - MODEL SERIES 5700 OR 5800 ONLY

### MODEL SERIES 5700

#### ADJUSTABLE 'WIPER BLADE' PATTERN CONTROLLER

This series features a friction pivoted, adjustable, extruded aluminum pattern controller in each slot. The pattern controller has a gasketed 'wiper blade' design. The direction of the airflow can be adjusted a full 180° from the face of the diffuser. This diffuser is available in 1 1/2", 1", 3/4" and 1/2" (38, 25, 19 and 13) slot widths. Suffix 'I' adds internal insulation.

### MODEL SERIES 5800

#### ADJUSTABLE 'ICE TONG' PATTERN CONTROLLER

This series features a friction pivoted, adjustable, extruded aluminum pattern controller in each slot. The pattern controller has a gasketed 'ice tong' design. The direction of the airflow can be adjusted a full 180° from the face of the diffuser. This diffuser is available in 1 1/2", 1", 3/4" and 1/2" (38, 25, 19 and 13) slot widths. Suffix 'I' adds internal insulation.

### MODEL SERIES 5600

#### CURVED BLADE 'FLIP FLOP' PATTERN CONTROLLER

This series features a roll-formed curved blade pattern controller in each slot. Aerodynamically designed to produce a fixed horizontal discharge pattern, the controller is pivoted at either end and may be simply rotated with fingers from the face for either a left or right discharge direction. This diffuser is available with a 3/4" (19) slot width, and with a choice of 1, 2, 3 or 4 parallel slots. Suffix 'I' adds internal insulation.



Model 5810

\*Return air plenums are available for 5800, 5700 and 5600 Series. The plenums are for ductless return and include a lightshield. Offered in standard Lay-in T-Bar, Narrow Regressed T-Bar (Straddle Mount or Flat Face), insulated or non-insulated.



Model Series 59NDR

### MODEL SERIES 59N

#### PREMIUM PERFORMANCE • SUPPLY AIR

#### STANDARD LAY-IN T-BAR (HORIZONTAL DISCHARGE) - 59N(I) STANDARD LAY-IN T-BAR (HORIZ./VERT. DISCHARGE) - 59ND(I) PLENUM SLOT DIFFUSERS

This supply diffuser has a 3/4" (19) slot that incorporates an extruded aluminum pattern controller for a fixed horizontal discharge pattern. This plenum is also available with a down-blow section that incorporates two hinged pattern controllers to provide a vertical discharge pattern in addition to the horizontal discharge pattern. Suffix 'I' adds internal insulation.

\*Model 59BS (Supply) and 59BSR (Supply/Return) with adjustable vertical discharge are available for curtain wall applications.

## CEILING DIFFUSERS

Nailor offers a wide selection of high quality ceiling diffusers, featuring unobtrusive clean lines for appearance, careful engineering and professional workmanship to ensure that customer satisfaction is being met at the highest level.

With a diverse product offering in supply and return models, available in either steel or aluminum, Nailor is sure to meet the specifications for any application imaginable. Available models include:

- **Square and Rectangular Pattern Ceiling Diffusers**  
\* Available in Fixed or Adjustable Patterns, (Induction Vanes and Extra High Capacity available with Fixed Patten).
- **Stamped Square Ceiling Diffusers**  
\* Available in Fixed or Adjustable Patterns, (Fixed Patten - 3 Cone - Removable Core available on Model RNS3).
- **Architectural Square Ceiling Diffusers**  
\* Available in Flat Panel (Flat Panel with Retaining Channel option on Model UNI), Downblast (Fixed Perforated or Adjustable), Ceiling Tile Slot (Supply or Return) or Plaque Diffuser (Model 66UNI includes Perimeter Slots).
- **Round Ceiling Diffusers**  
\* Available in Adjustable Horizontal, Adjustable Horizontal to Vertical, Two Position Horizontal/Vertical, Fully Adjustable Horizontal/Vertical, Architectural Plaque Face Horizontal or Downblast Adjustable Horizontal/Vertical patterns.
- **Perforated Supply Ceiling Diffusers**  
\* Discharge patterns can adjust to vertical or 1, 2, 3 or 4-way horizontal, before or after installation. These products are available for numerous applications, both supply and return, including Flush Face, Drop Face, Full Face, Fixed 4-Way Pattern, Modular Core and Curved Blade. Premium Architectural (4330 Model Series) and All Aluminum Perforated for MRI (4310A, 4310AR Model Series) are also available.
- **Eggcrate Return Ceiling Diffusers**  
\* High capacity, suitable for flexible duct connections. Designed with an Aluminum Grid Core 1/2" x 1/2" x 1/2" (13 x 13 x 13). Available with a Steel Frame/Backpan or Aluminum.
- **Modular Core Ceiling Diffusers**  
\* Square neck is standard. Diffuser features four individually adjustable "spring loaded" modular cores. Simple adjustment for 1, 2, 3 or 4-way horizontal discharge pattern without the use of tools.
- **Curved Blade Ceiling Diffusers**  
\* Available in Steel or Aluminum with 1 or 2-way pattern with Directional Vanes or 1, 2, 3 or 4-way pattern.

## STAMPED DIFFUSERS

### MODEL SERIES RNS, ARNS

#### FIXED PATTERN

#### STEEL - MODEL RNS

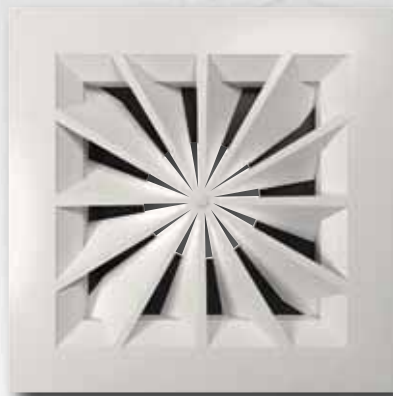
#### ALUMINUM - MODEL ARNS

These diffusers are a very popular choice for general air distribution applications. The diffusers are designed to provide high performance at a cost effective price. The stamped one-piece cones and die-formed clean curves supply a 360° diffusion pattern and provide the high performance necessary in VAV systems. Integral round necks provide a secure connection for flexible duct applications. Nailor's "classic" four-cone, removable core design is available in most ceiling module sizes, a choice of corrosion-resistant steel or aluminum, and an option of fixed or adjustable patterns. A two and three cone fixed pattern diffuser also accompanies this series.

\*Other available models include – RNSA, ARNSA, RNS3 and RNS2.



Model RNS



Model TWR

### MODEL TWR

#### STEEL

#### "TWISTER" HIGH INDUCTION STAMPED FACE

The "Twister" diffuser is engineered to optimize air distribution effectiveness. This next generation diffuser has a high induction, 360° swirl pattern for a superior coanda effect. It is available for a 2' x 2' (600 x 600) ceiling module with a choice of five round neck sizes.

**MODEL SERIES UNI, AUNI  
FLAT PANEL SQUARE  
STEEL - MODEL UNI  
ALUMINUM - MODEL AUNI  
ARCHITECTURAL PLAQUE FACE**

Designed with the architect in mind, the diffusers in this series are fashioned to blend in with most ceiling types in order to create the ultimate in aesthetic looks. Nailor has accomplished this while still offering a variety of diffuser designs that provide flexibility in both style, selection and engineering performance.



Model AUNI

**ROUND DIFFUSERS**



Models RNR, RDB

**MODEL SERIES RNR, RDB  
ROUND  
ADJUSTABLE HORIZONTAL PATTERN  
STEEL - MODEL RNR  
ALUMINUM - MODEL ARNR  
DOWNBLAST ADJUSTABLE HORIZONTAL/VERTICAL  
PATTERN  
STEEL - MODEL RDB**

Nailor's round diffusers are available in steel or aluminum construction, with adjustable or fixed patterns. Included in this series of diffusers is a 'Plaque' style for architectural ceilings and a 'Downblast' type for high ceiling areas.

**SQUARE AND RECTANGULAR PATTERN CEILING DIFFUSERS**

**MODEL SERIES 6500 – STEEL  
FIXED PATTERN – MODEL 6500  
ADJUSTABLE PATTERN – MODEL 6550  
INDUCTION VANES – MODEL 6500IV**

**MODEL SERIES 6200 – ALUMINUM  
FIXED PATTERN – MODEL 6200  
ADJUSTABLE PATTERN – MODEL 6250  
INDUCTION VANES – MODEL 6200IV**

**MODEL SERIES 6400 – ALUMINUM – HIGH CAPACITY  
FIXED PATTERN – MODEL 6400  
INDUCTION VANES – MODEL 6400IV**

Nailor's pattern diffusers are typically used in applications where considerable volumes of air are required while maintaining relatively low noise levels and pressure drops. A full range of models are available and consist of a choice of corrosion-resistant steel or aluminum construction, fixed and adjustable patterns, as well as extra high capacity models. Induction vanes are also available for those jobs that require quick equalization of cool and warm air such as in VAV systems with high cooling loads. The louvered cores are removable and are available in an assortment of patterns.



Models 6500, 6500IV, 6400, 6550

**PERFORATED CEILING DIFFUSERS**

Nailor manufactures a full range of supply air and matching return air Perforated Ceiling Diffusers. The perforated face is available in both corrosion-resistant steel and aluminum, with 3/16" (5) diameter holes on 1/4" (6) staggered centers, providing 51% free area. As standard, backpans are available in corrosion-resistant steel with an option of aluminum face or all aluminum construction, and some premium models are available with extruded aluminum frames. The diffusers can be selected to suit most common ceiling types, and are available with both flush and drop face styles. A variety of pattern controllers and deflector core styles are offered, allowing for a selection to be made based upon style, performance, and budgetary considerations. Match the supply air with the corresponding return air and the results will be a smooth, aesthetically balanced ceiling appearance.

- Available Pattern Controllers:**  
**'Base' Face Mounted (Adjustable)**  
 CB Curved Blade (Adjustable)  
 F Neck Mounted (Adjustable)  
 M Modular Core (Adjustable)  
 S Star Pattern (Adjustable)

**MODEL SERIES 4320**

**FLUSH FACE:**

**STEEL - MODEL 4320 (CB, F, M, S)**

**ALUMINUM FACE - MODEL 4320 (CB, F, M, S) – A**

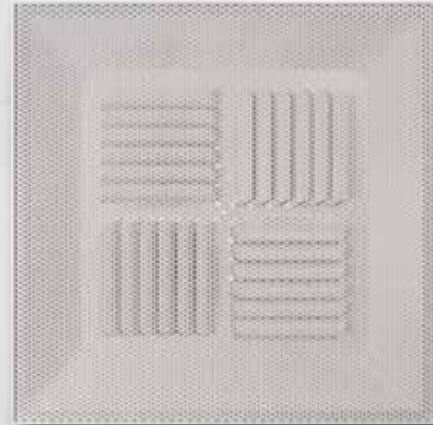
**DROP FACE:**

**STEEL - MODEL 4325 (CB, F, M, S)**

**ALUMINUM FACE - MODEL 4325 (CB, F, M, S) – A**

**EXAMPLE: 4320F**

This diffuser has pattern controllers that are factory set in a fixed 4-way discharge pattern. The controllers can be field adjusted to a 1, 2 or 3-way pattern as required. These diffusers are available with round or square necks. For the matching return, see Model Series 4360/4365.



Model 4320F



Model 4310A

**MODEL SERIES 4310A**

**FLUSH FACE**

**SUPPLY AIR - MODEL 4310A**

**RETURN AIR - MODEL 4310AR**

**ALL ALUMINUM FOR MRI ROOMS**

This diffuser is 100% aluminum and can be used for MRI rooms. It features a smooth, contoured wrap-around perforated face. The supply air diffuser includes a round disc pattern deflector that provides a true 360° radial horizontal air pattern. The matching return air diffuser is suitable for ducted return applications.

**Available: 'Base' Face Mounted**

- CB Curved Blade Pattern Controllers
- M Modular Core Pattern Controllers
- R Matching Return Model

**MODEL SERIES 4340 (CB, M, R)**

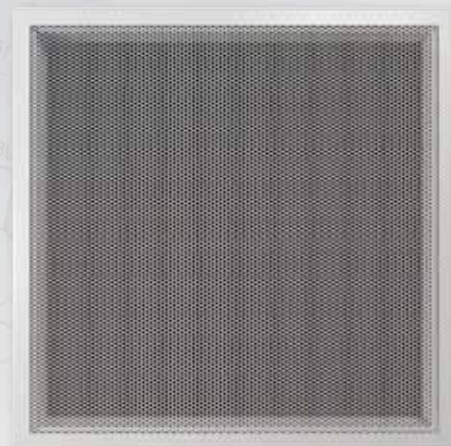
**FLUSH FACE**

**STEEL FACE - MODEL 4340**

**ALUMINUM FACE - MODEL 4340-A**

**EXTRUDED FRAME**

This grille frame style, full face diffuser has an extruded aluminum frame and is offered with a choice of a corrosion-resistant steel or an aluminum perforated face. The diffusers are available with square necks only and can be used in both ductless and ducted applications. See Model Series 4340CB and 4340M for the matching supply diffusers.

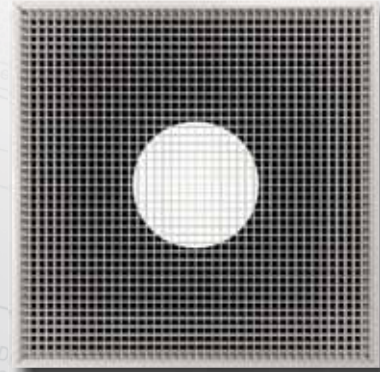


Model 4340R



**MODEL SERIES 4260**  
**STEEL FRAME/BACKPAN - MODEL 4260**  
**ALUMINUM FACE - MODEL 4260AA**  
**EGGCRATE RETURN**

This aluminum face return diffuser features 1/2" x 1/2" x 1/2" (13 x 13 x 13) eggcrate that provides a high free area. It is offered with either a round or square neck for ducted return applications. The backpan or frame is available in both corrosion-resistant steel and aluminum construction.



Model 4260



Model 51CC

**MODEL SERIES 61CC, 51CC**  
**STEEL**  
**NO DIRECTIONAL VANES - MODEL 61CC**  
**ALUMINUM**  
**NO DIRECTIONAL VANES - MODEL 51CC**  
**CURVED BLADE**

The curved blade deflectors for this diffuser are individually adjustable and integrated in a modular sized panel to suit many ceiling systems. If ordered with directional vanes a 1 or 2-way discharge pattern is available. If directional vanes are not required, the curved blade deflectors are offered in a 1, 2, 3, or 4-way discharge pattern.

\* Directional vanes on Models 61CCD and 51CCD.

**HOSPITAL/CLEANROOM DIFFUSERS**

Nailor provides a complete line of diffusers with industry leading performance and quality features uniquely suited for hospital and cleanroom type applications. Products are constructed from heavy gauge aluminum, corrosion-resistant steel or Type 304 stainless steel, with Type 316 stainless steel construction as an available option, to handle the most demanding of applications.

**MODELS 92RPD-2, 92RPD-1 – ALUMINUM**  
**MODELS 92RPD-2SS, 92RPD-1SS – STAINLESS STEEL**  
**RADIAL PATTERN DIFFUSERS**

This is Nailor's premium performance Radial Pattern Diffuser. The diffusers have been designed to provide low aspiration at high ventilation rates especially for cleanroom applications. The unique design of solid baffles in an intrusive perforated face can supply large volumes of air at low initial face velocities. Available in either a 180° (Models 92RPD-2; 92RPD-2SS) or 90° (Model 92RPD-1; 92RPD-1SS) radial flow pattern.



Models 92RPD-2, 92RPD-2SS

**MODELS 92RPDF-2SS, 92RPDF-1SS – STAINLESS STEEL**  
**RADIAL PATTERN DIFFUSERS WITH HEPA FILTER**

This Radial Pattern Diffuser has a similar appearance to the standard model series 92RPD, however, it incorporates an extended plenum and a unique frame designed to accommodate a Gel Seal HEPA or optional ULPA filter. These high quality filters incorporate a separatorless 2" (51) deep media, integral test port and an anodized aluminum gel seal frame. Available in either 180° (Model 92RPDF-2SS) or 90° (Model 92RPDF-1SS) radial flow pattern.



Model 92RPDF-2SS

**MODELS 92FRP-2AL, 92FRP-1AL – ALUMINUM**  
**MODELS 92FRP-2, 92FRP-1 – STEEL**  
**MODELS 92FRP-2SS, 92FRP-1SS – STAINLESS STEEL**  
**FLUSH FACE RADIAL PATTERN DIFFUSERS**

This diffuser provides an air pattern very similar to the 92RPD Series but incorporates an architecturally appealing 'Flush Face' appearance. Specially designed internal baffles and a pressure plate produce an excellent radial air pattern that allows large volumes of air to be supplied at low velocities. Available in either a 180° (Models 92FRP-2AL; 92FRP-2; 92FRP-2SS) or 90° (Models 92FRP-1AL; 92FRP-1; 92FRP-1SS) radial flow pattern. Models 92FRPF-2SS (180° Flush Face Radial Pattern Diffuser with Filter) and 92FRPF-1SS (90° Flush Face Radial Pattern Diffuser with Filter) are available.



**Model 92FRP-2AL**

**MODELS 92CBPRP-AL, 92CBPRP - PERFORATED CENTER**  
**MODELS 92CBSRP-AL, 92CBSRP - STRAIGHT BLADE CENTER**  
**ADJUSTABLE RADIAL PATTERN DIFFUSERS**

The Radial Pattern Diffuser in this series allows for adjustment of the air pattern. Nailor offers two distinct performance styles. One style incorporates adjustable straight blades that run the length of the center while the other style contains a perforated center. Both types include adjustable curved blades for directional control and are available in steel or aluminum construction.



**Models 92CBPRP, 92CBSRP**

**MODEL 92FFD – ALUMINUM**  
**MODEL 92FFD-SS – STAINLESS STEEL**  
**FAN FILTER DIFFUSERS**

This series of Fan Powered Laminar Flow Diffusers with filters, incorporates an extended plenum and unique frame that is designed to accommodate a HEPA or ULPA filter. Filters are secured within the plenum against a continuous knife edge that contacts the gel channel of the filter, providing a leak proof seal. The fan filter units are available with a variety of options including filters, motor/blower and controls that are room-side-replaceable. Filters are protected by a perforated face, easily removable via quarter turn fasteners. The units are designed for use in cleanroom applications such as microelectronics, pharmaceutical, biotechnology as well as aerospace manufacturing/ assembly and laser/optic industries. Optionally, PAO (polyalphaolefin) Testing is available to provide serialization of individual units, which passes the most current stringent leak tests.



**Model 92FFD-SS**

**MODEL 92GSF-HE**  
**HEPA FILTERS**

Nailor HEPA filter is a lightweight, low profile filter using a separatorless media pack to provide efficiencies ranging from 95% to 99.99% on 0.3um particles. Filters are constructed with an anodized aluminum frame designed to accommodate a gel seal and contain removable test port without requiring access to the ceiling plenum. Filters are offered in common sizes and specifically designed to match Nailor products. Filters are scan tested by the manufacturer, shipped loose and individually bagged.



**Model 92GSF-HE**

**MODELS 92LFD-AL – ALUMINUM 'OR & CLEANROOM'  
MODELS 92LFD – STEEL 'BUDGETARY APPLICATIONS'  
MODELS 92LFD-SS – STAINLESS STEEL 'OR & CLEANROOM'  
LAMINAR FLOW DIFFUSERS**

These are Nailor's standard Laminar Flow Diffusers. This series utilizes the well proven and time tested concept of vertical air mass 'laminar flow' technology. They produce a non-aspirating low velocity, uniformly distributed downward moving 'piston' of conditioned air. They may be used individually or as in the case of hospital rooms, several units may be banked together to sufficiently cover the area and produce one combined laminar mass. **Medium capacity units available in Aluminum - Model 92LFD-AL or Stainless Steel - Model 92LFD-SS.**



Model 92LFD-SS



Model 92LFD-AL

**MODEL 92LDFD-AL – ALUMINUM  
MODEL 92LDFD-SS – STAINLESS STEEL  
LAMINAR FLOW DIFFUSERS WITH HEPA FILTER**

This series of Laminar Flow Diffusers with Filters are similar to the standard model, however, they incorporate an extended plenum and a unique frame designed to accommodate a Gel Seal HEPA or optional ULPA filter. The filters can be easily removed and replaced from the face of the unit. These high quality filters incorporate a separatorless 2" (51) deep media, integral test port and an anodized aluminum gel seal frame. **Medium capacity units available in Aluminum - Model 92LDFD-AL or Stainless Steel - Model 92LDFD-SS.**

**MODEL 92LS-SS – STAINLESS STEEL  
STERI-SYSTEM LINEAR SLOT DIFFUSERS**

The Nailor Steri-System Linear Slot Diffusers are specially designed to provide an air curtain for operating rooms. The unique slot design creates a continuous curtain of air, angled outwards 5 – 15°, that encloses the operating area and minimizes the possibility of contaminated air entering the surgical area. The single slot design creates a uniform low velocity curtain that minimizes entrainment of contaminated air into the curtain air stream. It also creates a wider velocity profile with less turbulence and hence less induction over similar two slot designs. The face design incorporates longitudinal deflectors that horizontally deflect a small amount of air lengthwise. This effectively joins the airflow through sections and corners with a truly continuous air curtain, resulting in enhanced isolation of the surgical area.



Model 92LS-SS



Steri-System Hospital Operating Room Air Distribution System

**MODEL 92STSYS - STAINLESS STEEL  
STERI-SYSTEM HOSPITAL OPERATING ROOM AIR  
DISTRIBUTION SYSTEMS**

The Steri-System Hospital Operating Room System is a complete operating room ventilation system, specially designed to reduce airborne contaminants. Model 92LS-SS Linear Slot Diffusers, located around the perimeter, create a continuous low velocity curtain of air angled outwards 5 – 15°. The curtain encloses the operating area and minimizes the possibility of contaminated air entering the surgical area. Model 92LFD-SS Laminar Flow Diffusers, installed above the operating table; produce a low velocity non- aspirating, vertical air pattern. This low velocity 'clean' conditioned air flows over the operating table and greatly increases the ventilation rate within the surgical area. The Steri-System is available in fourteen standard module sizes with a wide variety of custom variations that allow it to be tailored to suit almost any application or configuration. Suffix '-O' adds stainless steel perimeter inlet balancing dampers.

**FIRE RATED PRODUCTS**

Nailor offers a wide variety of fire rated products that are designed to provide the unobtrusive appearance required for architectural excellence and the high engineering performance required for use in heating and cooling applications. Ceiling diffusers, plenum slot diffusers and even ductless return air grilles are some of the many styles available.

Nailor's selection of fire rated products are classified for use in UL/ULC restrained or unrestrained floor/ceiling and or roof/ceiling assemblies which incorporate an exposed grid suspended ceiling (Lay-in T-Bar) with up to a 3 hour rating. For details on the fire rated assemblies, see the current UL Fire Resistance Directory or ULC List of Equipment and Materials Volume III Fire Resistance Ratings.

**MODELS 6500FRD, 6550FRD, 6500IVFRD – SQUARE NECK  
MODELS 6505FRD, 6555FRD, 6505IVFRD – ROUND NECK  
FIRE RATED PATTERN DIFFUSERS**

Nailor's Pattern Ceiling Diffusers are a high capacity louvered face directional diffuser that can supply large volumes of air at relatively low sound levels and pressure drops. Available in a variety of core styles and neck sizes: a combination can be selected to suit a specified air pattern and deliver the desired volume of air to satisfy particular requirements. Models are available in either square or round neck, Fixed Pattern, Adjustable Pattern or Induction Vanes.



Model 6500FRD



Model 4410

**MODELS 4010, 4020, 2030, 4040, 4010-SM – FIXED AIR PATTERN  
MODELS 4010-1, 4020-1, 4030-1, 4040-1 – ADJUSTABLE PATTERN  
MODELS 4410, 4420, 4430, 4440 – FIXED PATTERN - 2 CONE  
FIRE RATED STAMPED SQUARE DIFFUSERS**

The 4000 and 4400 series models are a fire rated version of the popular RNS series. They have been specially designed to provide an extremely cost effective, value engineered product. They offer both the unobtrusive appearance required for architectural excellence and the 360° diffusion pattern at minimum NC levels required for high engineering performance. Models are available in Fixed, Adjustable or Fixed 2-Cone Patterns with Full Face, Panel Type or Surface Mount-Model 4010-SM (ULC only).

**MODELS 4410-UNI, 4420-UNI, 4430-UNI, 4440-UNI – FLAT PANEL  
MODEL 4410-UNI-SM – PLAQUE FACE, SURFACE MOUNT  
FIRE RATED ARCHITECTURAL SQUARE DIFFUSERS**

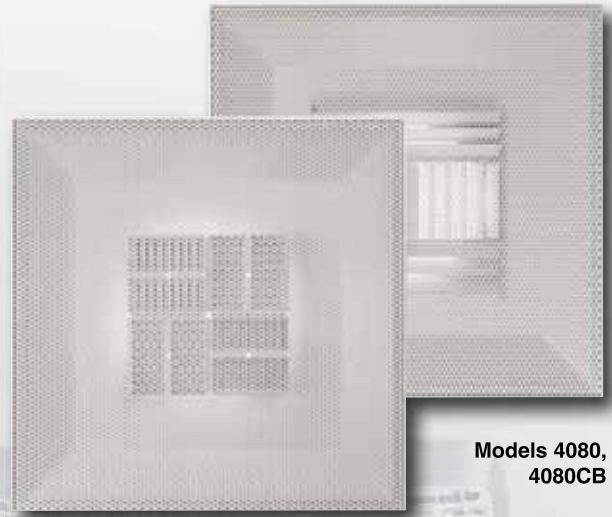
These models are a fire rated version of the popular UNI series. Designed with the architect in mind, the diffusers in this series are fashioned to blend in with most ceiling types to create the ultimate aesthetic look. Nailor has made available the standard UNI with a fixed 360° air diffusion pattern. Models are available in Flat Panel (Full Face or Panel) or Plaque Face, Surface Mount (Full Face).



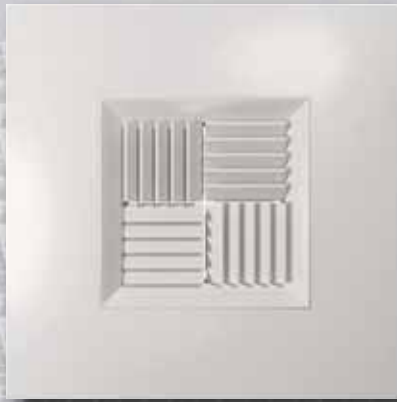
Model 4410-UNI

**MODELS 4070, 4080, 4075, 4085, 4070-SM – SUPPLY AIR  
ADJUSTABLE PATTERN DEFLECTORS**  
**MODELS 4070CB, 4080CB, 4075CB, 4085CB – SUPPLY AIR  
CURVED BLADE PATTERN CONTROLLERS**  
**MODELS 4070R, 4080R, 4075R, 4085R – RETURN AIR  
FIRE RATED PERFORATED DIFFUSERS**

The fire rated diffusers in this series are the most popular choices of Nailor's 4300 series perforated diffusers. Models included are the adjustable pattern controller design for ultimate performance flexibility. Available in both supply and return air styles with a choice of a flush or drop face. Model 4070-SM is a Surface Mount (ULC only).



Models 4080,  
4080CB



**MODEL 7500FRD – SQUARE NECK  
MODEL 7505FRD – ROUND NECK  
FIRE RATED MODULAR CORE DIFFUSERS**

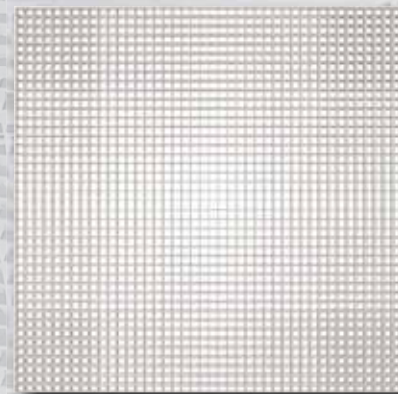
This diffuser features four individual spring-loaded 'modular' pattern controllers mounted in the neck. They can be adjusted before or after installation, to provide a 1, 2, 3 or 4-way discharge pattern. The diffuser maintains a horizontal ceiling pattern from maximum to minimum flow.

Model 7500FRD

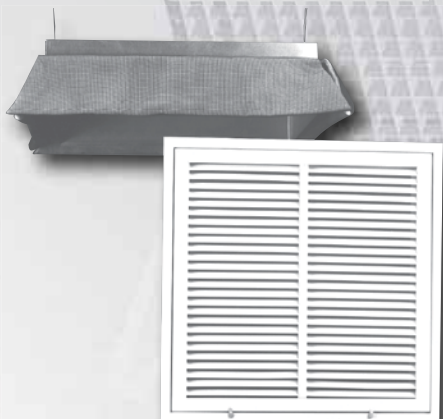
**MODELS 4111, 4112, 4113 – PERFORATED FACE  
MODELS 4114, 4115, 4116 – EGGCRATE FACE  
MODELS 4117, 4118, 4119 – OPEN FACE (GRILLE BY  
OTHERS)**

**FIRE RATED DUCTLESS RETURN GRILLES**

The return air grille models in this series have been designed to compliment the Nailor range of fire rated supply diffusers. The grilles have been tested and classified for use without the requirement of duct work or supplementary support, they simply lay in place. The grilles are available in three styles, a perforated face, an eggcrate face or an open face model that can accommodate a grille by others.



Model 4116



**MODELS 4121, 4122, 4123 – LOUVERED FACE  
MODELS 4124, 4125, 4126 – EGGCRATE FACE  
FIRE RATED DUCTLESS RETURN FILTER GRILLES**

The return air filter grille models in this series have been designed to compliment the Nailor range of fire rated supply diffusers. These grilles are manufactured to accommodate a throw away filter by others. The grilles have been tested and classified for use without the requirement of duct work or supplementary support, they simply lay in place. The filter grilles are available in two styles, a louvered face or an eggcrate face.

Model 4123

## GRILLES AND REGISTERS

Nailor offers a wide range of high quality grilles and registers, featuring unobtrusive clean lines for appearance, careful engineering and professional craftsmanship to ensure that customer satisfaction is being met at the highest level.

- Comprehensive range of models and styles to choose from.
- Versatile selection and sizing ensures the correct product for any specific application.
- Material choice of premium quality extruded aluminum, cost-effective steel or stainless steel. Unique in our manufacturing process is the exclusive use of corrosion-resistant coated steel as used in the auto industry. The material has superb forming qualities and outlasts painted cold-rolled steel and galvanized steel by up to three times.
- Various border/frame types, combinations and mounting options.
- Balancing accessories.
- Superior finishes.
- Performance data in accordance with current international test standards and the back-up of one of the finest 'in-house' testing laboratories in North America.

## LOUVERED FACE GRILLES AND REGISTERS

This series of grilles and registers are available in cost effective, corrosion-resistant steel, premium quality extruded aluminum or stainless steel construction. The blades are formed to a streamlined engineered contoured cross-section. Rigid, reinforced frames feature hairline-mitered corners. Optional opposed blade dampers have a screwdriver slot or lever operator for adjustment through the face of the register. As standard, the grilles and registers have countersunk screw holes in the frame, which make for an architecturally pleasing appearance.

### SUPPLY AIR:

**MODELS 51DV, 51DH – ALUMINUM • DOUBLE DEFLECTION • VERTICAL OR HORIZONTAL FRONT BLADES**

**MODELS 61DV, 61DH – STEEL • DOUBLE DEFLECTION • VERTICAL OR HORIZONTAL FRONT BLADES**

**MODELS 67DV, 67DH – STAINLESS STEEL • VERTICAL OR HORIZONTAL FRONT BLADES**

A dual set of individually adjustable blades are friction pivoted and can be easily adjusted to provide maximum control of the air pattern for spread and deflection in two planes. Blades are spaced on 3/4" (19) centers.

### RETURN AIR:

**MODELS 5145H, 5155H – ALUMINUM**

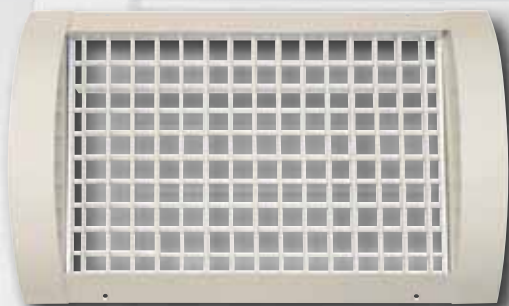
**MODELS 6145H, 6155H – STEEL**



Models 51DV, 67DV

## CURVED SPIRAL DUCT GRILLES

Nailor's unique curved spiral duct grille design offers an architecturally superior appearance featuring a fully radiated frame and saves installation time and money by directly mounting to the duct. This eliminates the need to fabricate stand-off saddles required for installing standard grilles. These grilles are available for both supply and return air applications.



Model 61DVC

### SUPPLY AIR:

**MODELS 61DVC, 61DHC – STEEL • DOUBLE DEFLECTION • VERTICAL OR HORIZONTAL**

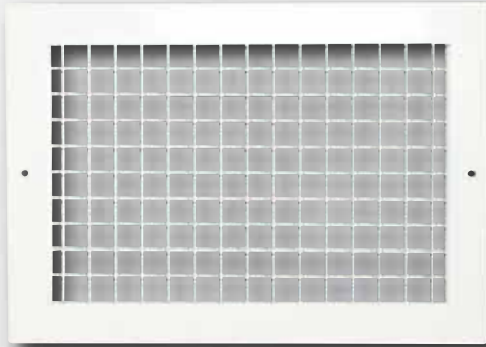
**MODELS 61SVC, 61SHC – STEEL • SINGLE DEFLECTION • VERTICAL OR HORIZONTAL**

### RETURN AIR:

**MODELS 6145HC, 6155HC – STEEL • FIXED BLADE • VERTICAL OR HORIZONTAL**

## AIRFOIL BLADE GRILLES AND REGISTERS

Sleek design, premium performance and a true extruded aluminum airfoil blade is what makes this series superior to the industry standard. The models in this series are designed for engineers and architects who require exceptional quality and performance. As standard, the grilles and registers have countersunk screw holes in the extruded aluminum frame, which make for a neat clean appearance. Optional opposed blade dampers have a screwdriver slot operator for adjustment through the face of the register.



Model 71DV

### SUPPLY AIR:

**MODELS 71DV, 71DH – ALUMINUM • DOUBLE DEFLECTION • VERTICAL OR HORIZONTAL**

### AIRFOIL BLADE

A dual set of individually adjustable airfoil blades are friction pivoted and can be easily adjusted to provide maximum control of the air pattern for spread and deflection in two planes. The airfoil blades are spaced on 3/4" (19) centers.

### RETURN AIR:

**MODEL 7145H – ALUMINUM**

## CURVED BLADE DIRECTIONAL GRILLES AND REGISTERS

Nailor's curved blade directional grilles and registers are designed to meet the demand for top quality and competitive prices. Constructed with extruded aluminum blades, this model series is unobtrusive in appearance for architectural excellence. The grilles and registers may be used in sidewall and ceiling applications. Optional opposed blade dampers have a screwdriver slot operator for adjustment through the face of the register. The 1 1/4" (32) frames have countersunk screw holes for an inconspicuous appearance.

**MODEL 51CD – ALUMINUM**

**MODEL 61CD – STEEL**

### CURVED BLADE WITH DEFLECTION VANES

The models in this series have individually adjustable curved blades that provide a true directional pattern. They also incorporate a set of rear adjustable vanes for complete directional control and flow equalization. They are available with one or two way directional throw. Curved Blade without Deflection Vanes available in Aluminum 1, 2-Way (Model 51C) or Steel 1, 2-Way or 3, 4-Way (Model 61C).



Model 61CD



Model 67EC

**MODEL 51EC – ALUMINUM**

**MODEL 61EC – STEEL FRAME**

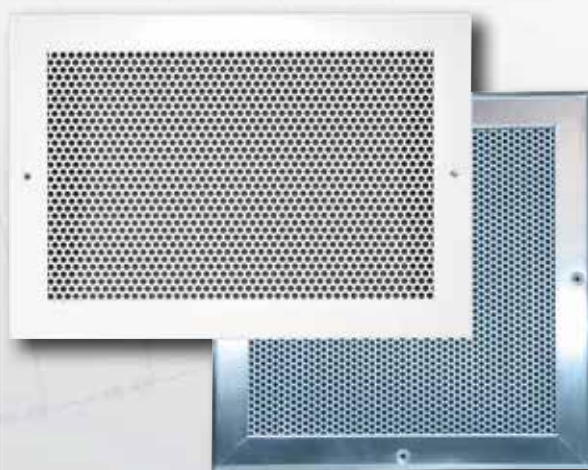
**MODEL 67EC – STAINLESS STEEL**

### EGGCRATE RETURN AND EXHAUST GRILLES

The eggcrate grilles and registers are constructed of thin, interlocked aluminum or stainless steel strips assembled in a square grid fashion that are available in a variety of grid sizes. The standard grid size is 1/2" x 1/2" x 1/2" with 1/2" x 1/2" x 1" or 1" x 1" x 1" as an option. Frame and border types are available in a variety of materials and mounting options.

**MODEL 51PR – ALUMINUM**  
**MODEL 61PR – STEEL**  
**MODEL 67PR – STAINLESS STEEL**  
**PERFORATED RETURN GRILLES**

The perforated face used on these grilles and registers have 3/16" (5) diameter holes on 1/4" (6) staggered centers (51% free area) and is available in a choice of aluminum, steel or stainless steel construction. Their general appearance matches and compliments the popular perforated supply diffusers (refer to the 4300 Series in the diffuser section).



Models 51PR, 67PR



Model 67FB45

**LOUVERED FACE**  
**MODEL 51FB45, 51FB55, 51FBS – ALUMINUM**  
**MODEL 61FB45, 61FB55, 61FBS – STEEL**  
**MODEL 67FB45, 67FB55 – STAINLESS STEEL**  
**FILTER RETURN AND EXHAUST GRILLES**

Nailor offers a large selection of filter grilles that are designed to match and compliment their respective base models in appearance. The standard filter frame accepts a standard 1" (25) thick, throw away type filter (by others) with an option for a 2" (51) filter frame. \*Available in Eggcrate Aluminum (Model 51FE) or Steel (Model 61FE) or Perforated Aluminum (Model 51FP) or Steel (Model 61FP).

## HEAVY DUTY STEEL GRILLES AND REGISTERS • GYMNASIUM STRENGTH

Nailor's Heavy Duty Steel Grilles and Registers are manufactured with 16 gauge steel frames and 14 gauge steel blades which gives them strength to stand up to abuse and high impacts that occur in schools, gymnasiums and other comparable applications.

- SUPPLY AIR:**  
**MODELS 61DV-HD, 61DH-HD – STEEL • DOUBLE DEFLECTION**  
**• ADJUSTABLE BLADES**  
**MODELS 61SV-HD, 61SH-HD – STEEL • SINGLE DEFLECTION**  
**• ADJUSTABLE BLADES**

The supply air grilles are offered with both single and double deflection blades. The adjustability of the blade is 0° – 40° deflection and they are spaced on 1/2" (13) centers. The double deflection rear blades are spaced on 3/4" (19) centers.

- RETURN AIR:**  
**MODEL 6155H-HD – STEEL**



Model 61SH-HD



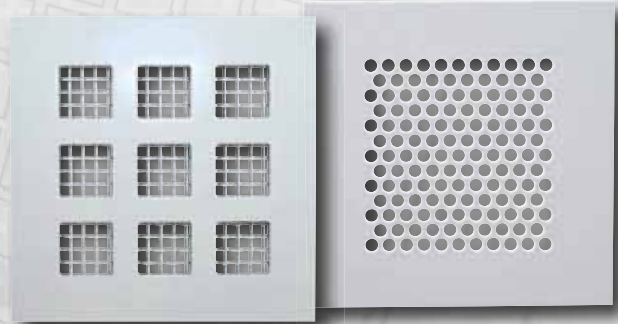
**SECURITY PRODUCTS**

Nailor offers a complete line of Security Grilles, Registers and Diffusers. The product line includes grilles and registers for maximum, medium and minimum security and a diffuser for minimum security applications. The grilles and registers that are for use in the highest security areas are constructed from very heavy gauge welded steel that provides exceptional strength and durability. A wide range of options and accessories are available that can enhance the strength and performance of the grilles and registers.

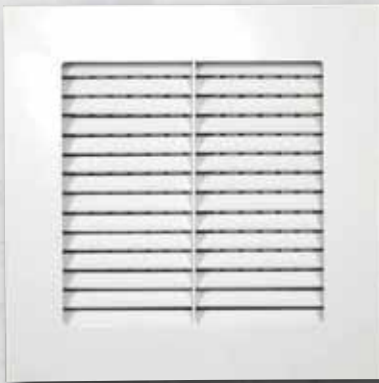
**MODELS SG-LM, SG-PR**

**LATTICE FACE WITH MESH - MODEL SG-LM  
PERFORATED FACE PLATE - MODEL SG-PR  
MAXIMUM SECURITY GRILLES**

Nailor's maximum security grilles and registers are constructed from heavy ga. welded steel and are for use in areas where maximum security is vital. These grilles can be used for both supply and return air applications.



Models SG-LM, SG-PR



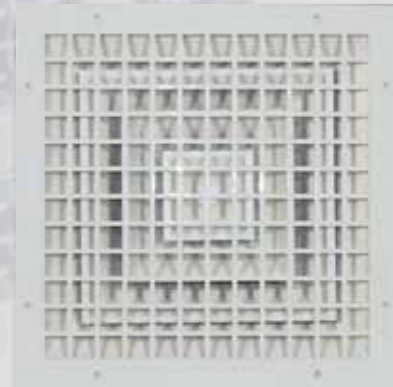
Model SG-BM4

**MODELS SG-BM4, SG-BMZ  
40° DEFLECTION - MODEL SG-BM4  
0° DEFLECTION - MODEL SG-BMZ  
MEDIUM TO MINIMUM SECURITY GRILLES**

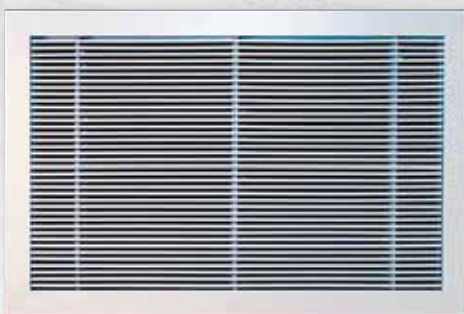
This sidewall bar grille is constructed from 14 ga. steel and has blades that are fixed at 40° or 0° deflection. The louvered blade and steel mesh screen are reinforced with heavy ga. steel mullions and a welded sleeve. These grilles can be used for both supply and return air applications.

**MODELS SG-6500, SG-6200  
STEEL - MODEL SG-6500  
ALUMINUM - MODEL SG-6200  
MINIMUM SECURITY GRILLES**

These diffusers are a combination of a louvered pattern diffuser with a lattice face plate for minimum security protection. The diffusers are available with a choice of 1, 2, 3 or 4-way throw patterns. Use these diffusers in applications where constant supervision occurs.



Model SG-6500

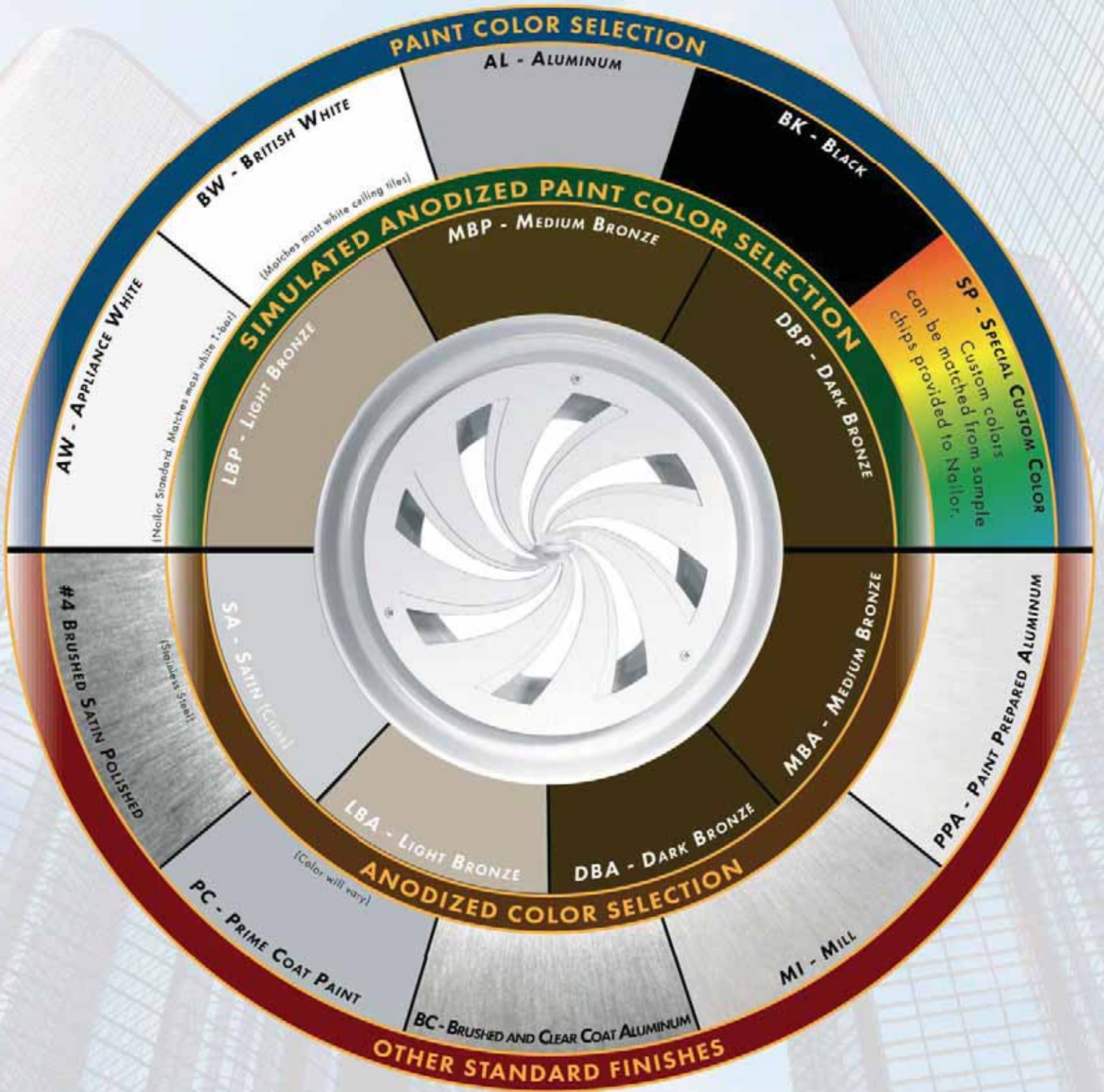


Model SG-480

**MODELS SG-280, SG-480  
1/2" (13) SPACING - MODEL SG-280  
1/4" (6) SPACING - MODEL SG-480  
MINIMUM SECURITY/BAR GRILLES AND REGISTERS**

These minimum security/bar grilles are all aluminum rust-proof construction, which makes them ideal for use in showers and wet areas. The frame and blades are welded for extra strength. These grilles have 0° deflection blades that are spaced on either 1/2" (13) or 1/4" (6) centers.

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.

# NAILOR WOODGRAIN FINISHES

FOR DIFFUSERS, LINEAR BAR GRILLES AND LINEAR SLOT DIFFUSERS

Standard finish is textured.  
\*Also available in a smooth gloss finish.



American Nut **WG01**



American Oak **WG02**



American Walnut **WG03**



Barnwood **WG04**



Black Walnut **WG05**



Cherry **WG06**



Cinnamon Red **WG07**



Cordoba Cherry **WG08**



Dark Knotty Pine **WG09**



Dark National Walnut **WG10**



English Walnut\* **WG11**



Fine Wenge **WG12**



Fonthill **WG13**



Honey Cherry **WG14**



Lighter Maple **WG15**



Light National Walnut **WG16**



Mahogany 1406 **WG17**



Maple **WG18**



Mediterranean **WG19**



Oak **WG20**



Rustic Cherry **WG21**



Straight Cherry **WG22**



Table Walnut **WG23**



Wide Grain **WG24**



## Complete Air Control and Distribution Solutions

### International Group Locations:

#### International & United States Headquarters, Sales, Manufacturing, Research and Development and Test Laboratory:

Nailor Industries of Texas Inc.  
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info@nailor.com  
nailor.com

#### Canadian Headquarters, Sales and Manufacturing:

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98 Toryork Drive,  
Toronto, Ontario M9L 1X6  
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Tel: (416) 744-3300  
Fax: (416) 744-3360

#### European Sales and Marketing Center, Manufacturing: (also responsible for exports to the Middle East, Asia and Australia):

Advanced Air (UK) Ltd.  
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**nailor.com**

#### Regional Sales and Manufacturing Facilities:

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3730 Vivac Center Drive,  
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Unit F, 4427-72nd Avenue S.E.,  
Calgary, Alberta T2C 2G5  
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WADPL