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.

Airfoil Blade – Return Air

45° Deflection, 3/4” (19) Blade Spacing
The airfoil blades are fixed at a 45° angle. This grille is vision proof when installed in a low or high sidewall location with grille blade deflection facing away from the line of sight. In addition, a diverse selection of mounting frames are available to suit many suspended ceiling designs.

Models 7145H, 7145V
Suffix ‘-O’ adds a steel OBD
Suffix ‘-OA’ adds an aluminum OBD

0° Deflection, 3/4” (19) Blade Spacing
The airfoil blades are set at 0°. Their appearance compliments the supply grilles and registers of the same series. In addition, a diverse selection of mounting frames are available to suit many suspended ceiling designs.

Models 71FH, 71FV
Suffix ‘-O’ adds a steel OBD
Suffix ‘-OA’ adds an aluminum OBD

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.

Aluminum – Model 51CD
Suffix ‘-O’ adds a steel OBD
Suffix ‘-OA’ adds an aluminum OBD

Steel – Model 61CD
Suffix ‘-O’ adds a steel OBD

Curved Blade without Deflection Vanes
The models in this series have curved blades that provide a true directional pattern. There are twelve available patterns to choose from.

Aluminum – Model 51C
One and Two-Way
Three and Four-Way

Steel – Model 61C
One and Two-Way
Three and Four-Way
EXCLUSIVE WARRANTY FOR
NAILOR STEEL GRILLES,
REGISTERS AND DIFFUSERS

LIMITED WARRANTY – SERIES 61C, 6100, 61EC, 61F, RNS, RNS2,
UNI, 4300, 6500, 7500 AND 61CC

Nailor Industries Inc. (‘Nailor’) warrants to the original and each subsequent owner of
a new Nailor Series Grille, Register or Ceiling Air Diffuser in the model series titled
above, constructed of corrosion-resistant steel that should rust become visible on the
exposed portion of any individual product covered by this agreement Nailor will
replace the rusted unit. Any diffuser affected by chemicals or misuse, including,
without limitation, the failure to perform reasonable and necessary maintenance, will
not be covered by this warranty. This warranty is for sixty (60) months from the date
of the shipment by Nailor.

This warranty gives you specific legal rights and you may also have other rights which
vary from state to state.

The rusted unit will be shipped by the owner at its cost to Nailor for replacement. The
cost of the replacement, including the cost of shipment to the owner, but excluding any
costs for either the removal or preparation for shipment of the rusted unit and the
re-installation of the replacement unit, will be borne by Nailor. A reasonable time
should be allowed after shipment to Nailor for the replacement of the rusted unit.

This is the only warranty given with the purchase. Any warranties implied by
law are limited to sixty (60) months from the date of shipment by Nailor. Nailor
neither assumes nor authorizes any person to assume for it any other liability
in connection with any diffuser covered by this agreement.

No payment or other compensation will be made for indirect or consequential
damage such as, damage or injury to person or property or loss of revenue or
profit which might be paid, incurred or sustained by reason of the use or inability
to use a Nailor product listed above, even if such loss or damage could have
been foreseen by Nailor.

Some states do not allow the exclusion of limitation of incidental or consequential
damages or limitation on how long an implied warranty lasts, so the above may not
apply to you.
Models 51C and 51CD are supply grilles and registers which incorporate individually adjustable curved blades. The blades can be positioned to provide one-way, two-way and two-way corner blow discharge air patterns. They are commonly used in ceiling and/or side wall locations and are recommended for use in both heating and cooling applications.

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

FEATURES:
- High quality, extruded aluminum construction.
- 1 1/4" (32) wide face border with a 1" (25) overlap margin standard, furnished with countersunk screw holes and mounting screws.
- NF Narrow Frame with 1" (25) face border optional. Concealed mounting is optional.
- Heavy gauge extruded aluminum margins, mechanically interlocked with reinforced mitered corners.
- Extruded blades – curved streamlined aluminum blades on 1" (25) centers.
- Steel or aluminum integral dampers are opposed blade design with a screwdriver slot operator.
- Adjustable pattern – grille blades easily adjustable to provide horizontal one-way or two-way air path from a ceiling location. Adjustable to a full down-blow position as required. Curved blades can be fixed to provide a non-adjustable horizontal air path if specified.
- AW Appliance White baked enamel finish is standard. Other finishes are available.
- Available from 6" x 4" to 36" x 36" (152 x 102 to 914 x 914).
ALUMINUM CURVED BLADE GRILLES AND Registers

* SUPPLY *

Model:
51C with Three and Four-way Discharge Pattern

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

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

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

FEATURES:
- High quality, extruded aluminum construction.
- 1 1/4" (32) wide face border with a 1" (25) overlap margin standard, furnished with countersunk screw holes and mounting screws.
- NF Narrow Frame with 1" (25) face border optional. Concealed mounting is optional.
- Heavy gauge extruded aluminum margins, mechanically interlocked with reinforced mitered corners.
- Extruded blades – curved streamlined aluminum blades on 1" (25) centers. Blades formed with tenons to fit snugly into the side margin, friction loaded to firmly hold deflection setting.
- Steel or aluminum integral dampers are opposed blade design with a screwdriver slot operator.
- Adjustable pattern – grille blades easily adjustable to provide horizontal three-way or four-way air path from a ceiling location. Adjustable to a full down-blow position as required. Curved blades can be fixed to provide a non-adjustable horizontal air path if specified.
- AW Appliance White baked enamel finish is standard. Other finishes are available.
- Available from 6" x 4" to 36" x 36" (152 x 102 to 914 x 914).

Model 51C (Pattern 3A)
STEEL CURVED BLADE GRILLES AND REGISTERS

• SUPPLY

Models:
61C and 61CD with One and Two-way Discharge Pattern

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

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

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

FEATURES:
• Cost effective, corrosion-resistant steel construction.
• 1 1/4" (32) wide face border with a 1" (25) overlap margin standard, furnished with countersunk screw holes and mounting screws.
• Heavy gauge, roll-formed steel margins, mechanically interlocked with reinforced mitered corners.
• Extruded blades – curved streamlined aluminum blades on 1" (25) centers. Blades formed with tenons to fit snugly into the side margin, friction loaded to firmly hold deflection setting.
• Integral dampers – roll-formed steel blades. Opposed blade design with a screwdriver slot operator.
• Adjustable pattern – grille blades easily adjustable to provide horizontal one-way or two-way air path from a ceiling location. Adjustable to a full down-blow position as required. Curved blades can be fixed to provide a non-adjustable horizontal air path if specified.
• AW Appliance White baked enamel finish is standard. Other finishes are available.
• Available from 6" x 4" to 36" x 36" (152 x 102 to 914 x 914).
STEEL CURVED BLADE GRILLES AND REGISTERS
• SUPPLY

Model:
61C with Three and Four-way Discharge Pattern
• Suffix ‘-O’ adds a steel opposed blade damper

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

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

FEATURES:
• Cost effective, corrosion-resistant steel construction.
• 1 1/4" (32) wide face border with a 1" (25) overlap margin standard, furnished with countersunk screw holes and mounting screws.
• Concealed mounting is optional.
• Heavy gauge roll-formed steel margins, mechanically interlocked with reinforced mitered corners.
• Extruded blades – curved streamlined aluminum blades on 1" (25) centers.
• Blades formed with tenons to fit snugly into the side margin, friction loaded to firmly hold deflection setting.
• Integral dampers – roll-formed steel blades. Opposed blade design with a screwdriver slot operator.
• Adjustable pattern – grille blades easily adjustable to provide horizontal three-way or four-way air path from a ceiling location. Adjustable to a full down-blow position as required. Curved blades can be fixed to provide a non-adjustable horizontal air path if specified.
• AW Appliance White baked enamel finish is standard. Other finishes are available.
• Available from 6" x 4" to 36" x 36" (152 x 102 to 914 x 914).

Model 61C (Pattern 4A)
Aluminum Curved Blade Grilles and Registers – Model Series 51C

MODEL
- Aluminum Construction 51C
- Aluminum Construction with Rear Vanes 51CD

DAMPER (OBD)
- Steel (standard) O
- Aluminum OA
- No Damper —

WIDTH x HEIGHT
inches (mm) x inches (mm)

FRAME / BORDER TYPE
Surface Mount:
- Standard 1 1/4” (32) (default) S
- Narrow 1” (25) NF

AVAILABLE DISCHARGE PATTERNS

1-WAY

2-WAY

2-WAY CORNER

3-WAY

4-WAY

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

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

FINISH
- Appliance White (default) AW
- Aluminum AL
- Special Custom Color SP
- Satin (clear) Anodized SA

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

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

The manufacturer shall provide published performance data for the grille, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 2006.
HOW TO SPECIFY OR TO ORDER
(Show complete Model Number and Size, unless "Default" is desired).

Steel Curved Blade Grilles and Registers – Model Series 61C

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

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

DAMPER (OBD)
- Steel O
- No Damper —

WIDTH x HEIGHT
inches (mm) x inches (mm)

FRAME / BORDER TYPE
- Surface Mount (default) S

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

FRONT BLADES
- Adjustable (default) AB
- Fixed FB

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

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

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

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

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

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

The manufacturer shall provide published performance data for the grille, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 2006.
## Performance Data

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

**Models: 51C, 51CD**

**61C, 61CD**

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## Performance Data

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

**Models: 51C, 51CD**  
61C, 61CD

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## Performance Data

**Curved Blade - Supply Grilles and Registers - 51C and 61C Series**

**Models:** 51C, 51CD  
61C, 61CD

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<tr>
<th>Core Area, Square Feet</th>
<th>Nominal Duct Size, Inches</th>
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</table>

**Curved Blade Supply Grilles and Registers - 51C and 61C Series**

**Models:** 51C, 51CD  
61C, 61CD

**Core Nominal Area, Square Feet:**
- 36 x 8
- 30 x 10
- 24 x 12
- 20 x 14
- 18 x 16

**Core Velocity, FPM:**
- TP

**CFM (Cubic Feet per Minute):**
- 182
- 210
- 235
- 315
- 365
- 405
- 470
- 580

**Core Area, Square Feet:**
- 36 x 8
- 30 x 10
- 24 x 12
- 20 x 14
- 18 x 16

**Core Velocity, FPM:**
- 4-Way
- 3-Way
- 2-Way
- 1-Way

**Models:**
- 51C, 51CD  
61C, 61CD

**Core Area, Square Feet:**
- 36 x 8
- 30 x 10
- 24 x 12
- 20 x 14
- 18 x 16

**Core Velocity, FPM:**
- TP

**CFM (Cubic Feet per Minute):**
- 182
- 210
- 235
- 315
- 365
- 405
- 470
- 580
## Performance Data

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

#### Models: 51C, 51CD

61C, 61CD

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<thead>
<tr>
<th>Core Area, Square Feet</th>
<th>Nominal Duct Size, Inches</th>
<th>Core Velocity, FPM</th>
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<th>Core Velocity, FPM</th>
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<td><strong>3-Way</strong></td>
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### Performance Notes:

1. Throw values are given for terminal velocities of 150, 100 and 50 fpm, with a cooling temperature differential ($\Delta T$) of 20°F and are based on surface mount units benefiting from the ceiling coanda effect. The blade settings were set for optimum discharge, parallel to the face of the grille, which has the outer blades closest to the frame, set with an opening of 1/8" (3) and progressively wider spacings between blades away from the frame. (Note: The throw values may be increased or decreased by as much as 20% by changing the blade setting).

2. Blades in the full open position
   - reduce the NC by 6.
   - multiply the total pressure x 0.3.

3. The NC values are based on a room absorption of 10 dB, re $10^{-12}$ watts.

4. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.
PRODUCT OVERVIEW
OPTIONS AND ACCESSORIES FOR GRILLES AND REGISTERS

FASTENING AND MOUNTING FRAMES
- Up to four methods of fastening available for most models.
- Sub-frame available for professionally finished openings.
- Surface mount adaptor frame for plaster and sheet rock ceilings.
- Panel mounting available to suit architectural ceiling systems.

OPTIONS
- A selection of optional items that are available on grilles and registers.
- Information on custom sizing for special applications.

FINISHES
- Selection of standard and non-standard finishes to choose from.
- Baked enamel paint in custom colors to suit architect.
- Anodizing of aluminum products.

AIR BALANCING DEVICES
- Opposed blade dampers for every application.
- Volume extractors.
Effective air balancing of an HVAC System requires the correct selection, specification and installation of the right product to suit the system design.
Nailor offers a comprehensive range of models and options to cover all applications.
Nailor balancing devices are:
- Easy to select and specify. Many items can be supplied as factory mounted or packaged accessories on grilles and registers.
- Designed to offer a smooth, accurate and predictable response during adjustment for precise air metering.
- Designed to provide quick access and adjustment.
- Engineered with attention to optimizing airflow in order to minimize noise, turbulence and pressure drop.
GRILLE AND REGISTER OPTIONS AND ACCESSORIES

Fastening and Border Frames

Type A Screw Fastening (External)
Standard method of fastening for all Nailor grilles and registers in surface mount applications. All Nailor grilles and registers are supplied this way unless specified otherwise. Universal application for all models and cost effective installation.
Screw holes are countersunk in the frame for most models to provide an aesthetically pleasing appearance and are sized for #8 x 1 1/2” (38) oval-head screws which are supplied from the factory packed with each grille or register and are painted to match the specified finish.

Type C Concealed Mounting
Grilles and registers are supplied with concealed mounting straps (at additional cost) which permit surface mounting with concealed screws, allowing a clean frame appearance. The bracket attached to the back of the grille screws to an adjustable mounting strap which can either be secured directly to the duct wall or hooked into a hem formed in the end of the duct. Not available on return grilles with 1/2” (13) spacing and a fixed angled blade deflection. Maximum size: 36” x 36” (914 x 914).

Type D Screw Fastening (Concealed)
Screw holes are provided in the neck of the grille or register frame. Screws are field installed at an angle through the grille frame and into the ductwork, providing a clean frame appearance. Installation is more difficult than Type A due to the space constriction between the grille blades. Care must be taken not to bend or scratch the grille. Not recommended on return air grilles with a fixed angled blade deflection as accessibility to screw holes is greatly restricted.

Type NF Narrow Frame
An optional reduced 1” (25) wide narrow border frame is available on most aluminum models to satisfy architectural considerations. See individual models for availability.
Mounting Frames

**MODEL: PF Plaster/Mounting Frame**
Available (at additional cost) with most standard steel and aluminum grilles and registers.

The Model PF Plaster Frame is constructed from extruded aluminum and provides a convenient and professional way for finishing off the grille or register opening. It provides a stable anchor for attachment, while enabling the grille or register to be detached and replaced readily without disturbing the finished surface of the wall or ceiling opening. It may be used for surface mounting on various materials or recess mounted in wet plaster.

**MODELS: DFS (Steel), DFA (Aluminum)**

Drywall/Plaster Frame

The DF Series are for mounting in finished drywall or plaster ceilings to accept any standard lay-in type grille, register, diffuser or other ceiling component. Installation of the air outlet is as simple as inserting them in a standard lay-in T-Bar type ceiling system.

The DF Series simplifies and reduces installation time compared with surface mount type diffusers. This is especially true where flexible duct is utilized.

A major benefit is that the DF Series allows access to the ceiling plenum space above for maintenance purposes without the need for separate access doors. The finished appearance is professional and aesthetically pleasing.

**Standard Finish:** AW Appliance White baked enamel. Other finishes are available.

**Model DFS** is installed quickly and easily using adjustable fastening angle brackets which adapt to various ceiling thicknesses. Frames are roll-formed corrosion-resistant steel with staked and mitered corners.

<table>
<thead>
<tr>
<th>IMPERIAL MODULES</th>
<th>S.I. UNITS (mm)</th>
<th>METRIC MODULES</th>
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Ceiling opening = CM + 1/4" (6)

**Model DFA** requires framing of the ceiling opening with "C" channel or wood studs for attachment with mounting screws (by others).

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Ceiling opening = CM + 1/4" (6)
Panel Mounting/Ceiling Modules

A panel can be added to the majority of Nailor’s steel and aluminum return grilles to suit many special architectural ceiling designs and ceiling module sizes. These panel mount grilles are available in corrosion-resistant steel for the 6100 series steel grilles and both aluminum and corrosion-resistant steel for the 5100 and 7100 series aluminum grilles.

To specify a steel panel; add the suffix S to the end of the selected panel variant. To specify an aluminum panel; add the suffix A to the end of the selected panel variant. e.g. If a steel panel is required with a Spline Type ceiling module, the variant code will become SPS.

The maximum grille neck sizes available for panel mounting will be the ceiling module size selected - 3” (76).

### Available Ceiling Module Sizes

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### Border Type PL: Lay-in T-Bar

Grille or register is mounted in an extended panel to suit standard T-Bar Lay-in Type ceilings.

### Border Type SP: Spline

The grille or register is mounted in an extended panel to suit spline type ceiling modules.

### Border Type MP: Metal Pan/Snap-in

The grille or register is mounted in an extended panel to suit metal pan ceilings that have snap-in type ceiling modules.

### Border Type FP: Narrow Regressed T-Bar (Fineline®)

The grille or register is mounted in an extended panel that will fit a narrow regressed T-Bar ceiling grid.

### Border Type TL: Tegular Type T-Bar

The grille or register is mounted in a panel that will extend below the T-Bar ceiling grid.
GRILLE AND REGISTER OPTIONS AND ACCESSORIES

Options, Custom Sizing and Finishes

OPTIONS:

GK Gasket
An optional foam gasket is available factory installed on the rear of all Type S corrosion-resistant steel and aluminum surface mount grilles and registers.
Eliminates air leakage and the possibility of dirt streaking and smudging from entrainment, particularly when installed on unevenly finished surfaces such as stucco.

IS Insect Screen
1/16” (2) galvanized steel mesh, factory installed.

EQT Earthquake Tabs
Earthquake (seismic) retaining safety tabs are available; factory installed on grilles or registers when required by local building code that units be independently restrained and safety wired to supporting structure.

CUSTOM SIZING:

Oversized Units
For specialized applications and architectural considerations; certain grilles and registers can be manufactured in single sections larger than the standard published maximum size at additional cost. Aspect ratio, tolerances, manufacturing capability and weight have all to be considered by the factory prior to acceptance. Consult your Nailor representative for specific applications.

Fractional/Hard Metric Sizes
Nailor grilles and registers have been designed and are manufactured to suit HVAC systems where the duct design has been done using Imperial Units of measurement (i.e. feet and inches). The majority of Nailor grilles and registers are fabricated as standard in 1” (25) nominal incremental units, giving the designer great flexibility during sizing selection.
At additional cost, the majority of Nailor grilles and registers can be custom fabricated in fractional sizes for special applications and in Hard Metric (S.I. Units) when the HVAC duct design has been done using the Metric System.
Consult your Nailor representative for availability on specific project applications.

FINISHES:

BAKED ENAMEL PAINT

AW Appliance White (standard)
A white finish that is currently the industry standard. Closely matches standard finishes supplied by the majority of T-Bar ceiling system manufacturers. (No additional cost).

AL Aluminum
Contains suspended metal particles to give the appearance of a silver grey metallic or anodized finish. (No additional cost).

WH Off-White
Has a creamy appearance. (Additional cost)

BK Black
This black has a matte finish. (Additional cost)

SP Special
The Nailor range of grilles and registers are available in any color for special architectural consideration. Custom colors are individually mixed to match customer supplied samples. (Additional cost)

ACRYLIC

AAW Acrylic Appliance White
Extra protection for your grilles and registers. This color matches the industry standard white finish. (Additional cost).

ASP Acrylic Special Finish
Extra protection for your grilles and registers. Custom colors are individually mixed to match customer supplied samples. (Additional cost)

ALUMINUM PRODUCT FINISHES

BC Brushed and Clear Coat
Brushed for an enhanced appearance. (Additional cost).

SA Satin (clear) Anodized
Adds a smooth satin finish to further protect the aluminum from corrosion. (Additional cost).

ALSO AVAILABLE

MI Mill Finish
(No additional cost).

PPA Paint Prepared Metal (Washed only)
(No additional cost).

PC Prime Coat
(Additional cost).
Air Balancing Devices

OPPOSED BLADE DAMPERS – STEEL AND ALUMINUM

Nailor Opposed Blade Dampers are manufactured from heavy gauge, roll-formed, corrosion-resistant steel or extruded aluminum blades and frame with miscellaneous steel components.

The gang operated multi-blade design with blades closing at 45 degrees permits fine volume control for accurate balancing with minimum disturbance to the airflow pattern. Blades are individually pivoted on 1" (25) centers.

GRILLE MOUNT MODELS:

OBD Steel
OBD-A Aluminum

This style of damper mounts directly on the neck of the grille and is sized to fit most Nailor grilles. Uses steel barbed S-clips for easy field mounting or removal when ordered separately. Supplied as standard with a screwdriver slot operator (Type SL) on supply registers and a screwdriver pivot lever operator (Type PL) on fixed, angled deflection return registers. Type SL operator is standard if damper is ordered separately from grille. A lever operator (Type GL) is available as an option on fixed, angled deflection return registers.

Can be specified as an integral part of the grille (register) by adding a - O (steel) or - OA (aluminum) suffix to the grille model. Min. Size = 4" x 2 1/2" (102 x 64) Max. Size = 24" x 24" (610 x 610)

Type SL Operator

The SL Operator incorporates a screwdriver slot, which adjusts from the face of the register. This operator is the standard supplied with supply air registers such as the single and double deflection adjustable blade.

Type PL Operator

The PL Operator is a concealed pivot lever, which is adjusted from the face of the register using a screwdriver. This operator is for use only on fixed blade, angled deflection, return air grilles. When specifying, the blade orientation of the damper must be opposite of the grille.

Type GL Operator

The GL Operator incorporates a lever that adjusts without the use of tools. The lever operator extends through the grille face and is an alternative for fixed blade, angled deflection, return air grilles. When specifying, the blade orientation of the damper must be opposite of the grille being used and the grille model must be specified.
**Type SL Operator**
The SL Operator incorporates a screwdriver slot face operator that is accessed from inside the duct by removing the grille.

**Type EH Operator**
The EH Operator incorporates an external hex device that penetrates the duct wall to provide control. For use with 3/16" (5) Allen key wrench (by others).

**Type EN Operator**
The EN Operator incorporates an external (nylon) screwdriver slot device. This device is controlled externally through the duct.

**Type QD Operator** *
The QD Operator includes a nylon snap-in extension that fits an external (nylon) operator. This device also includes a hand locking quadrant operator for control and position indication.

**Type QX Operator** *
The QX Operator includes a nylon snap-in extension that fits an external (nylon) operator. This device also includes a 2" (51) stand-off bracket and hand locking quadrant for control and position indication. To ensure quadrant is located on vertical side of duct, specify damper with blades parallel to the horizontal duct dimension.

*Not available on Model OBDD-A*
Air Balancing Devices

OPPOSED BLADE DAMPERS – STAINLESS STEEL
Nailor Stainless Steel Opposed Blade Dampers feature heavy gauge, roll-formed blades and a heavy duty frame in all stainless steel construction. Type 304 stainless steel is standard with Type 316 as an available option.

The gang operated multi-blade design with blades closing at 45 degrees permits fine volume control for accurate balancing with minimum disturbance to the airflow pattern. Blades are individually pivoted on 1" (25) centers.

GRILLE/DUCT MOUNT MODELS:
OBD-SS  Stainless Steel
When ordered as part of the stainless steel grille, (using the suffix ‘-O’ on the model number), the dampers are factory welded to the grille frame to provide a secure non-removable connection. If the dampers are ordered separately, they are supplied with mounting tabs. The tabs allow the dampers to be field installed onto a grille or to be mounted independently in the duct, separate from and behind the grille.

All Nailor stainless steel dampers feature a Phillip’s head screwdriver operator that is accessed through the face of the grille.
GRILLE AND REGISTER OPTIONS AND ACCESSORIES

Volume Extractors

MODEL SERIES
EX  Blades on 2" centers
EXD  Blades on 1" centers

The Model Series EX Volume Extractors uniformly divert air from the main duct into the branch take-off and across the face of a grille or diffuser. Gang-operated parallel blades available on 2” (51) or 1” (25) centers pivot from full open to full closed with blades overlapping for shut-off. The curved blade design improves airflow by reducing turbulence, thereby reducing noise and pressure drop.

Specify on order: Length x Width. (Length is first dimension. Blades are parallel to width, second dimension).

FEATURES:
- Material: Galvanized steel.
- Minimum size: 6" x 4" (152 x 102).
- Maximum size: 36" x 36" (914 x 914).

Operator Types

EX/EXD-1
Standard unit with adjusting strap.

EX/EXD-1-R
Rod operator for external operation.

EX/EXD-2
Linkage with 7/16” (11) square hole (2 per unit). Remote operator (eg. Young Regulator #1) by others.

EX/EXD-3
Screw gear operator. Adjusts with 3/16” (4.8) wrench (by others).

Optional Accessories

RLD
Locking device for Models EX/EXD-1-R.