08 91 00

Louvers, Screens & Grilles

June 2014



Right to site.

Complementary Building Products

Nystrom is a global supplier of miscellaneous and specialty construction products.

We partner with our customers to simplify specifying and procurement, minimizing cost and time in the construction project workflow. Our representatives take responsibility for guiding you through the process from beginning to end.

Nystrom is committed to delivering you the right products at the right time. *Right to site.* Stair Treads & Nosings 05 51 00



Smoke Vents 07 72 36



Access Doors



Louvers 08 91 00



Fire Safety 10 44 13



Roof Hatches 07 72 33



Expansion Joint Systems 07 95 13



Floor Doors 08 31 00



Wall & Door Protection 10 26 00



Entrance Flooring Systems 12 48 13







Right to site.

A full line of Louvers. Right to site.

The local division of

Product Family

Nystrom offers a complete line of Airline Louvers for your specific building requirements. Airline louvers are designed for the following application standards: hurricane, wind-driven rain, drainable, weather, acoustical, brick and thin-line. Contact our expert sales department for guidance in selecting louvers on your next project.

 Drainable Louvers Hurricane Louvers Wind Driven Rain Louvers 	Standard Drainable Louver	pg 5-9 'S	
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Architectural Grilles • Thin-Line & PTAC •	FEMA & Impact Resistant	pg 14-15	
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Screens Flange Frames	Extended Sills & Pans Mullions Material Color options	pg 17-19 Learn about the many optic accessories we offer for you your louvers, including cus screens, colors and more.	u to customize

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Hurricane Louvers



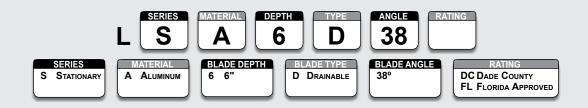
Nystrom's Hurricane Airline Louvers protect the building envelope from wind, debris and rain infiltration. Designed for a much higher windload, these louvers meet the stringent criteria established by Miami-Dade and the Florida Building code.

The Dade-County (DC) model hurricane louvers have passed TAS-201 Large Missile Impact Test, TAS-202 Uniform Static Pressure Test, and TAS-203 Cyclic Wind Pressure Load Test. All models are designed to be used when your building is located in a potential tornado, strong wind, or hurricane zone.

MATERIAL:	Aluminum
BLADE DEPTH:	6"
BLADE ANGLE:	38°
FINISH:	Kynar 500, Baked Enamel, Mill or Anodized
FRAME:	Channel or Dade Flange
OPTIONS:	Bird/Insect Screen, Custom Shape, Extended
	Sill, Sill Pan, Filter Racks and Security Bars

Model	Blade Thickness	Frame Thickness	Blade Spacing	Blade Depth	Blade Angle	Free Area %	Water Penetration	Tested Wind Speed +/-
LSA5CDD-DC	0.063"	0.81"	2"	5"	Chevron	44%	1250+	50 PSF
LSA6D38DC	0.081"	0.081"	5.91"	6"	38°	57%	1023	148 PSF
LSA6D38FL	0.081"	0.081"	5.91"	6"	38°	57%	1023	50 PSF

Additional FEMA, Impact Resistant and Dade County Approved ThinLine Grilles available on pages14-15.



MIAMIDADE

FL Approval

LSA6D38DC

Wind Driven Rain Louvers

Protect your sensitive equipment and keep water out with our full line of Nystrom's Wind Driven Rain Airline Louvers. These louvers have added protection needed to keep the elements outside and withstand severe weather conditions. The louver profiles are built to stop excessive water penetration thus preventing harm to your building. The sightproof chevron style blade makes this an exceptional choice for areas where sight restriction and security are a concern.

MATERIAL:	Aluminum
BLADE DEPTH:	2, 4", 5, 7", or 8"
BLADE ANGLE:	Chevron
FINISH:	Kynar 500, Baked Enamel, Mill or Anodized
FRAME:	Channel, Flange, Glazing or Hinged with
	subframe
OPTIONS:	Bird/Insect Screen, *Semi-Recessed Mullion,
	Custom Shape, Extended Sill, Sill Pan, Filter
	Rack and Security Bars

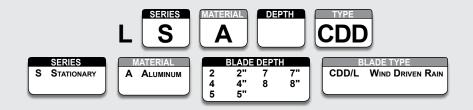






Model	Blade Thickness	Frame Thickness	Blade Spacing	Blade Depth	Blade Angle	Free Area %	Water Penetration	Tested Wind Speed +/-	AMCA Certified
LSA2CDD	0.45"	0.60"	0.813"	2"	Chevron	43%	680	50 mph	No
LSA4CDD	0.63"	0.81"	1.625"	4"	Chevron	40%	1250+	50 mph	Yes
LSA5CDDL	0.63"	0.81"	2" / 50"	5"	Chevron	44%	1250+	50 mph	Yes
LSA7CDD	0.81"	0.81"	4.74" / 2.37"	7"	Chevron	49%	N/A	29 mph	Yes
LSA8CDD	0.60"	0.81"	2.75" / 50"	8"	Chevron	46%	N/A	29 mph	No

*Semi-recessed mullion available on LSA7CDD only.



Drainable Airline Louvers feature an edge gutter and downspout in each blade specially constructed for water disposal. Falling water is drained into the jambs removing cascading water droplets from the air stream. Drainable blades are highly recommended for use in applications where both water penetration and air performance are critical.



LSA4D45

Drainable blade louvers allow very low water penetration with extremely high free area and have excellent rigidity which helps to minimize wind deflection. These features, coupled with the louver's unique blade design, provide the industry's top draining performance.

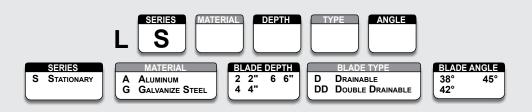
MATERIAL:	Aluminum or Galvanized Steel
BLADE DEPTH:	2", 4", or 6"
BLADE ANGLE:	35°, 38°, 42°, or 45°
FINISH:	Kynar 500, Baked Enamel, Mill or Anodized
FRAME:	Channel, Flange, Glazing, Hinged with subframe
OPTIONS:	Bird/Inset Screen, *Semi-Recessed Mullions, Custom
	Shape, Extended Sill, Sill Pan, Filter Rack and
	Security Bars

Aluminum

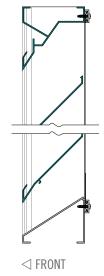
Model	Blade Thickness	Frame Thickness	Blade Spacing	Blade Depth	Blade Angle	Free Area %	Water Penetration	AMCA Certified
LSA2D45	0.62"	0.62"	3.19"	2"	45°	38%	1197 fpm	Yes
LSA4D38	0.81"	0.81"	5.09"	4"	38°	54%	873 fpm	Yes
LSA4D45	0.81"	0.81"	4"	4"	45°	54%	1075 fpm	Yes
LSA4DD45	0.81"	0.81"	5.09"	4"	45°	44%	974 fpm	No
LSA6D38	0.81"	0.81"	5.91"	6"	38°	57%	1023 fpm	Yes
LSA6DD42	0.81"	0.81"	5"	6"	42°	51%	852 fpm	Yes
LSA6DD45	0.10"	0.12"	6"	6"	45°	44%	1080 fpm	No
LSA6D35S	0.81"	0.125"	4"	6"	35°	62%	1250 fpm	No

Galvanized Steel

Model	Blade Thickness	Frame Thickness	Blade Spacing	Blade Depth	Blade Angle	Free Area %	Water Penetration	AMCA Certified
LSG4D38	18 GA	16 GA	3.5"	4"	38°	52%	961 fpm	Yes
LSG6D38	18 GA	16 GA	4.75"	6"	38°	54%	896 fpm	Yes



Drainable Louvers



*Semi-recessed mullion available on LSA6DD42 only.

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Storm Louvers

Storm Airline Louvers feature specially constructed blades with a center weather baffle for optimum protection. Storm resistant louvers are generally used where water penetration and air performance are required but not critical. Storm Blade Louvers have excellent rigidity which helps to minimize wind deflection.

MATERIAL:	Aluminum
BLADE DEPTH:	2", 4", or 6"
BLADE ANGLE:	38° or 45°
FINISH:	Kynar 500, Baked Enamel, Mill or Anodized
FRAME:	Angle, Channel, Flange, Glazing or Hinged
	with subframe
OPTIONS:	Bird/Inset Screen, Mitered Corners,
	Concealed Mullions, Custom Shape,
	Extended Sill, Sill Pan, Filter Rack and
	Security Bars



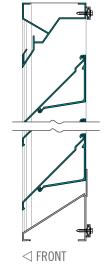


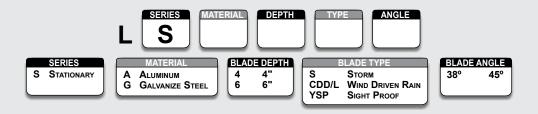
Aluminum

Model	Blade Thickness	Frame Thickness	Blade Spacing	Blade Depth	Blade Angle	Free Area %	Water Penetration	AMCA Certified
LSA2S45	0.62"	0.62"	3.188"	2"	45°	41%	N/A	No
LSA4S38	0.81"	0.81"	4.75"	4"	38°	52%	696 fpm	Yes
LSA4S45	0.81"	0.81"	4.75"	4"	45°	53%	871 fpm	Yes
LSA6S45	0.125"	0.125"	5.91"	6"	45°	48%	680 fpm	No

Galvanized Steel

Model	Blade Thickness	Frame Thickness	Blade Spacing	Blade Depth	Blade Angle	Free Area %	Water Penetration	AMCA Certified
LSG4S45	18 GA	16 GA	5"	4"	45°	45%	725 fpm	Yes
LSG6S45	20 GA	20 GA	6.6875"	6"	45°	42%	668 fpm	No



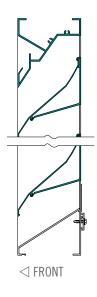


Weather Louvers

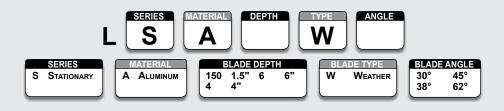
Weather Resistant Airline Louvers are manufactured with a clean attractive design that provides all-weather protection. The continuous blade presents uninterrupted horizontal lines enhancing your architectural design. Weather resistant blades are economical and recommended in applications where water penetration and air performance are not critical.

MATERIAL:	Aluminum
BLADE DEPTH:	1.5", 4", or 6"
BLADE ANGLE:	30°, 38°, 45° or 62°
FINISH:	Kynar 500, Baked Enamel, Mill or Anodized
FRAME:	Angel, Channel, Flange, Glazing or Hinged
	with subframe
OPTIONS:	Bird/Inset Screen, Mitered Corners,
	Concealed Mullions, Custom Shape,
	Extended Sill and Sill Pan





Model	Blade Thickness	Frame Thickness	Blade Spacing	Blade Depth	Blade Angle	Free Area %	Water Penetration	Sight Proof	AMCA Certified
LSA150W30	0.62"	0.62"	1.5"	1.5"	30°	49%	N/A	No	No
LSA150W45	0.62"	0.62"	1.5"	1.5"	45°	43%	N/A	No	No
LSA4W38	0.81"	0.81"	5.09"	4"	38°	54%	803 fpm	No	Yes
LSA6W38	0.81"	0.81"	6"	6"	38°	55%	1010 fpm	No	Yes



Acoustical Louvers

Acoustically insulated Airline Louvers keep the necessary sound in while preventing unwanted noise from getting out. Acoustical louvers allow the flow of air while preventing noise pollution.

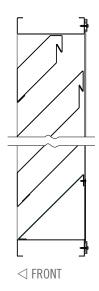


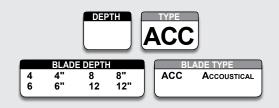
MATERIAL:	Aluminum
BLADE DEPTH:	4", 6", 8" or 12"
BLADE ANGLE:	45°
FINISH:	Kynar 500, Baked Enamel, Mill
	or Anodized finish
FRAME:	Channel
OPTIONS:	Bird/Inset Screen, Concealed Mullions,
	Extended Sill and Sill Pan



Free Field Noise Reduction (db)
10
11
9
13
19
20
19
18

Model	Blade Thickness	Frame Thickness	Blade Depth	Blade Angle	Free Area %	Water Penetration	AMCA Certified
4ACC	0.08"	0.10"	4"	45°	29%	703 fpm	Yes
6ACC	0.08"	0.10"	6"	45°	30%	872 fpm	Yes
6ACC125	0.081"	0.125"	6"	45°	30%	1019 fpm	Yes
8ACC	0.08"	0.10"	8"	45°	26%	838 fpm	Yes
12ACC	0.80"	0.10"	12"	45°	22%	1054 fpm	Yes





Equipment Screens

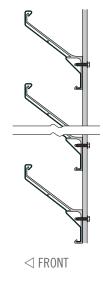
Airline Equipment Screens are great for public areas where privacy and/or security are desired. Available in both horizontal and vertical applications, these models inhibit vision of unsightly equipment while also serving as a protective barrier.

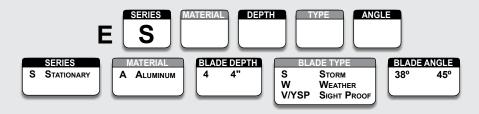
MATERIAL:	Aluminum
BLADE DEPTH:	4"
FINISH:	Kynar 500, Baked Enamel, Mill
	or Anodized finish
OPTIONS:	Horizontal or Vertical Blades, Hinged
	Louvered Personnel Door, Concealed

Mullions and Mitered Corners



Model	Blade Orienation	Blade Thickness	Blade Spacing	Blade Width	Blade Depth	Blade Angle
ESA4VSP	Horizontal	0.81"	3-3/8" / 4-3/8"	N/A	4"	"V"
ESA4YSP	Horizontal	0.81"	3-3/8" / 4-3/8"	N/A	4"	"Y"
ESA4VSPV	Vertical	0.08"	3-3/8" / 4-3/8"	N/A	3-15/16"	"V"
ESA4YSPV	Vertical	0.08"	3-3/8" / 4-3/8"	N/A	5-3/8"	"Y"
ESA175	Vertical	0.06"	2" / 5"	3"	1-3/4"	0°
ESA250	Vertical	0.25"	5" / 6.5"	7"	2-1/2"	0°
ESA4S45-IN	Horizontal	0.81"	5"	N/A	4"	45°
ESA4W38-IN	Horizontal	0.81"	5.094"	N/A	4"	38°



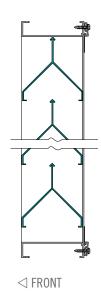


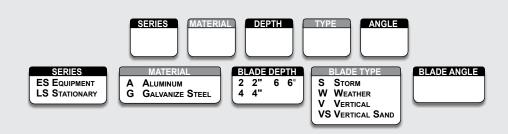
Sight Proof Louvers

The ideal solution when privacy is concerned. Nystrom's Sight Proof Airline Louvers conceal equipment, prevent vandalism and act as a safety barrier to dangerous areas. These louvers provide outstanding durability, low maintenance and are corrosion resistant.

MATERIAL:	Aluminum
BLADE DEPTH:	2", 4" or 6"
ORIENTATION:	Horizontal or Vertical
BLADE ANGLE:	45°, 60°, 62° or 90°
FINISH:	Kynar 500, Baked Enamel, Mill
	or Anodized finish
FRAME:	Angle, Flange, Glazing or Hinged with
	subframe
OPTIONS:	Bird/Insect Screens, Extended Sill, Security
	Bars and Filter Racks







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Blade

Horizontal

Horizontal

Vertical

Vertical

Horizontal

Orientation Thickness

Model

LSA4VSP

LSA4YSP

LSA4VSP-V

LSA4YSP-V

LSA2VSP

Blade

0.81"

0.81"

0.81"

0.81"

0.06"

Frame

Thickness

0.81"

0.81"

0.81"

0.81"

0.06"

Blade

Spacing

4"

4"

4"

4"

2"

Blade

Depth

4"

4"

4"

4"

4"

Blade

Angle

62°

45°

62°

45°

60°

Free

Area %

35%

33%

35%

33%

28%

Brick Vent Louvers

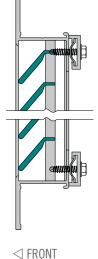
Brick Vent Airline Louvers are an economical option for ventilation in crawl spaces, foundations and corridors. They can be used in new and existing structures where a conventional louver would not be used. Brick vents are constructed of .125 extruded aluminum with a standard clear anodized finish. Nystrom can provide ducts and/or dampers along with brick vents.

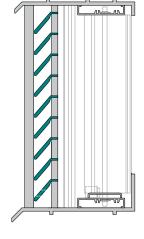
MATERIAL:	Aluminum
BLADE DEPTH:	1.3125" or 4"
BLADE ANGLE:	48°
FINISH:	Kynar 500, Baked Enamel, Mill
	or Anodized finish
FRAME:	Flange or Box
OPTIONS:	Insect Screen, Ducts and/or Dampers

Model	Nomin	ninal Size Free		
Model	Width	Height	Area %	
825	8-1/8"	2-3/8"	21.98%	
847	8-1/8"	4-3/4"	30.32%	
808	8-1/8"	7-3/4"	31.59%	
123	12"	2-3/8"	22.23%	
125	12"	4-3/4"	30.32%	
128	12"	7-3/4"	31.59%	
1212	12"	11-3/4"	31.66%	
157	15-5/8"	7-3/4"	31.27%	
1516	15-5/8"	15-3/4"	31.6%	
162	16-1/2"	2-3/8"	22.05%	
164	16-1/2"	4-3/4"	36.01%	
168	16-1/2"	7-3/4"	31.53%	
1616	16-1/2"	15-3/4"	31.86%	
242	24"	2-3/8"	22.23%	
244	24"	4-3/4"	34.23%	
248	24"	7-3/4"	31.59%	
3208	32"	7-3/4"	31.53%	
4808	48"	7-3/4"	-	

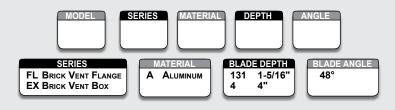
Model EX: nominal height does NOT include 1/4" mortar ribs

Model FL: nominal height does NOT include 1" front flange on four sides and ADD 1/4" to nominal width for mechanical fastener heads





 \lhd Front



FL



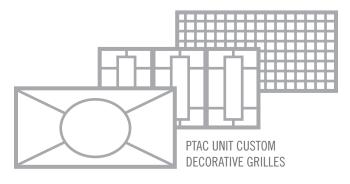
Thin-Line Louver Vents & Grilles

Nystrom's Thin-Line Airline Louver vents are commonly used with packaged terminal air conditioners (P.T.A.C.) or for decorative architectural applications. These louvers provide high free area with limited weather protection.

Thin-line louvers are available in a variety of colors, finishes, and frame options. Airline louvers are fabricated from extruded aluminum for durability and easy handling and can be designed in a variety of configurations.

MATERIAL:	Aluminum
BLADE DEPTH:	1.125"
BLADE ANGLE:	30°, 42° or 45°
FINISH:	Kynar 500, Baked Enamel, Mill
	or Anodized finish
PERIMETER FRAME:	Channel Flange Glazing or Frameley

FRAME:	Channel, Flange, Glazing of Frameless
OPTIONS:	Decorative grille (medallion), Dade-County
	approved and bird/inset screen*



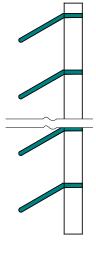
Model	Blade Thickness	Frame Thickness	Blade Spacing	Blade Depth	Blade Angle	Free Area %	Dade County Approved
LSA-30	0.62"	0.62"	0.775"	1.125"	30°	60%	No
LSA-42	0.62"	0.62"	0.775"	1.125"	42°	50%	No
LSA-45	0.62"	0.62"	0.775"	1.125"	45°	45%	No
AEL-42	0.125"	0.125"	0.775"	1.125"	42°	-	Yes

*Screens available for grilles not used with PTAC units.





LSA30



 \lhd FRONT

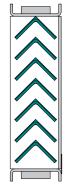
FEMA & Impact Resistant Grilles

Nystrom's Impact resistant grille is designed to withstand 266 psf and has two mounting options:

- 1. Externally in combination with a wall louver
- 2. Internally, stand alone

MATERIAL:	Aluminum
FINISH:	Kynar 500, Mill
OPTIONS:	Bird Screen





< FRONT

Model	Blade Thickness	Frame Thickness	Blade Spacing	Blade Depth	Blade Angle	Free Area %
XP500	0.25"	0.25"	3"	3"	Chevron	53%
LSG8FHD	0.25"	0.25"	3"	3"	Chevron	53%

Complies with FEMA 361 Design and Construction for Community Shelters, Zone IV criteria, 250 mph wind, 15 lb. 2x4 impact at 100 mph.

Sand Louvers

MATERIAL:	Steel
BLADE DEPTH:	4"
ORIENTATION:	Vertical
FINISH:	Mill
FRAME:	Channel
OPTIONS:	Kynar or Baked Enamel, Filter Racks and
	bird/insect screens

Model	Blade	Blade	Frame	Blade	Free	Sight	Sand
	Orientation	Thickness	Thickness	Depth	Area %	Proof	Efficiency
LSS4VSL	Vertical	18 GA	18 GA	4"	25%	Yes	90%

Kynar 500, Baked Enamel, Mill or Anodized

Bird/Insect Screen, Mitered or Boxed Corner



MATERIAL:

FINISH:

OPTIONS:



Penthouse Louvers



Call 800.547.2635 for more information.

Aluminum

Operable and Combination Louvers

Nystrom offers Operable and Combination style louvers including gravity backdraft and motorizerd with HVAC units.

MATERIAL:	Aluminum
BLADE DEPTH:	4", or 6"
BLADE ANGLE:	38° or 45°
FINISH:	Kynar 500, Baked Enamel, Mill or Anodized
OPERATION:	Hand Leaver, Hand Crank, Chain Pull,
	Electric, or Pneumatic
FRAME:	Channel or Flange
OPTIONS:	Bird/Inset Screen, Extended Sill and Security
	Bars



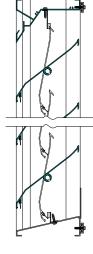


Operable Louvers

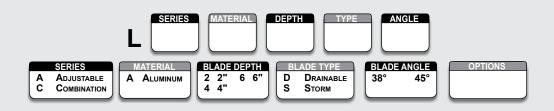
Model	Blade Thickness	Frame Thickness	Blade Depth	Blade Angle	Free Area %	AMCA Certified
LAA4D45	0.81"	0.081"	4"	45°	36%	No
LAA4S45	0.81"	0.081"	4"	45°	37%	No
LAA6D38	0.81"	0.081"	6"	38°	54%	No
LAA6S38	0.081"	0.081"	6"	38°	54%	No
LAA6S45	0.081"	0.081"	6"	45°	57%	No

Combination Louvers

Model	Blade Thickness	Frame Thickness	Blade Depth	Blade Angle	Free Area %	AMCA Certified
LCA4D45	0.061"	0.081"	4"	45°	39%	Yes
LCA6D38X	0.081	0.125"	6"	38°	47%	Yes
LSA4SEGD	0.05"	0.081"	4"	45°	40%	No
LSA4SIGD	0.081"	0.081"	4"	45°	40%	No



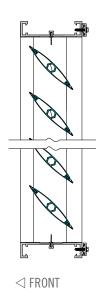
 \lhd Front



Dampers

MATERIAL:	Aluminum
BLADE DEPTH:	2", 4" or 5"
FINISH:	Kynar 500, Baked Enamel, Mill or Anodized
OPERATION:	Electric or Pneumatic Actuator
FRAME:	Channel or Flange
OPTIONS:	Bird/Insect Screen and Extended Sills

Model	Туре	Blade Thickness	Frame Thickness	Blade Depth
BDD2E	Backdraft	0.05"	0.09"	2"
BDD4CBG	Backdraft	0.07"	0.081"	4"
LAA44VCD	Control	0.081"	0.125"	4"
LAA5VCD	Control	0.081"	0.125"	5"



Shape Louvers



Model	Description
RT	Round Top
R	Round
HR	Half Round
LQ	Left Quarter
RQ	Right Quarter

Triangular Shapes

Model	Description
D	Diamond
LT	Left Triangle
RT	Right Triangle
TT	Triangle Top
LTT	Left Triangle Top
RTT	Right Triangle Top
Т	Triangle

Call 800.547.2635 for more information.



Round

MATERIAL:

FINISH:

FRAME:

OPTIONS:

Nystrom certifies that the louvers shown with the following symbol are licensed to bear the AMCA Seal.

Half Round

Standard or Flange

Bird/Insect Screen

Kynar 500, Baked Enamel, Mill or Anodized

Aluminum

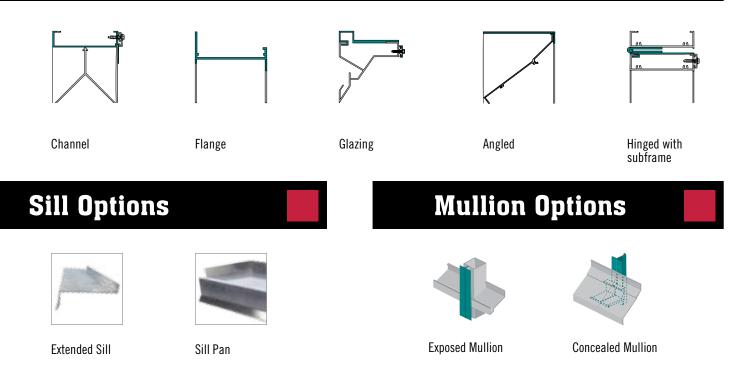
Left Triangle

The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. Corner Options

Box Corner

Mitered Corner

Frame Options



Blank Off Panels



Panel



Non-Insulated

Insulated Panel

Blank Off Panels are used to restrict air flow and is used in areas where ventilation is not required or for duct work.

Description	Thickness (in.)
Non-Insulated Sheet	.04
Insulated Aluminum Panel	1.0
Insulated Aluminum Panel	2.0

Screen Options



Bird Screen



Insect Screen

Model	Description	Size (in.)
WAMIC2	Aluminum Bird Screen	0.5
WSSIC2	Stainless Steel Bird Screen	0.5
WIS	Fiberglass Woven Insect Screen	0.011
WSS	Stainless Steel Woven Insect Screen	0.011
WAS	Aluminum Woven Insect Screen	0.011
WAMIC4	Galvanized Hardware Cloth	0.25
WGH2	Galvanized Hardware Cloth	0.5
WBS	Diamond Aluminum Bird Screen	1.0 x 0.313
WBS-1	Diamond Aluminum Bird Screen	1.813 x 0.906

Kynar 500 Finish



Baked Enamel Finish



Anodized Finish





Complementary Building Products. Right to site.

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08 31 00	Floor Doors
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12 48 13	Entrance Flooring Systems

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