LOUVER PRODUCTS CATALOG

RCHITECTURAL .O.U.V.E.R.S **Attractive Ventilation**: Architectural Louvers combines functionality with unequaled design capability. Use your ventilation requirements to add a memorable design element to your building.



Special shapes, face trim, and various blade types offer a full range of possibilities. Whether you are trying to ventilate an attic space, bring in fresh air, or add decoration to your building, Architectural Louvers can help.

Available finishes include baked enamel, anodized, and high resin content fluoropolymer paint. Standard colors in each of these finish types is available, or select your own color and we will computer match our louver finish to your needs.

		<u> </u>		Frame		Water Pen.
	Blade Type	Performance	Model	Depth	Free Area	Rating <sup>1</sup>
	Standard J	Standard	E2JS	2.0"	48.7%	5648 CFM
	Standard J	Standard	E4JS	4.0"	50.4%	7157 CFM
	Standard J	High	E4JP	4.0"	58.4%	8970 CFM
	Standard J	High	E6JP	6.0"	57.3%	10298 CFM
	Storm K	Standard	E2KS	2.0"	48.7%	5648 CFM
	Storm K	Standard	E4KS	4.0"	50.4%	7157 CFM
ouvers	Storm K	High	E4KP	4.0"	58.4%	7686 CFM
Nno	Storm K	High	E6KP	6.0"	57.3%	10298 CFM
	Drainable	Standard	E2DS	2.0"	49.4%	7032 CFM
Wall	Drainable	Standard	E4DS	4.0"	56.0%	8333 CFM
	Drainable	High	E4DP	4.0"	59.3%	8826 CFM
	Drainable	High	E6DP	6.0"	57.7%	9655 CFM
	Chevron	Wind/Rain	E2WV	2.0"	53.8%	50 mph 8" rainfall
	Chevron	Wind/Rain	E4WH	4.0"	50.6%	50 mph 8" rainfall
	Drainable	Wind/Rain	E4WS	4.0"	56.0%	29 mph 3" rainfall
	Chevron	Wind/Rain	E6WH	6.0"	50.3%	50 mph 8" rainfall

# Select from our full range of louver products:

<sup>1</sup> - Water penetration is listed as total CFM capability from testing of a 48" Wide x 48" High sample. The total CFM is the louver free area (in square feet) multiplied by the first point of water penetration. Wind driven rain louvers are listed by wind speed and rainfall rate.



© 2011 Harray, LLC

266 West Mitchell Avenue Cincinnati, OH 45232 Phone: 888-568-8371 Fax: 888-568-8370

## **Standard Blade Louvers**

# **Standard Performance**

Standard blade, standard performance series offers a clean appearance at a low cost. Ideal applications include decorative, low air velocity, air exhaust, or special shape louvers.

E2J		E4.		
DUNNUNN				A
Frame Depth Blade Spacing Blade Angle	2.0" 2.0" 45°	Frame Depth Blade Spacing Blade Angle	4.0" 5.0" 45°	
Free Area <sup>1</sup> First Point Water <sup>2</sup> Resistance to Air <sup>3</sup>	<b>48.7%</b> 725 fpm 0.07"	Free Area <sup>1</sup> First Point Water <sup>2</sup> Resistance to Air <sup>3</sup>	<b>50.4%</b> 888 fpm 0.15"	

## **Standard Blade Louvers**

#### **High Performance**

High performance series offers higher free areas at reduced resistance to airflow. Used for higher velocities or where high free areas are required.

E4.	JP	E6.	JP	
				A
Frame Depth	4.0"	Frame Depth	6.0"	
Blade Spacing	3.0"	Blade Spacing	4.0"	
Blade Angle	35°	Blade Angle	35°	
 Free Area <sup>1</sup>	58.4%	Free Area <sup>1</sup>	57.3%	
 First Point Water <sup>2</sup>	960	First Point Water <sup>2</sup>	1123	
Resistance to Air <sup>3</sup>	0.13"	Resistance to Air <sup>3</sup>	0.18"	

<sup>1</sup> - Free Area is the space between frame and blades divided by the overall wall opening size (based on a size 48" Wide by 48" High)

<sup>2</sup> - First point at which the louver entrains water, based on air intake free area velocities (0.01 oz. of water per square foot)

<sup>3</sup> - Pressure drop of airflow across the louver at the first point of water penetration, expressed in inches water gauge

# **Storm Blade Louvers**

# **Standard Performance**

Storm blade, standard performance utilizes a baffle to help stop water infiltration. Ideal applications include decorative, low air velocity, air exhaust, or special shape louvers.

E, low all velocity, all		E4		
				A
Frame Depth Blade Spacing Blade Angle Free Area <sup>1</sup> First Point Water <sup>2</sup> Resistance to Air <sup>3</sup>	2.0" 2.0" 45° <b>48.7%</b> 725 fpm 0.07"	Frame Depth Blade Spacing Blade Angle Free Area <sup>1</sup> First Point Water <sup>2</sup> Resistance to Air <sup>3</sup>	4.0" 5.0" 45° <b>50.4%</b> 888 fpm 0.15"	

## Storm Blade Louvers

#### **High Performance**

High performance series offers higher free areas at reduced resistance to airflow. Used for higher velocities or where high free areas are required.

E4K		E6	КР	
				A
Frame Depth	4.0"	Frame Depth	6.0"	
Blade Spacing	3.0"	Blade Spacing	4.0"	
Blade Angle	35°	Blade Angle	35°	
Free Area <sup>1</sup>	58.4%	Free Area <sup>1</sup>	57.3%	
 First Point Water <sup>2</sup>	960	First Point Water <sup>2</sup>	1123	
Resistance to Air <sup>3</sup>	0.13"	Resistance to Air <sup>3</sup>	0.18"	

<sup>1</sup> - Free Area is the space between frame and blades divided by the overall wall opening size (based on a size 48" Wide by 48" High)

<sup>2</sup> - First point at which the louver entrains water, based on air intake free area velocities (0.01 oz. of water per square foot)

<sup>3</sup> - Pressure drop of airflow across the louver at the first point of water penetration, expressed in inches water gauge

#### **Drainable Blade Louvers**

#### **Standard Performance**

Drainable Blade, standard performance louvers have a drain channel integral with the blade and frame to channel water away. Ideal applications include air intake where free area and velocity are low, or open ventilation areas where water entrainment is a concern.



#### **Drainable Blade Louvers**

#### **High Performance**

High performance series offers higher free areas at reduced resistance to airflow. Used for higher velocities or where high free areas are required.

e areas are required. E4D		E6	DP	
				A
Frame Depth	4.0"	Frame Depth	6.0"	
Blade Spacing	3.0"	Blade Spacing	4.0"	
Blade Angle	35°	Blade Angle	35°	
Free Area <sup>1</sup>	59.3%	Free Area <sup>1</sup>	57.7%	
First Point Water <sup>2</sup>	930	First Point Water <sup>2</sup>	1046	
Resistance to Air <sup>3</sup>	0.12"	Resistance to Air <sup>3</sup>	0.13"	

<sup>1</sup> - Free Area is the space between frame and blades divided by the overall wall opening size (based on a size 48" Wide by 48" High)

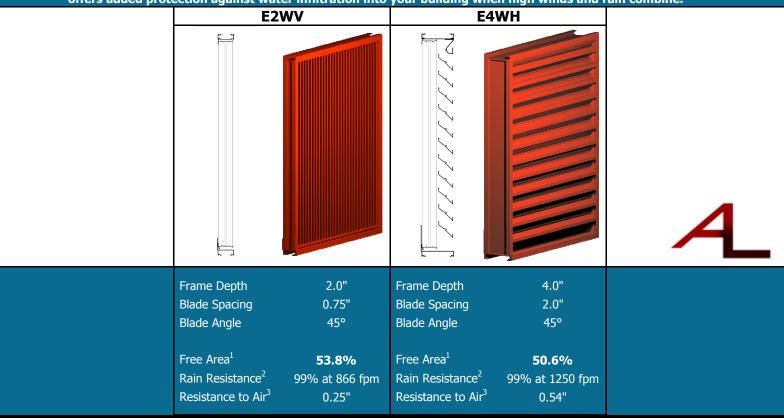
<sup>2</sup> - First point at which the louver entrains water, based on air intake free area velocities (0.01 oz. of water per square foot)

<sup>3</sup> - Pressure drop of airflow across the louver at the first point of water penetration, expressed in inches water gauge

# Wind Driven Rain Louvers

#### **Best Performance**

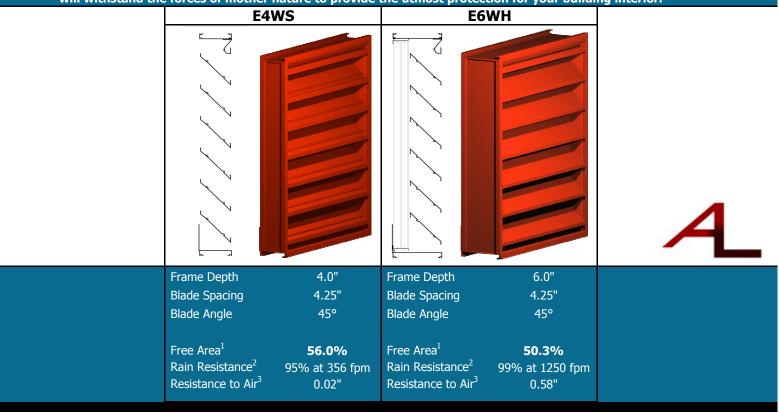
Typical louvers may not be enough to stop the effects of severe weather. The Wind Driven Rain series offers added protection against water infiltration into your building when high winds and rain combine.



## Wind Driven Rain Louvers

#### **Best Performance**

Combining exceptional rain resistance, low resistance to airflow, and respectable free areas. These louvers will withstand the forces of mother nature to provide the utmost protection for your building interior.



<sup>1</sup> - Free Area is the space between frame and blades divided by the overall wall opening size (based on a size 48" Wide by 48" High)

<sup>2</sup> - Rain Resistance is measured in effectiveness at various air intake louver core velocities. See Technical Literature for more details.

<sup>3</sup> - Pressure drop of airflow across the louver at the velocity shown, expressed in inches water gauge

# **Accessories and Options**

Wall Louvers are available with a number of accessories and options to meet the design requirements for your project. Listed below are the most common, but not all of our available options. We have the capability to modify our products further to meet you needs.

capability to moa	iny our products further to meet			
Option	Standard	Available		
Wind Load:	30 pounds per square foot	Up to 150 pounds per square foot		
Finishes:	Mill Finish Aluminum	Clear Anodized Aluminum		
		Color Anodized Aluminum		
		Baked Enamel Paint Finish		
		Kynar Flouropolymer Paint Finish		
		Primer Coat for field painting		
Frame Style:	Channel Frame	Flange Frame (1-1/2" wide)		
		Glazing Channel (for storefront systems)		
		J-Channel Frame (for siding or stucco)		
Interior Screen:	3/4" Mesh Bird Screen	Insect Screen		
		Variety of other screens		
Shapes:	Square or Rectangular	Trianglar, Rounded, Arched, and others		
Mullions:	Exposed (visible at exterior)	Hidden (mullions hidden at exterior)		
Exposed Mullion Construction Shown Right		Hidden Mullion Construction Shown Right		



© 2011 Harray, LLC

266 West Mitchell Avenue Cincinnati, OH 45232 Phone: 888-568-8371 Fax: 888-568-8370

Louvers

8