# Louvers

Best Available Program
3 Days
10 Days
1 Day
5 Days

### **Stationary Louvers**

Stationary extruded aluminum louvers are used in applications that require intake and exhaust ventilation with moderate protection from rain and weather infiltration. Non-drainable and drainable models available.

Product T	- Type	Model	Description
	Drainable Blades	EDD-401, 601 ESD-202, 403, 435, 603, 635	Designed with a drainable head and drainable blades to protect air intake and exhaust openings in a building's exterior walls by minimizing water penetration. Drain gutters are located on every blade to capture water which is dispersed to the jambs and drained out of the sill. The Dual Drainable (EDD) louvers have an additional rain gutter on each blade to provide additional water and weather protection.
	Drainable Head	EDJ-202, 401, 430, 601 EDK-402, 430, 602 ESID-430	Design includes a drainable head member with either J or K style blades and optional 30° blades to maximize free area. The ESID-430 design allows intake and discharge ductwork to be connected to the back of the louver and prevents the short cycling of air. This unit can be either a combination intake/ discharge louver or discharge only louver.
	Non-Drainable Blades	ESJ-202, 401, 602 ESK-402, 602	Designs incorporate traditional non-drainable J or K style blades with sloped sill. The K style blade has an additional offset "rain hook" in each blade to provide extra protection against water penetration. High free areas provide minimum resistance to airflow. Design incorporates hidden mullions when multi-wide sections are needed.
	Recessed Mullion	ESJ-401RM, 602RM ESK-402RM, 602RM EHM-601	The traditional non-drainable J and K style blades with recessed mullion. Design offers better blade alignment for a continuous blade appearance. Provides more structural integrity between multi-wide sections.

Model	Best Available Program
All Thinline Louvers	1 Day
Painted Finishes	10 Days

#### **Thinline Louvers**

Thinline extruded aluminum louvers are commonly used for interior or exterior applications where high free area and low airflow resistance is required. The narrow depth makes this product ideal for installation into curtainwalls, windows and doors.

Product <sup>-</sup>	Туре	Model	Description
	Framed Models	ESJ-155 ESU-153, 154	The narrow depth makes this product ideal for installation into curtainwalls, windows, doors or as air conditioning grilles. Flat or J style blades available depending on model selected.
	Frameless Models	ESU-153S, 154S	Frameless models with extruded aluminum vertical supports are ideal for use as a Packaged Terminal Air Conditioning (PTAC) grille.

Model	Best Available Program
All Sightproof Louvers	1 Day
Painted Finishes	5 Days

### **Sightproof Louvers**

Sightproof extruded aluminum louvers designed to prevent visual seethrough and security. Can be applied as air intake or discharge louvers or can be applied as louvered equipment screens. Chevron drainable and non-drainable blades available, as well as a vertical blade configuration.

Product Type	Model	Description
Horizontal Blades	SES-202, 401 SEH-202, 401 SED-202, 401, 501	SES models incorporate a horizontal chevron blade preventing visual see-through.  SEH models incorporate a drainable head member for increased protection against water penetration.  SED models offer both drainable head member and drainable blades for maximum protection against water penetration.
Vertical Blades	SEV-401, 501	Incorporates chevron style blades in a vertical blade configuration preventing visual see-through.



Model	Best Available Program
EAC, EACA, ECD, EACN, GCE, GCI	1 Day
Painted Finishes	5 Days
EACC	10 Days
Painted EACC	15 Days

#### **Combination Louver/Damper Louvers**

Extruded aluminum combination louver/dampers incorporate operable and stationary blades into one common frame member. Design maintains a stationary appearance when adjustable blades are closed. A tight seal is created to prevent the passage of air.

Product Type	Model	Description
Drainable Blades	EAC-401, 601 EACC-401, 601 EACA-601 ECD-401, 601	All models include drainable stationary blades and a drainable head member. Drainable adjustable blades have either concealed blade linkage or exposed onblade linkage. Design of EACA-601 incorporates airfoil adjustable blades for less airflow resistance. EACC models incorporate a concealed actuator.
Non-Drainable Blades	EACN-601	Non-drainable stationary blades are combined with non-drainable center pivot adjustable blades. The design does include a drainable head member and concealed blade linkage.
Gravity Louvers	GCE-202, 402 GCI-202, 402	Combination weather louver and gravity backdraft dampers designed to protect air exhaust openings in building exterior walls. Design incorporates a drainable head member, J style stationary louver blades, pressure/gravity operated damper blades. Recommended application is in close proximity to an exhaust or intake air fan.

Model	Best Available Program
EAD, EAH	1 Day
Painted Finishes	5 Days
EADC	10 Days
Painted EADC	15 Days

### **Adjustable Louvers**

Extruded aluminum operable blade louvers are designed to be open or closed to protect air intake and exhaust openings in exterior building walls. Louver blades are center pivoted and can be operated manually or by any commonly specified damper actuator.

Product Type	Model	Description
Drainable Blades	EAD-401, 601, 635 EADC-401, 501	Model EAD offer concealed blade linkage. Model EAD-635 offers 35° blade angle. EADC models incorporate a concealed actuator.
Non-Drainable Blades	EAH-401, 690	EAH models offer concealed blade linkage. Model EAH-690 provides 70% free area when blades are in full 90° open position.



Model	Best Available Program
EHV-901	5 Day
Painted Finishes	10 Days
All Other Wind Driven Rain Louvers	1 Day
Painted Finishes	5 Days

#### Wind-Driven Rain Louvers

Wind-driven rain louvers are Greenheck's most effective louvers in minimizing water penetration through wall openings. Designed to protect air intake and exhaust openings in building exterior walls that are sensitive to the penetration of wind-driven rain.

Product Type	Model	Description
Horizontal Blades	EHH-201, 401, 501, 601, 701	Horizontal blades offer the traditional louver look and excellent protection against wind-driven rain.
Vertical Blades	EVH-201, 301, 401, 501, 602, 801 EHV-901	Vertical blades offer the best protection against wind-driven rain although the vertical blade look is not typical.

Model	Best Available Program
ESD-635DE 12x12, 18x18, 24x24, 30x30, 36x36, 48x48 Mill Finish Only (Miami Warehouse)	In Stock
ESD-435X, ESD-635X, EHH-501X, EVH-602X	3 Days
Painted Finishes, models above	10 Days
EACA-601D, ESD-635D, ESD-635DE, EHH-601D, EHH-601DE, EHV-901D, ESS-502D, EVH-501D, EVH-660D	5 Days
Painted Finishes, models above	10 Days
AFJ-601D, AFJ-601X, ESD-635PD, EHH-601PD	10 Days
Painted Finishes, models above	15 Days

### Florida Product Approved Louvers Miami-Dade Qualified Louvers and Penthouses

These louvers have been designed to meet the stringent criteria established by the Florida Building Code. Whether your application calls for louvers to meet a high wind-load, impact resistance, or be resistant to the penetration of wind-driven rain, Greenheck has the solution.

Product Type	Model	Description
Florida Product Approved	AFJ-601X, ESD-435X, ESD-635X, EHH-501X, EVH-602X	Approved for use in Florida's High Velocity Hurricane Zone if Miami-Dade Notice of Acceptance is not required. All mechanically fastened models comply with TAS-202 Uniform Static Pressure Test (ASTM E330). Models also comply with TAS-201 Large Missile Impact Test (ASTM E1996), TAS-203 Cyclic Wind Pressure Load Test with optional welded construction.
Miami-Dade Qualified	Louvers: AFJ-601D, EACA-601D, ESD-635D, ESD-635DE, EHH-601D, EHH-601DE, EHV-901D, ESS-502D, EVH-501D, EVH-660D Miami-Dade Penthouses: EHH-601PD, ESD-635PD	For use within Florida's High Velocity Hurricane Zone when a Miami-Dade Notice of Acceptance is required. All models comply with Miami-Dade structural test protocols TAS-201 Large Missle Impact Test (ASTM E1996), TAS-202 Uniform Static Pressure Test (ASTM E330) and TAS-203 Cyclic Wind Pressure Test.



Model	Best Available Program
All Acoustical Louvers	10 Days
Painted Finishes	15 Days

#### **Acoustical Louvers**

Acoustically insulated louver blades provide sound absorption for escaping noise. Available in either formed aluminum or steel material and in a variety of blade styles such as airfoil, sightproof or J blade.

Product Type	Model	Description
Airfoil Blades	AFA-801	Acoustical airfoil blades offer the highest free area and lowest airflow resistance.
J Blades	AFJ-120, 601, 801	Acoustical J style blade series offers the best balance of economics, airflow resistance and sound absorption.
Sightproof Blades	AFS-120	Acoustical sightproof blades prevent visual seethrough while providing sound absorption.

Model	Best Available Program
All Fabricated Louvers	3 Days
Painted Finishes	10 Days

#### **Fabricated Louvers**

Fabricated from 20, 18 or 16 gauge galvanized steel and available in stainless steel material. Units are low cost compared to extruded aluminum models. Stationary and adjustable blades are available, as well as drainable and non-drainable blades.

Product Type	Model	Description
Adjustable Blades	FAD-402, 602, 635 FAJ-402, 602	Operable drainable (FAD) or J (FAJ) blades can be closed for tight air shut off. Provide similar features as the EAD extruded aluminum models. Can be operated manually or by any commonly specified damper actuator.
Stationary Blades	FDS-402, 602 FSJ-402, 602	FDS models incorporate stationary drainable blades for excellent resistance to water penetration and FSJ models include traditional J style blades.



#### **Best Available** Program

Shipment time is determined by size and finish type chosen

#### **Brick Vents**

A permanent means of ventilation for crawl spaces, hung ceilings, incinerator rooms, chimney flues, foundations, pipe spaces and corridors. Many standard sizes and finishes available.

Product Type Model		Description
Extruded Aluminum	BVE	Extruded construction provides a quality finished appearance. The units are designed with deep louvered overlapping blades with storm drips on the rear of the blades. The units also have a high water stop at the rear of the unit.
Flanged Extruded Aluminum	BVF	Extruded construction with an aesthetically pleasing flanged frame for easier installation in existing walls. The units are designed with deep louvered overlapping blades with storm drips on the rear of the blades. The units also have a water stop at the rear of the unit.

	BVE				BVF	
	8½ x 7¾ 12 x 7¾ 15½ x 7¾ 16½ x 7¾ Other sizes				All sizes	
Anodized^	In Stock^	In Stock^	In Stock^	In Stock^	10 Days	10 Days
Mill Finish	In Stock	In Stock	In Stock	In Stock	10 Days	10 Days
Anodized*	5 Days	5 Days	5 Days	5 Days	15 Days	15 Days
Painted**	10 Days	10 Days	10 Days	10 Days	15 Days	15 Days

<sup>^ 204</sup> R1, clear

<sup>\*\*\*</sup> Baked Enamel paint only

Model	Best Available Program
Sizes up to 48 x 48 inches	5 Days
All models and Sizes	10 Days
Painted Finishes	15 Days

#### **Louver Penthouses**

Greenheck penthouses offer clean lines, mitered corners, all aluminum construction and removable hoods.

For complete product information on Model WIH Intake and WRH Relief, refer to Greenheck's Gravity Ventilators catalog, or contact your local representative.

Product Type	Model	Description
Penthouse	WIH WRH	The low silhouette louvered penthouses are designed for intake (WIH) or relief (WRH) applications with either natural gravity or positive pressure systems. These units feature a storm-proof aluminum louver with mitered corners and clean horizontal lines. The design affords lower pressure drops while maintaining low hood heights. Removable cover is lined with fiberglass to prevent condensation. Maximum throat dimension is 60 x 120 inches.



<sup>\* 204</sup> R1, medium, dark, by others

\*\* Primer, Baked Enamel, Acroflur®, Kynar®, Mica - all done at Greenheck

## **Louver Qualifications and Licenses**

Greenheck offers the most AMCA licensed louvers in the industry, including Miami-Dade Qualified and Florida Product Approved products.

License	Model	Description
AMCA Licensed: Water Penetration and Air Performance	ESD-635D, ESD-635DE, ESS-502D, ESD-435X, ESD-635X, ESJ-202, 401, 602, ESK-402, 602, ESJ-401RM, 602RM, ESK-402RM, 602RM, EDJ-202, 401, 430, 601, EDK-402, 430, 602, ESD-202, 403, 435, 603, 635, EDD-401, 601, EHM-601, SES-202, 401, SEH-202, 401, SED-202, 401, 501, ECD-401, 601, EACA-601, EACA-601D, EACN-601, EACA-601D, EACN-601, EACA-601, EACA-601D, EACN-601, EACA-601, EACA-601D, EACN-601, EACA-601, EACA-601D, EACN-601,	Greenheck Fan Corporation certifies that the stated models are licensed to bear the AMCA Seal. 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. The AMCA Certified Ratings Seal applies to water penetration and air performance.
AMCA Licensed: Water Penetration, Sound, and Air Performance	AFJ-120, 601, 801, AFA-801, AFS-120, AFJ-601D and AFJ-601X	Greenheck Fan Corporation certifies that the stated models are licensed to bear the AMCA Seal. 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. The AMCA Certified Ratings Seal applies to water penetration, air performance and sound ratings.
AMCA Licensed: Water Penetration, Air Performance, Wind-Driven Rain	EVH-201, 301, 401, 501, 602, 801, EHH-201, 401, 501, 601, 701, EVH-501D, EVH-660D, EHH-601D, EHH-601DE, EHV-901, EHV-901D, EHH-501X and EVH-602X	Greenheck Fan Corporation certifies that the stated models are licensed to bear the AMCA Seal. 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. The AMCA Certified Ratings Seal applies to water penetration, air performance and wind-driven rain.
AMCA Licensed: Air Performance	EAH-690 (90° blade angle)	Greenheck Fan Corporation certifies the stated models are licensed to bear the AMCA Seal. 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. The AMCA Certified Ratings Seal applies to air performance.
AMCA Listed: Impact Resistant Louver Basic Protection	ESD-635D, ESD-635DE, ESD-635X, ESD-435X, EACA-601D	Greenheck Fan Corporation certifies that the product shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program.
AMCA Listed: Impact Resistant Louver Enhanced Protection	AFJ-601D, AFJ-601X, EHH-501X, EVH-602X, EHH-601D, EHH-601DE, ESD-635D*, 635X*, ESS-502D, *0.125" Frame & Blade	Greenheck Fan Corporation certifies that the product shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program.
AMCA Listed: High Velocity Rain Resistant and Impact Resistant Louver Enhanced Protection	EHV-901, EHV-901D, EVH-501D, EVH-602X, EVH-660D	Greenheck Fan Corporation certifies that the product shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program.
MIAMI-DADE COUNTY  APPROYED  Miami-Dade County Qualified	AFJ-601D, EACA-601D, ESD-635D, ESD-635DE, EHH-601D, EHH-601DE, EHV-901D ESS-502D, EVH-501D, EVH-660D EHH-601PD, ESD-635PD	All models comply with Miami-Dade structural test protocols TAS-201, Large Missile Impact Test (ASTM E1996), TAS-202, Uniform Static Pressure Test (ASTM E330) and TAS-203, Cyclic Wind Pressure Test.
Florida Product Approved and UL Classified	AFJ-601X, ESD-435X, ESD-635X, EHH-501X, EVH-602X	All mechanically fastened Florida Product Approved models comply with TAS-202, Uniform Static Pressure Test (ASTM E330).  Models also comply with TAS-201 Large Missile Impact Test (ASTM E1996), TAS-203 Cyclic Wind Pressure Load Test with optional welded construction.



# **Options and Accessories**

We have a full line of accessories available on all Quick Build programs.

- Standard birdscreen
- · Standard insect screen
- Clip angles
- Flange frame
- Standard finishes
- Triangular Shapes (10 day mill; 15 day painted finishes)

These accessories and options allow Greenheck to complete your project just as you envision it.

#### **Louver Finishes**

Choosing the right finish is as critical to a louver project as performance and ratings. The following chart puts complete application information at your fingertips to make the right choice.

Finish Type	Description/Application	Color Selection	Standard Warranty (Aluminum)
2-coat and 3-coat 70% Kynar 500®/Hylar 5000® AAMA 2605 – Dry film thickness 1.2 mil. (AKA: Duranar®, Fluoropon®, Trinar®, Fluoropolymer, Polyvinylidene Fluoride, PVDF2)	"Best." The premier finish for extruded aluminum. Tough, long-lasting coating has superior color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.	Standard Colors: Any of Greenheck's 24 standard colors can be furnished in 70% or 50% Kynar 500®/ Hylar 5000® or Baked Enamel.	10 Years (Consult Greenheck for availability of extended warranty)
2-coat and 3-coat 50% Kynar 500®/Hylar 5000® AAMA 2604 – Dry film thickness 1.2 mil. (AKA: Acroflur®, Acrynar®)	"Better." Tough, long-lasting coating has excellent color retention and abrasive properties. Resists chalking, fading, chemical abrasion and weathering.	2-Coat Mica: Greenheck offers nine standard 2-coat Mica colors. Other colors are available. Consult Greenheck for possible	5 Years
Baked Enamel AAMA 2603 – Dry film thickness 0.8 mil. (AKA: Acrabond Plus®, Duracron®)	"Good." Provides good adhesion and resistance to weathering, corrosion and chemical stain.	extra cost when selecting non-standard colors or special finishes.	1 Year
<b>Color Anodize</b> AA-M10C21A44 (>0.7 mil)	"Two-step" anodizing is produced by following the normal anodizing step with a second, colorfast electrolytic process.	Light, Medium or Dark Bronze; Champagne; Black	5 Years
Clear Anodize 215 R-1 AA-M10C21A41 (>0.7 mil)	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	5 Years
Clear Anodize 204 R-1 AA-M10C21A31 (0.4-0.7 mil)	Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack.	Clear	1 Year
Industrial Coatings	Greenheck offers a number of industrial coatings such as Hi-Pro Polyester, Epoxy, and Permatector™. Consult a Greenheck Product Specialist for complete color and application information.		Consult Greenheck
Mill Finish	Materials may be supplied in natural aluminum or galvanized steel finish when normal weathering is acceptable and there is no concern for color or color change.		Not available

Finishes meet or exceed AAMA 2605, AAMA 2604, AAMA 2603 and AAMA 611 requirements. Please consult www.greenheck.com for complete information on standard and extended paint warranties. Paint finish warranties are not applicable to steel products.

