



Stan Weaver & Company

ENGINEERING [FOCUS]



Florida's Premier HVAC Representative

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Special points of interest:

- All regions of Florida require that installed louvers pass TAS-202
- Miami-Dade Approved louvers only required in Broward and Dade counties
- Save your customer money by only using Miami-Dade rated products where necessary

Florida Product Approval for Louvers

The Florida Building Code requires all louvers installed as part of the building envelope either have a Florida Product Approval number or be certified by the engineer of record (third party independent source approved by building inspector is acceptable).

Wind-borne debris regions are identified as areas where the basic wind speed is 120mph or greater or 110mph or greater within 1 mile of the coast. These regions require that all louvers installed pass TAS-202 and, in installations up to 30 ft above grade, pass TAS-201 and TAS-203.

Enhanced Hurricane Protection Areas are specifically identified spaces for emergency shelter in public buildings during a hurricane. These buildings require that all louvers installed pass TAS-201, TAS-202 and TAS-203.

Broward and Dade counties are identified as High Velocity Hurricane Zones and require Miami-Dade Approved louvers. Louvers must pass TAS-201, TAS-202 and TAS-203. If the louver is installed where the design does not accommodate water penetration, the louver must also meet TAS-100(A).



ESD-435X

Greenheck's louver model ESD-435X

All other regions within Florida require louvers that pass TAS-202 only.

Florida Product Approved Louvers are those louvers which have been tested and certified to comply with the testing protocols and are identified with a Florida Product Approval Number.

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Testing Protocols

Four different testing protocols are referenced by the Florida Building Code for evaluating louver products.

[TAS-100\(A\)](#) - Wind Driven Rain Resistance Test measures a product's ability to resist water penetration in wind drive rain conditions.

[TAS-201](#)—Large Missile Impact Test evaluates a product's resistance

to impact from wind-borne debris in hurricane-force wind conditions. If the projectile used in testing penetrates beyond the inside plane of the louver, or the condition of the louver changes (cracking, etc.), the product fails the test.

[TAS-202](#)—Uniform Static Air Pressure Test assesses a product's ability to withstand a maximum static pres-

sure differential. If the permanent deformation is greater than 80% of the allowable deflection, the louver fails.

[TAS-203](#)—Cyclic Wind Pressure Load Test evaluates a product's ability to withstand wind vibration. If the permanent deformation is greater than 80% of the allowable deflection, the louver fails.



TAMPA OFFICE PH: 813.879.0383
4607 N. Cortez Ave Tampa, FL 33614

JACKSONVILLE OFFICE PH: 904.695.9295
5220 W. Beaver St, Jacksonville, FL 32254

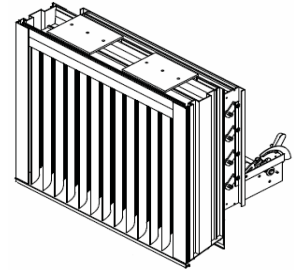
ORLANDO OFFICE PH: 407.581.6940
3663 All American Blvd, Orlando, FL 32810

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Greenheck Product Offering

Greenheck offers several louvers that meet the requirements of the Florida Building Code. These louvers have Florida Product Approval Numbers that can be verified online at: http://www.floridabuilding.org/pr/pr_app_srch.aspx

Louver Model	Florida Product Approval Number	Protocols	AMCA Certifications
AFJ-601X	FL6876.1	Standard: TAS-202 Welded: TAS-201, TAS-202, TAS-203	Water Penetration, Air Performance, & Sound
ESD-435X	FL6876.3	Standard: TAS-202 Welded: TAS-201, TAS-202, TAS-203	Water Penetration & Air Performance
ESD-635X	FL6876.4	Standard: TAS-202 Welded: TAS-201, TAS-202, TAS-203	Water Penetration & Air Performance
EHH-501X	FL6876.2	Standard: TAS-202 Welded: TAS-201, TAS-202, TAS-203	Water Penetration, Air Performance, & Wind Driven Rain
EVH-602X	FL7494.1	Standard: TAS-202 Welded: TAS-201, TAS-202, TAS-203	Water Penetration, Air Performance, & Wind Driven Rain



EVH-602D with factory mounted VCD-40

The following louvers are Miami-Dade rated louvers that also have Florida Product Approval numbers. These louvers are only required for installations in Broward and Dade counties.

ESD-603D	FL4826.1	TAS-201, TAS-202, TAS-203	Water Penetration & Air Performance
ESD-603D/HCD-240	FL4826.2	TAS-201, TAS-202, TAS-203, TAS-100A	Water Penetration & Air Performance
ESS-501D	FL8923.1	TAS-201, TAS-202, TAS-203	Water Penetration & Air Performance
ESD-635D	FL10088.3	TAS-201, TAS-202, TAS-203	Water Penetration & Air Performance
ESD-635D/VCD-40	FL10088.4	TAS-201, TAS-202, TAS-203	Water Penetration & Air Performance
EHH-601D	FL10088.1	TAS-201, TAS-202, TAS-203	Water Penetration, Air Performance, & Wind Driven Rain
EHH-601D/VCD-40	FL10088.2	TAS-201, TAS-202, TAS-203, TAS-100A	Water Penetration, Air Performance, & Wind Driven Rain
EVH-602D	FL8042.1	TAS-201, TAS-202, TAS-203	Water Penetration, Air Performance, & Wind Driven Rain
EVH-602D/VCD-40	FL8042.2	TAS-201, TAS-202, TAS-203, TAS-100A	Water Penetration, Air Performance, & Wind Driven Rain

“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.”



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3663 All American Blvd, Orlando, FL 32810

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Job Spotlight: *Orlando Regional Medical Center*

Orlando Regional Medical Center recently replaced existing louvers with Miami Dade rated wind driven rain louvers. The louvers were ordered to custom fit the existing opening, 192” wide by 144” tall. To keep the Miami Dade NOA for such a wide louver, the louver was built in multiple sections connected by mullions. For this particular application, the section widths were custom specified as to avoid interference in the room at one of the vertical seams.



Industrial Engineering served as the mechanical contractor for the louver replacement. Industrial Engineering installed the multiple section louvers with custom designed section widths, noting the ease of installation with the product.

The mechanical design of the Orlando Regional Medical Center was performed by RLF Engineering in Winter Park. RLF used a Greenheck Model EHH-601D louver on this job to meet the Florida Building Code Requirements for Enhanced Hurricane Protection Facilities and resist wind driven rain penetration.

Orlando Health is very happy with the successful installation by Industrial Engineering and custom design by RLF.

Have any questions about this newsletter? Want more information about these products?

Contact us at mtosh@stanweaver.com



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