



Building with conscience.

Sto High Velocity Hurricane Zone (HVHZ) Systems

Hurricane and Tropical Storm Protection Systems for Exterior Walls

Facades



Sto High Velocity Hurricane Zone Systems provide a full range of exterior cladding options to protect against hurricane and tropical storm winds, water intrusion, and wind-borne debris — a leading cause of building envelope failure. All Sto HVHZ systems are fully engineered and tested, and compliant with Miami-Dade County, Florida criteria for wind load, impact resistance, air leakage, and water resistance.

Level E impact resistance is available for building occupancies requiring the highest level of protection, while maintaining design flexibility.



A smarter cladding offering advanced protection

Since 2016, the U.S. has experienced 29 hurricanes or tropical storms (i.e. storms that caused at least \$1 billion in damage) according to NOAA, over the span of nine hurricane seasons. In that same period, the cumulative damage from these billion-dollar storms is estimated at \$820 billion (in U.S. dollars of that timeframe).¹

Sto High Velocity Hurricane Zone (HVHZ) Systems provide several exterior cladding options to protect against hurricane and tropical storm winds, water intrusion, and windborne debris. All systems meet the stringent High Velocity Hurricane Zone (HVHZ) provisions of the Florida Building Code at specified design pressures. Sto High Velocity Hurricane Zone (HVHZ) Systems have Miami-Dade County Notice of Acceptance (NOA) and Florida Statewide Product Approval.

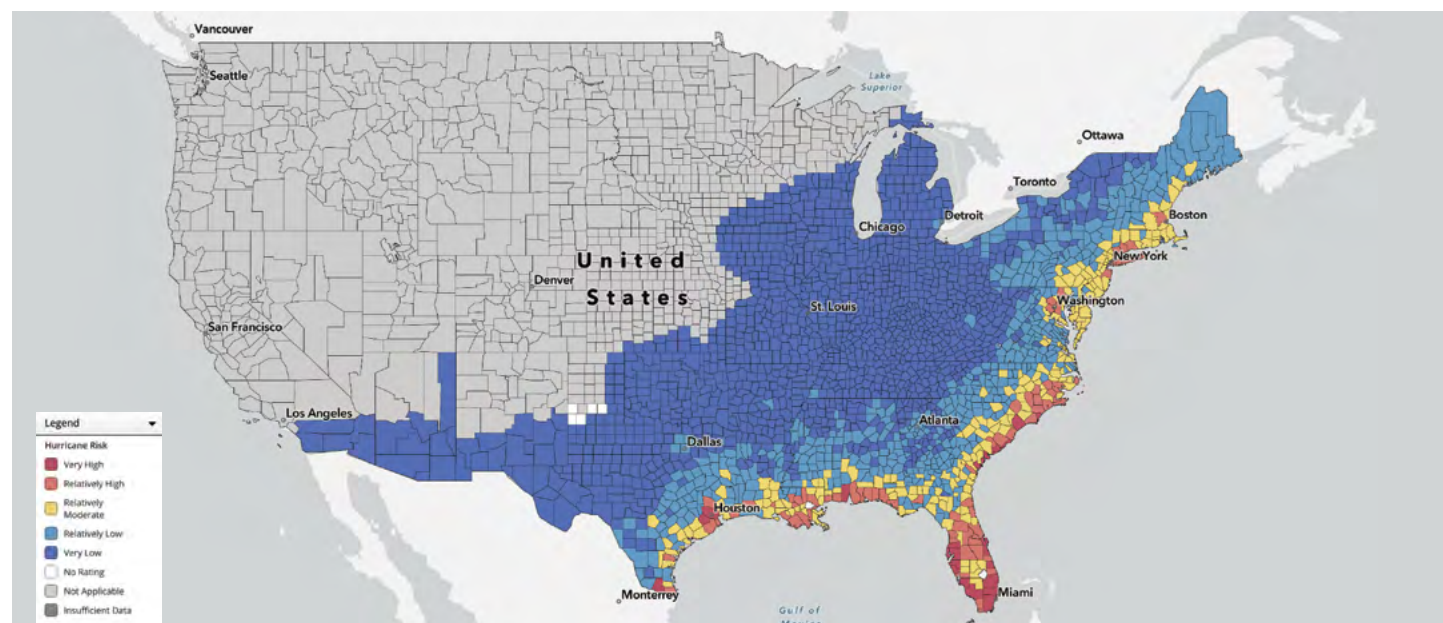
For more information visit www.stocorp.com/sto-high-velocity-hurricane-zone-hvzh-systems/

Key features of the systems include:

- Rainscreen, EIFS, Stucco HVHZ options
- Fully tested and fire-resistance rated wall assemblies
- Lightweight and easy to install
- Field applied or prefabricated exterior panels
- Wide range of aesthetic possibilities from glass, brick, wood, fiber cement or plaster finish

Sto HVHZ systems may be installed economically on a variety of construction types – metal frame with gypsum sheathing, wood or steel frame with plywood sheathing, or concrete masonry. Select from Sto’s wide range of decorative and protective wall finishes for outstanding appearance and superior protection against some of the most severe weather in North America.

Hurricane risk in the United States



¹ <https://weather.com/storms/hurricane/news/2025-05-29-us-hurricanes-damage-cost-since-2016?> by Jonathan Erdman.

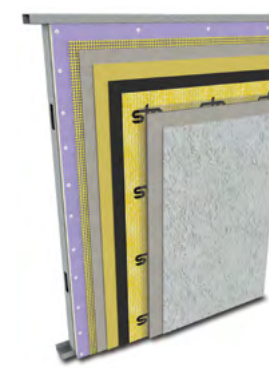


Understanding Level E Impact Resistance

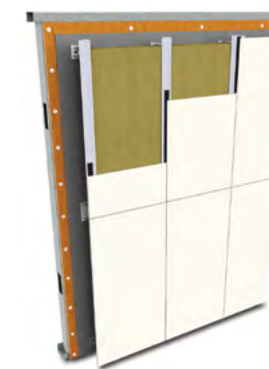
Level E impact-rated systems are designed for areas where enhanced protection is required beyond large missile classifications. These systems are generally required for building occupancies such as hospitals, fire stations, emergency shelters, and other essential facilities that must continue to operate during and after extreme storms. Sto offers a Level E-rated assembly that delivers proven impact resistance, moisture protection, and design flexibility in a fully tested Florida Building Code compliant wall system.



StoTherm ci GMG - LE
(large missile system over glass mat gypsum sheathing)



StoPowerwall DrainScreen GMG
(large missile system over glass mat gypsum sheathing)



StoVentec Fiber Cement
(large missile system over over plywood)





Impact Resistance Rating: Where Used

Sto System Name	Application type	Large Missile: ≤ 30 ft	Small Missile: > 30 ft	Design Pressure Rating (PSF)	Construction Types	Steel stud/track gauge	Miami-Dade County NOA#	FL Building Code #
Sto Therm[®] ci GMG - LM (over glass mat gypsum sheathing)	Field applied Prefab (StoPanel [®])	X		+/- 120 and +/- 150	I - IV, V	16 gauge	25-1205.02	21034.R2
StoTherm[®] ci GMG - SM (over glass mat gypsum sheathing)	Field applied Prefab (StoPanel [®])		X	+/- 120, +/-140, and +/- 150	I - IV, V	16 gauge	25-1205.03	21034.R2
StoTherm ci GMG - LM/SM (over glass mat gypsum sheathing)	Field applied Prefab (StoPanel)	X	X	+/- 140 and +/- 150	I - IV, V	18 gauge	25-0107.04	21034.R2
StoTherm ci MVES GMG - LM (over glass mat gypsum sheathing)	Field applied Prefab (StoPanel)	X		+/- 103	I - IV, V	18 gauge	25-1117.02	21034.R2
StoTherm ci MVES GMG - SM (over glass mat gypsum sheathing)	Field applied Prefab (StoPanel)		X	+/- 112	I - IV, V	18 gauge	25-1117.03	21034.R2
StoTherm ci Ply (over plywood sheathing)	Field applied Prefab (StoPanel)	X		+/- 100 and +/- 125	III (see note #3), V	18 gauge (see note #2)	25-0107.08	21034.R2
StoTherm ci CMU (over CMU)	Field applied	X		-180	I - IV, V	N/A	25-0107.03	21034.R2
StoTherm ci GMG - LE (over glass mat gypsum sheathing)	Field applied Prefab (StoPanel)	X (Level E) *		+/- 110 psf	I - IV, V	16 gauge		47961
StoPowerwall[®] GMG (over glass mat gypsum sheathing)	Field applied	X	X	+/- 100	I - IV, V	18 gauge	25-0107.07	TAS 201, 202, 203
StoPowerwall[®] DrainScreen GMG (over glass mat gypsum sheathing)	Field applied	X	X	+/- 100	I - IV, V	18 gauge	25-0107.10	TAS 201, 202, 203
StoPowerwall GMG - Structa Wire (with Structa Wire lath - over glass mat gypsum sheathing)	Field applied	X	X	+/- 100	I - IV, V	18 gauge	25-0107.09	TAS 201, 202, 203
StoVentec[®] Render (over plywood sheathing, concrete, or CMU)	Field applied	X	X	+/- 80	I - IV, V	18 gauge	25-0610.02	41659.1
StoVentec[®] MVF (over plywood sheathing, concrete, or CMU)	Field applied	X	X	+/- 80	I - IV, V	18 gauge	25-0610.02	41659.1
StoVentec Glass (over plywood sheathing, concrete, or CMU)	Field applied	X	X	+/- 70 and +/- 100	I - IV, V	18 gauge	22-0606.05	47006.1
StoVentec Fiber Cement (over plywood)	Field applied	X	X	+/- 105	III (see note #3), V	18 gauge	N/A	47528.1

Note:

1. All LM and LE rated systems achieve SM rating. 2. Wood studs permitted. 3. Some, not all Type III permitted. Consult local code and AHJ. 4. Refer to applicable Miami-Dade NOAs for complete information on listed assemblies. 5. StoTherm ci: refer to ICC ESR-1748 for use in Types HV construction. 6. StoVentec Rainscreen and StoVentec MVF: refer to CCR 0454 for use in Types HV construction. For StoVentec Fiber Cement refer to CCR 0600 for use in HVHZ. 7. Refer to DrJ TER 2312-07 for use in Types I+V construction.

* Essential buildings (Level E) require a Large Missile Impact Resistant system above 30'

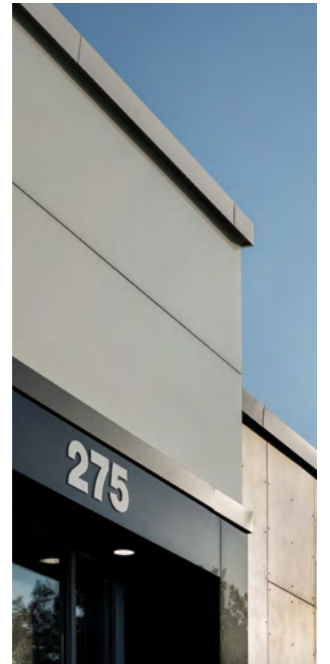
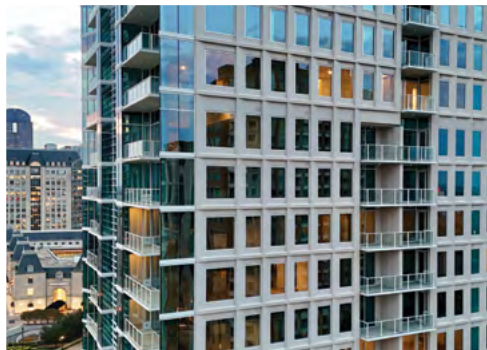
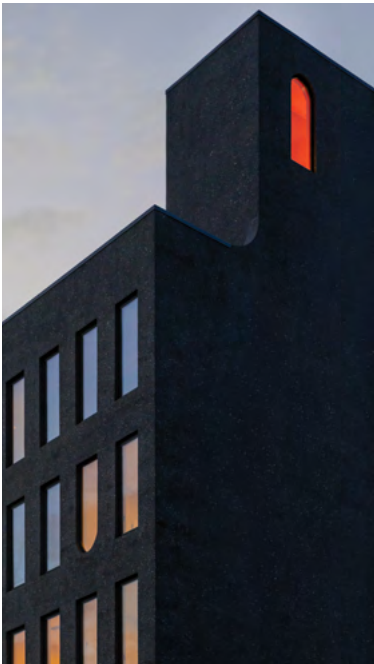


Engineered for Resilience. Made for High Design.

Inspiration favors the open mind. With Sto, your creative exploration can take you anywhere. Our proven products give you unmatched freedom and the ability to achieve your vision in a wide range of colors, textures, and materials.

Sto hurricane-resistant wall systems are engineered to withstand extreme weather, delivering strength, impact resistance, and moisture protection that architects and owners can count on. And while performance is critical in high-velocity wind zones, aesthetics never take a back seat. Sto's broad portfolio of finishes allows you to confidently specify bold designs, diverse textures, and distinctive colors without compromising durability or code compliance. Whether you're building for coastal communities or anywhere severe weather demands more, Sto gives you the design flexibility and proven protection to bring your vision to life.

Creativity Begins. **Sto Finishes.**®



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