

Sto Corp. | Exteriors

StoTherm™ Storm Systems

Level-E Performance for
Essential Facilities

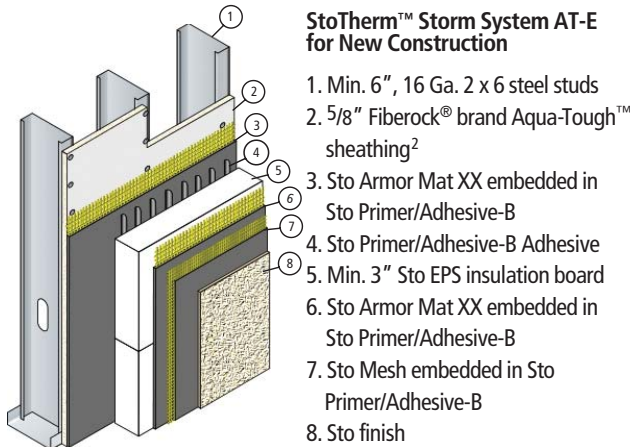
StoTherm™ Storm Systems

Level-E: The highest standard for essential facilities



More than 25 hurricanes have struck coastal regions of the United States since Hurricane Andrew in 1992. Twelve hit in 2004 and 2005. Associated damages were over \$42 million in 2004 and a staggering \$115 million for 2005's storms¹. When the next storm strikes why not be prepared? Protect your building or essential facility (hospital, jail, storm shelter, police/fire station, etc.) with a StoTherm Storm System.

StoTherm Storm Systems protect the building envelope from some of the most severe weather in North America. They offer the highest level of protection (ASTM Level-E for essential facilities) against damage from wind and windborne debris, two of the major components of building envelope failure during a hurricane. Upgrading new construction or an existing cladding to a StoTherm Storm System can help reduce loss of life, property loss, and costly shutdowns.



StoTherm™ Storm System AT-E for New Construction

1. Min. 6", 16 Ga. 2 x 6 steel studs
2. 5/8" Fiberock® brand Aqua-Tough™ sheathing²
3. Sto Armor Mat XX embedded in Sto Primer/Adhesive-B
4. Sto Primer/Adhesive-B Adhesive
5. Min. 3" Sto EPS insulation board
6. Sto Armor Mat XX embedded in Sto Primer/Adhesive-B
7. Sto Mesh embedded in Sto Primer/Adhesive-B
8. Sto finish

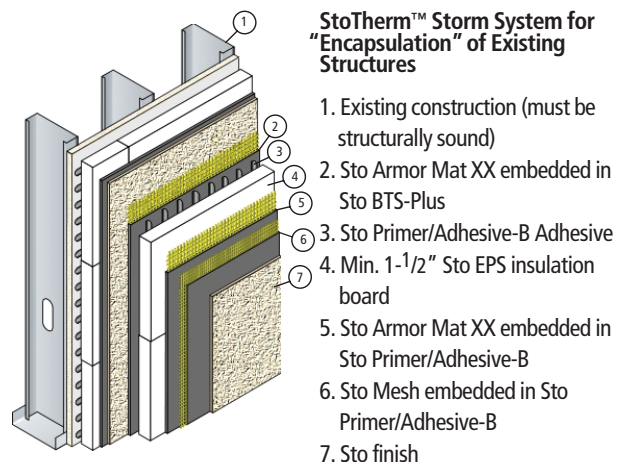
DP Rating: 145 psf (exceeds 1.5 times Cat 5 hurricane wind speed)

Missile Impact Rating:

- Large Missile, Miami-Dade County, FL when tested per protocols PA-201, PA-202, and PA-203, Miami-Dade County, FL NOA # pending
- Large Missile, FBC Section 1609. 1. 4 for High Velocity Hurricane Zones, when tested per TAS 201, 202, and 203
- ASTM E 1996-04 Missile Level-E (Essential Facilities), Zone 4, when tested per ASTM E 1886-04

Water Penetration Resistance:

- 2 hours when tested per ASTM E 331 at 6.24 psf (approx. 50 mph sustained wind with 8 inches/hour of rainfall)



StoTherm™ Storm System for "Encapsulation" of Existing Structures

1. Existing construction (must be structurally sound)
2. Sto Armor Mat XX embedded in Sto BTS-Plus
3. Sto Primer/Adhesive-B Adhesive
4. Min. 1-1/2" Sto EPS insulation board
5. Sto Armor Mat XX embedded in Sto Primer/Adhesive-B
6. Sto Mesh embedded in Sto Primer/Adhesive-B
7. Sto finish

DP Rating: 166 psf attainable*

Missile Impact Rating:

- ASTM E 1996-04 Missile Level-E (Essential Structures), Zone 4 attainable*

*Note: final DP Rating and missile impact levels are partly dependent on make-up of existing construction.

Test a replica of the existing construction with the proposed encapsulation assembly to verify satisfactory performance levels or verify through engineering analysis.

Water Penetration Resistance:

- 2 hours when tested per ASTM E 331 at 6.24 psf (approx. 50 mph sustained wind with 8 inches/hour of rainfall)

As with any wall assembly, proper design and construction, including the proper use of flashing to direct water away from the wall, not into the wall, is essential for long term durability. Occupancy, height requirements, and other building code requirements dictate acceptance of wall assemblies by construction type. Always consult local code authorities to verify conformance of any proposed wall construction.

Always involve a qualified design professional in the design and detailing of wall assemblies, in the evaluation of the condition of any existing structure, and in the final determination of the suitability of any proposed system or assembly for any given structure.

Sto Corp., based in Atlanta, GA, is the innovative world leader and producer of a broad range of versatile cladding and coating systems for building construction, maintenance and restoration. Sto Corp. is ISO 9001:2000 certified and operates production plants strategically located to serve more than 200 distributor locations across North America. At research and development laboratories in the U.S. and Europe, Sto continues to revolutionize the industry with the highest quality products and application technology.

Contact your local distributor for more information.

Please visit us at www.stocorp.com or call us toll-free at 888-552-4111.

¹ Source: National Climatic Data Center, www.ncdc.noaa.gov

² Fiberock® is a registered trademark of USG

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