



## Sustainable Design with StoGuard™, the Spray-on Waterproofing Air Barrier

For more than 50 years, Sto has been committed to the concept of environmental, economic and social sustainability. Our motto, "Building with conscience," focuses on this commitment.

Sto knows the impact buildings can have on the environment. That's why it's our mission to maintain the value of both new and existing buildings for their owners, investors and users by providing product systems and services that improve a building's energy efficiency, durability and aesthetic appeal.

### StoGuard™ is Energy Efficient

Several design decisions contribute to the overall energy efficiency of a building. One significant factor is the airtightness of the building envelope. The Department of Energy reports that up to 40% of the energy used to heat and cool buildings results from heat transfer caused by uncontrolled air leakage through the building envelope.

StoGuard spray-on building wrap is a structural air barrier that minimizes air leakage through the wall assembly, resulting in:

- improved thermal efficiency of the wall system
- decreased energy costs
- increased comfort

### StoGuard™ Improves Indoor Environmental Quality

The air quality of a building interior can be affected by factors such as ventilation, material selection and the spread of contaminants like mold.

The use of StoGuard spray-on building wrap helps improve indoor air quality in several ways:

- **Ventilation System Effectiveness** – Uncontrolled air leakage through the building envelope undermines proper operation of the HVAC system.
  - *StoGuard, a continuous, structural air barrier, minimizes air infiltration and leakage through the wall assembly.*
- **Low VOC (Volatile Organic Compounds) Content** – Low VOC materials reduce emissions of organic compounds as the materials are applied and dry.
  - *StoGuard complies with the stringent South Coast Air Quality Management District (SCAQMD) rule 1113, for maximum allowable VOC content for Waterproofing Sealers.*
- **Protects Against the Development and Spread of Indoor Contaminants** – Water intrusion in the walls during or after construction can be a significant source of mold and mildew.
  - *Installing StoGuard during construction protects the sheathing from absorbing moisture during the building process. StoGuard can be left exposed for up to six months, and will not tear or gap when left exposed like sheet wraps tend to do.*
  - *After construction, StoGuard continues to protect the sheathing from absorbing incidental water, which can be a source of mold. It also reduces air leakage, which is a potential source of moisture accumulation in walls and/or high humidity in interior spaces.*

## StoGuard™ Ensures Durability

“Sustainability” isn’t just about energy efficiency or low CO<sub>2</sub> emissions. It starts with durable design, followed by sound construction practices that promote longevity. Without durability as the cornerstone of sustainable design, most other sustainable building features are lost. StoGuard ensures durability by protecting the sheathing from saturation, while still letting water vapor pass through – thus helping the wall dry, should incidental water leak into the wall assembly.

### Materials and Resources

- Sto uses locally sourced materials, because raw materials extracted locally or finished goods manufactured close to the job location reduce the environmental damage caused by the transportation of materials.
  - *StoGuard is manufactured in three locations, covering much of the US and Eastern Canada.*
- Sto uses recycled content; Products that utilize recycled materials lessen the environmental impact of both extracting new raw materials and disposing of waste.
  - *StoGuard components contain fly ash, a post-industrial recycled material.*

*A study by the National Institute of Standards and Technology (NIST) confirmed that air barriers promote energy savings from 30-40% for heating climates and 10-15% for cooling climates.\**

*StoGuard has been demonstrated by criteria of the International Code Council – Evaluation Service and the Canadian Construction Materials Centre (CCMC) to be an extremely durable waterproofing and air barrier material with exceptional drainage performance.\*\**

\* Source: NISTIR 7238 "Investigation of the impact of Commercial Building Envelope airtightness on HVAC energy use."

\*\* Source: Canadian Construction Materials Centre (CCMC) report - CCMC 13210-R.

Contact your local distributor for more information.  
Please visit us at [www.stocorp.com](http://www.stocorp.com) or call us toll-free at 800-221-2397.

#### ATTENTION

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. **STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.** For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, [www.stocorp.com](http://www.stocorp.com).

#### Sto Corp.

3800 Camp Creek Parkway  
Building 1400, Suite 120  
Atlanta, GA 30331

Tel: 404-346-3666  
Toll Free: 1-800-221-2397  
Fax: 404-346-3119  
[www.stocorp.com](http://www.stocorp.com)



S789B 08/08 VEN 5609  
Printed in the U.S.A. on recycled content paper.