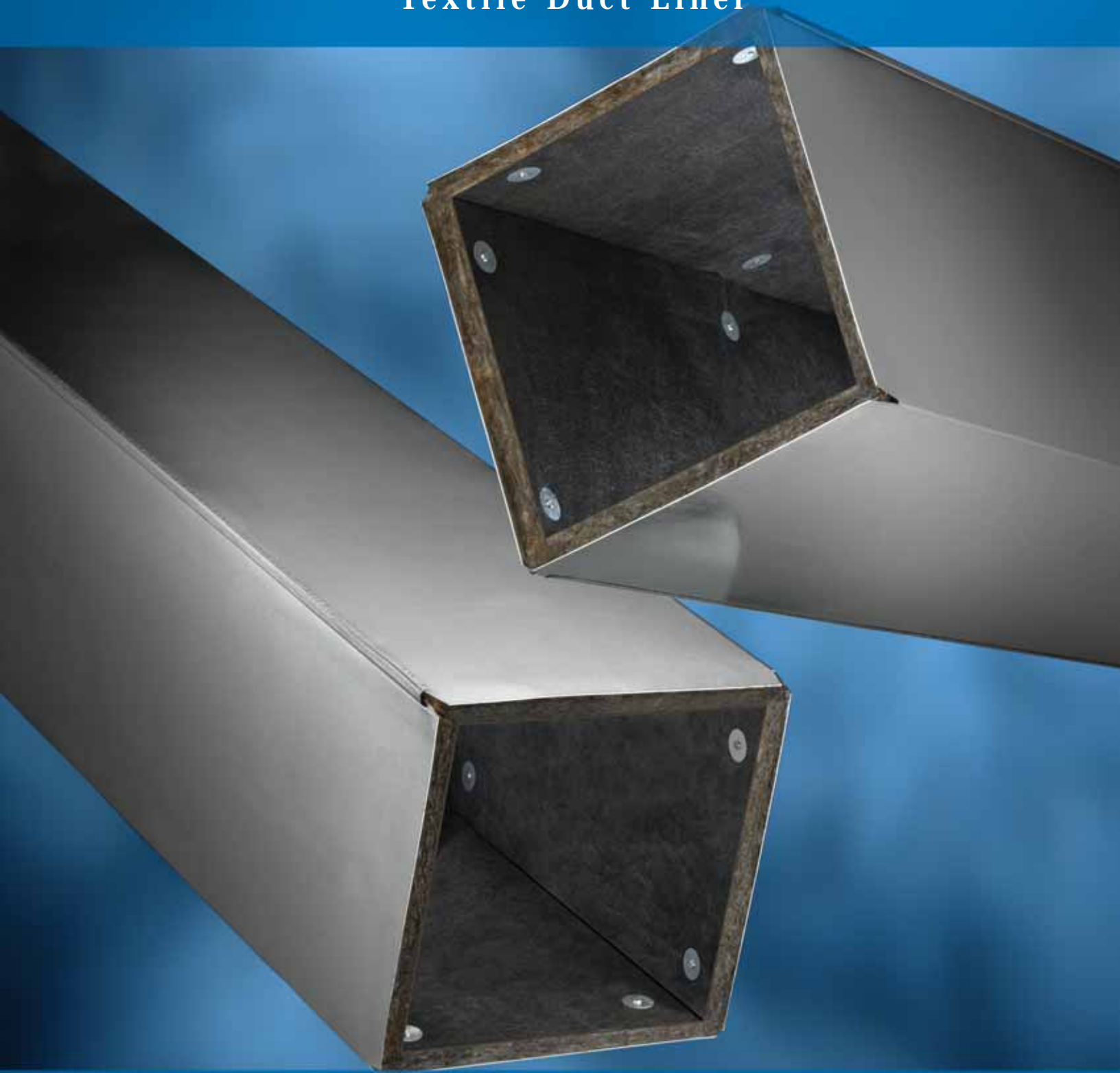


CertainTeed  
**TOUGHGARD<sup>®</sup> 2**  
Textile Duct Liner



**CertainTeed** 

*Quality made certain. Satisfaction guaranteed.<sup>™</sup>*

# ToughGard® 2 Textile Duct Liner: Satisfying Engineers' Tough Standards

## WHAT IS TOUGHGARD® 2?



Original CertainTeed ToughGard® Duct Liner was the HVAC industry's preferred textile fiber glass duct liner, a favorite of engineers and contractors alike. Tough, durable, cleanable, and easy to work with, ToughGard consistently delivered the thermal and acoustical values engineers were looking for.

With higher R-values, ToughGard 2 Textile Duct Liner now exceeds not only the thermal performance of original ToughGard, but also all other competitive textile duct liner products, easily meeting the new energy requirement code. In addition, improved acoustical values keep crosstalk, equipment, and air rush noise to a minimum over a broad spectrum of sound.

## MOISTURE RESISTANCE TESTING

ToughGard® 2 Textile Duct Liner and three other fiber glass duct liners were tested using the INDA Standard Test Method for water repellency (IST 80.6-92). This test method measures the resistance of non-woven fabrics to wetting or penetration by alcohol/water solutions. The higher the IST 80.6-92 rating, the more repellent the surface is to liquids.

The accompanying chart shows that ToughGard 2 outperforms the competition by a wide margin.

**INDA STANDARD TEST  
METHOD SCALE IS 0-10**  
(with 10 most repellent)

PRODUCT	RATING
ToughGard® 2 Textile Duct Liner	3
Competitor #1	2
Competitor #2	1
Competitor #3	0

## WHY IS TOUGHGARD 2 DIFFERENT?

### *Dedicated Production Facility*

As the leader in the development of innovative HVAC insulation products, CertainTeed took charge by designing and building the first U.S. plant constructed exclusively for the production of textile duct liner. This facility in Sherman, TX, has one priority: produce the finest duct liner on the market today.

### *Advanced Manufacturing Technology*

Employing a new process, the Sherman operation uses the most modern computerized equipment, designed to deliver a consistent premium quality product all day, every day. Thickness, width, and density of ToughGard 2 are dependably uniform so that engineers are assured of the desired thermal and acoustical values. Automated quality control stations provide continuous computer-aided quality checking.



## WHY IS TOUGHGARD 2 BETTER?

### *Moisture Resistant Surface*

Ducts are supposed to be properly sealed to keep moisture out. But we all know that in the real world, water does sometimes find its way into air-handling systems—and if dust or dirt is present in a duct where moisture has accumulated, mold growth may result, compromising indoor air quality. This problem can occur in both lined and bare sheet metal ducts.

The solution is proper design and maintenance of duct systems, and specification of products that help prevent the accumulation of moisture. This is where ToughGard 2 Textile Duct Liner comes in.



ToughGard 2 is more moisture resistant than standard duct liners thanks to its unique enhanced surface. Moisture that enters the duct system beads up and stays beaded, allowing airflow to evaporate the moisture before it can be absorbed into the liner. A drier duct environment lessens the chances that mold will be an issue, and improves the quality of the air that is transmitted through the ducts.

Check the results (opposite page) of moisture resistance tests conducted on ToughGard 2 and competing fiber glass duct liners—graphic proof of the superiority of ToughGard 2.

### **Anti-Microbial Agent**

ToughGard 2's enhanced surface includes an EPA registered anti-microbial agent in order to reduce the potential for microbial growth on the duct liner that may affect the product's performance. The anti-microbial properties are intended to protect only this product.

### **Cleanability**

The tough, high-performance surface of ToughGard 2 provides exceptional resistance to tearing, puncturing, and surface wear during installation and cleaning with industry-recognized duct cleaning equipment outlined in the NAIMA Duct Cleaning Guide. In addition, CertainTeed's ToughGard line of products consistently leads the industry in surface abrasion tests.

### **No Fiber Erosion**

ToughGard 2 is designed for systems operating at velocities up to 6,000 fpm. To achieve this rating, the liner is tested at two-and-half times the final approved velocity—in this case, more than 15,000 fpm without significant fiber erosion. That is the equivalent of 170 mph hurricane-force winds. This rating should give peace of mind to engineers with fiber erosion concerns.

### **High Recycled Content**

ToughGard 2 boasts a significantly high level of recycled content, nearly 80%, which enables engineers to gain credits towards LEED certification.

## **TOUGHGARD 2: THE RIGHT CHOICE**

With enhanced R-values, higher acoustical values, and IAQ-friendly composition, the newest generation of textile duct liner can meet nearly every engineer's demanding specifications. New and improved ToughGard 2 is the future of textile duct liner.

### **BETTER THERMAL & ACOUSTICAL VALUES**

TYPE	NOMINAL THICKNESS	R-VALUE	NRC VALUE
200	.5"	2.0	0.45
150	1"	4.0	0.70
150	1.5"	6.0	0.90
150	2"	8.0	0.90
300	1"	4.4	0.75



## **Get Smart About Building Science**

The concept of Building Science, which examines the complex relationships between the building envelope, mechanical systems and occupants, continues to gain attention and grow in importance. A number of factors—from code requirements to increased media coverage—have brought this issue to the forefront. CertainTeed understands the role insulation and innovative products like ToughGard 2 Textile Duct Liner play in the overall integrity of a building system. We have a dedicated Building Science department that works regularly with building professionals to solve critical building envelope issues and provide solutions that have a positive and lasting effect on the industry.

# CertainTeed is the right choice for your business.

## THE RIGHT PRODUCTS.



CertainTeed has been making quality building products for more than 100 years and is part of the largest building materials company in the world, Saint-Gobain Corporation. We offer a full line of fiber glass insulation products that meet the needs of your customers and your business.

And even though we've been doing this for a long time, we're always looking for new and better ways to do things. In fact, we were the first fiber glass insulation manufacturer to have its manufacturing plants, R&D center and corporate headquarters registered to ISO 9001-2000 standards. So you know you're getting the best products possible.

## THE RIGHT PROGRAMS.

Our ultimate goal, of course, is to deliver the absolute best products and programs for your business. We offer solutions that streamline inventory and incentives to maximize sales as well as margins.

## THE RIGHT SUPPORT.

We don't just sell insulation. We listen. We want to understand the unique needs of your business in order to deliver solutions that actually work. From our Building Science department to our dedicated sales team, we work to earn your trust and your business—order after order, year after year.



*If you have any questions regarding specifications, building codes, installation practices, or anything else for that matter, our Technical Services Department is available at (800) 233-8990.*

*In addition to our HVAC fiber glass products, CertainTeed offers a full line of commercial and residential insulation products.*

## ASK ABOUT OUR OTHER CERTAINTEED PRODUCTS:

ROOFING • SIDING • WINDOWS • INSULATION • FENCE • DECKING • RAILING • FOUNDATIONS • PIPE

CertainTeed Corporation  
P.O. Box 860  
Valley Forge, PA 19482

Professional: 800-233-8990  
Order Management: 800-441-6720  
www.certainteed.com

