

**The Truth About  
Vinyl Siding and  
Fiber Cement Siding**



Side-by-Side



# Side with the facts

Vinyl siding is the number one exterior cladding across the United States and Canada. It's the preferred choice because of an impressive list of benefits, including lasting beauty, design versatility, durability, great value, sustainability and extremely low maintenance. In fact, vinyl siding has more than triple the market share of fiber cement siding! Yet some competitors continue to make claims about vinyl siding performance that simply are not true. The Vinyl Siding Institute (VSI) is dedicated to presenting the facts.





## Beautiful Choices

### The truth:

Vinyl siding offers a wide selection of profiles and a broad range of colors fiber cement can't match without painting.

- Vinyl siding is available in a variety of profiles and shapes, with ideal choices to suit virtually any architectural style or house design.
- Vinyl siding manufacturers provide an ever-increasing spectrum of colors in a wide variety of product lines, including darker options and period colors for historic restoration.
- No matter what the profile or color of vinyl siding, it never needs to be painted to maintain its beauty.

- The *VSI Vinyl Siding Product Certification Program* includes certification based on the performance standard for color retention, *ASTM D6864*. VSI's color retention certification process requires that an outdoor weathering study be conducted for each color being considered. Each certified color must demonstrate the ability to resist major changes over time in a variety of climates. Over 360 colors have been certified for color retention.

### Consider this:

Just like high-maintenance wood siding, fiber cement siding requires painting and caulking to protect the home and maintain its appearance, adding to the home's life-cycle cost. Although prefinished product is available in a limited range of colors, it carries an additional cost, requires touch-up during installation and must be repainted at regular intervals.



# Engineered and installed to last

## Installed Performance

### The truth:

Vinyl siding's solid performance is reinforced by Certified Installers.

- Any exterior cladding material may be installed incorrectly, negatively affecting its performance.
- For the *VSI Certified Installer Program*, an independent agency ensures that certified vinyl siding installers are trained and tested on ASTM-accepted application techniques. By proactively certifying those who install vinyl siding, the industry is helping to make sure that the installers of today and tomorrow are properly trained.

- Like fiber cement and all other cladding, proper installation is key. Unlike the fiber cement industry, the vinyl siding industry is certifying installers who successfully meet the highest quality standards. The *VSI Certified Installer Program* includes three levels of certification: Certified Installer, Certified Trainer and Certified Installer Company.

### Consider this:

Special tools are recommended for installation of fiber cement, which must be primed, painted and caulked – including all joints. Improper installation may adversely affect performance, including the potential for water infiltration.



## Proven Durability

### The truth:

- Lightweight materials can be strong and durable.
- Vinyl siding is engineered to provide optimum stiffness and reliable stability while contributing to light weight and ease of installation.
  - Through the *VSI Vinyl Siding Product Certification Program*, independent testing verifies that manufacturers' products meet or exceed globally recognized ASTM standards in many critical areas including windload resistance, surface distortion, impact resistance, heat shrinkage and color retention.
  - Vinyl siding manufacturers' warranties are among the longest and strongest in the cladding industry.

### Consider this:

Fiber cement siding is susceptible to unsightly chips and cracks during shipping, delivery and installation, which must be repaired before it can perform properly – and it can even break during handling on the jobsite.





# Environmental Impact

## The truth:

Vinyl siding is an environmentally sustainable product.

- Life-cycle analysis tools, such as Building for Environmental and Economic Sustainability (BEES<sup>®</sup>) software, demonstrate vinyl siding's high level of environmental performance. BEES is established per *ISO 14040* and ASTM standards and is recognized by green building professionals as a useful tool for selecting environmentally preferable products.
- Silica-based fiber cement, like James Hardie siding products, require special tools for installation along with a dust mask or respirator and may potentially

cause adverse health effects such as silicosis (an incurable lung disease) for installers who do not use respirators.<sup>2</sup> Vinyl siding does not use any materials that can cause adverse health effects to installers or others.

- Fiber cement requires periodic painting and caulking. Vinyl siding only requires occasional cleaning with mild soap and water, reducing the overall environmental impact of vinyl siding.
- Vinyl siding requires less water and energy to manufacture per square than fiber cement.
- Vinyl siding is lighter per square than fiber cement, requiring less fuel and energy to ship and install.
- Most of the raw materials used to manufacture vinyl siding are typically shipped by rail or pipeline, which

# Value that's both beautiful and sustainable



is more energy-efficient than an equivalent volume of raw materials for fiber cement that are typically shipped by truck.

- Scrap from vinyl siding can be fed back into the manufacturing process, while fiber cement scrap is typically sent to landfills.
- While BEES software does not specifically address fiber cement products, the production of cement is responsible for 7 to 8 percent of all human-generated carbon dioxide emissions, contributing to global warming potential.<sup>3</sup>
- Production of cement-based products, including fiber cement, is generally responsible for creating more dioxin than the production of vinyl siding.<sup>4</sup>

## Consider this:

Fiber cement can contribute to earning relatively few points in the draft National Green Building Standard.<sup>™</sup> On the other hand, vinyl siding has the potential to earn more points than other exterior cladding, including fiber cement, because vinyl siding requires no additional finish resources, may contain recycled content, and based on life-cycle assessment with BEES software, qualifies as a more environmentally preferable product.





## Weather Resistance

### The truth:

Vinyl siding has proven itself as fully capable of standing up to weather extremes.

- The *VSI Vinyl Siding Product Certification Program* requires that certified products withstand heavy winds of at least 110 mph required for most installations under the *International Residential Code*.
- Vinyl siding is used extensively across the country – withstanding summer heat in excess of 100°F and sub-zero winter cold, season after season.
- Some vinyl siding even complies with 150 mph building code requirements in Texas and hurricane-prone Miami. Several manufacturers offer products that withstand 190 mph winds.

### Consider this:

Fiber cement siding is susceptible to freeze/thaw complications, and if required caulking or joint flashings fail, or are not installed or maintained properly, moisture infiltration problems can occur.





**Vinyl siding has more market share than any other single type of cladding and more than triple that of fiber cement siding! There are many reasons America sides with vinyl:**

- Vinyl siding has the lowest total installed cost (including labor and finish costs) and the lowest long-term maintenance cost of any cladding material.<sup>5</sup>
- Vinyl siding's ability to withstand high winds and resist heat, cold and moisture means it retains its original appearance and performance capabilities year after year.
- Life-cycle analysis tools, such as BEES software, demonstrate vinyl siding's high level of environmental performance.
- Vinyl siding is the only exterior cladding with both third-party product certification and certified installer programs, both of which are administered by an accredited, independent quality control agency. These programs ensure that products meet or exceed ASTM standards and that installers demonstrate knowledge of ASTM-accepted application techniques.



## Environment

Vinyl Siding	Fiber Cement Siding
<ul style="list-style-type: none"><li>■ Demonstrated environmental performance using life-cycle analysis</li><li>■ Vinyl siding does not use any materials that can cause adverse health effects to installers or others</li><li>■ Lighter weight of raw materials and finished product require less fuel and energy for shipping</li><li>■ Scrap from vinyl siding can be fed back into the manufacturing process</li></ul>	<ul style="list-style-type: none"><li>■ Silica-based fiber cement may potentially cause adverse health effects such as silicosis to installers who do not use respirators<sup>2</sup></li><li>■ Production of cement is responsible for 7 to 8% of all human-generated carbon dioxide emissions<sup>3</sup></li><li>■ Requires more energy and water to manufacture per square</li><li>■ Scrap from fiber cement is typically sent to landfills</li></ul>



## Lifetime Value

Vinyl Siding	Fiber Cement Siding
<ul style="list-style-type: none"> <li>■ A cost-effective exterior cladding</li> <li>■ Lower total installed cost (includes material and labor) and more efficient at the job site</li> <li>■ Never requires painting</li> <li>■ No long-term maintenance costs</li> <li>■ <i>VSI Vinyl Siding Product Certification Program</i> includes surprise inspections and testing of product by an independent third-party to ensure product performance</li> <li>■ <i>VSI Vinyl Siding Product Certification Program</i> also includes third-party verification based on the standard for vinyl siding color retention, <i>ASTM D6864</i></li> </ul>	<ul style="list-style-type: none"> <li>■ The initial purchase price (including labor and finish costs) is over 49% higher than vinyl siding<sup>5</sup></li> <li>■ Requires special tools and additional labor to install, which increases cost</li> <li>■ Requires priming and one or two coats of paint; preprimed and prefinished boards can carry an upcharge of up to 15%</li> <li>■ Requires repainting to maintain appearance</li> <li>■ No similar third-party product certification</li> <li>■ No similar third-party certification for color retention</li> </ul>

## Installation

Vinyl Siding	Fiber Cement Siding
<ul style="list-style-type: none"> <li>■ Starts performing from the moment it's installed without labor-intensive priming, caulking or painting</li> <li>■ No special tools required</li> <li>■ <i>VSI Certified Installer Program</i> trains and verifies knowledge of installers</li> <li>■ Lowest total installed cost of any cladding material<sup>5</sup></li> </ul>	<ul style="list-style-type: none"> <li>■ Must be primed, painted and caulked, including all joints</li> <li>■ Prefinished boards require touch-up painting for nicks, scrapes and nail heads</li> <li>■ Use of special tools and equipment is recommended, including breathing apparatus, during installation<sup>2</sup></li> <li>■ No comparable independent installer certification</li> <li>■ Heavy weight requires special equipment for handling; must be drop-shipped on site and requires larger crews</li> <li>■ Susceptible to moisture; product must be kept dry during shipping, storage and installation</li> </ul>

# Advantage: Vinyl siding

Important ways vinyl siding is a superior choice to fiber cement siding.



Side-by-Side

## Maintenance

Vinyl Siding	Fiber Cement Siding
<ul style="list-style-type: none"> <li>Never requires painting; over 360 vinyl siding colors have been certified for color retention</li> <li>Occasional rinse with a garden hose and a soft cloth is the only maintenance required</li> <li>Does not require caulking</li> </ul>	<ul style="list-style-type: none"> <li>Must be repainted to maintain appearance and moisture resistance</li> <li>Chips and cracks occur – mostly during shipping and installation – and must be filled for proper performance</li> <li>Caulking at panel joints must be maintained to prevent damage due to moisture</li> </ul>

## Warranty

Vinyl Siding	Fiber Cement Siding
<ul style="list-style-type: none"> <li>Lifetime, non-prorated warranties are generally available</li> <li>Typical warranties are fully transferable and cover both manufacturing defects and color/appearance</li> </ul>	<ul style="list-style-type: none"> <li>Warranties range from 30 to 50 years depending on the product and cover manufacturing defects only</li> <li>15-year limited finish warranty on prefinished product</li> <li>All warranties prorated after first year</li> </ul>

## Selection

Vinyl Siding	Fiber Cement Siding
<ul style="list-style-type: none"> <li>Comprehensive architectural trim options and accessories in matching and complementary colors</li> </ul>	<ul style="list-style-type: none"> <li>Often rely on vinyl or polymeric trim products to complete look</li> </ul>

VINYL SIDING INSTITUTE  
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# America Sides with Vinyl<sup>SM</sup>

For free materials on vinyl siding product certification, installation, installer certification, designing with vinyl siding and answers to other questions, visit [www.vinylsiding.org](http://www.vinylsiding.org).



## Siding with Quality and Value

Before you let someone else tell you what today's vinyl siding is all about, we recommend discovering for yourself. Visit [www.vinylsiding.org](http://www.vinylsiding.org) to learn more about the more than 1,000 certified products listed – verified by a third-party, accredited inspection agency to meet or exceed *ASTM D3679*, the long-standing, accepted industry standard for quality vinyl siding. Also take note that more than 360 colors are currently certified to meet or exceed the color retention requirements of *ASTM D6864*.

What's more, vinyl siding is the *only* exterior cladding with both third-party product certification and a certified installer program, both of which are administered by an independent agency to ensure that products and colors meet or exceed ASTM standards and that installers demonstrate knowledge of ASTM-accepted application techniques.

Through links to manufacturer websites, you can see the vast selection of colors and styles now available. Not to mention warranties that can last the lifetime of a home and even transfer to the next owner.

**The more you learn, the more you'll appreciate why America sides with vinyl.**



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