# ARCHITECT G U I D E



TRIM SMARTER.



# **E VERSATEX** TRIMBOARD

VERSATEX is a free-foamed cellular PVC material that duplicates the beauty of wood, yet provides long lasting protection against rot, cracking, and decay-all without requiring any paints or sealants to protect it from the environment. When VERSATEX is applied in trim, fascia or soffit applications, homeowners get the warm, rich, durable beauty they are seeking with the satisfaction of knowing it is engineered to stay that way.

VERSATEX carries a lifetime transferable warranty against cracking, cupping, rot, decay or any possible defect you would face with wood. This warranty and other manufacturing standards are also monitored and tested by an independent third party under our national code listing report CCRR-0149. Finally, VERSATEX is an environmentally friendly material that helps prevent deforestation and is "NGBS Green Certified" from the Home Innovation Research Labs.

At VERSATEX, we simply help you **TRIM SMARTER.** 

# WHY SELECT VERSATEX FOR A HOME'S EXTERIOR TRIM?

# RESOURCE EFFICIENCY

Recycling VERSATEX reduces the amount of raw materials used to make new PVC and lessens the amount of waste diverted to landfills. Most cellular PVC manufacturers recycle their post-industrial trim on-site. VERSATEX has taken it one step further by securing and processing as much as 20% pre-consumer recycled scrap into its cellular PVC trim.

# ENERGY CONSUMPTION

MAINTENANCE

characteristics.

**VERSATEX** cellular PVC trim requires

less maintenance than other similar

products. It does not require the use of paints, stains, or harsh cleaners

to maintain its physical performance

Because VERSATEX cellular PVC is lighter than most other building products, it reduces the amount of fuel required for transportation, which in turn reduces fossil fuel use and carbon dioxide (CO<sub>a</sub>) emissions. VERSATEX also requires less energy to produce than many competing products and 20% less than other plastics.

The majority of raw materials used to produce VERSATEX vinyl trim are shipped to us via rail.

LIFF CYCLE ANALYSIS

An environmental life cycle analysis of PVC building products similar to VERSATEX by the European Commission found that they offer environmental benefits equal to or better than competing materials. The United States Green Building Council (USGBC) PVC Task Group reached similar conclusions in its draft report issued December 2004.



# DURABILITY

The longer a product lasts, the less energy and other resources that must be expended to make and install replacement products **VERSATEX** cellular PVC trim is a durable material that does not rust or corrode. It is also insect. mold, mildew, and fire resistant.

# **FNFRGY FFFICIENT**

**VERSATEX** cellular PVC trim has an R-value that is 60% greater than a comparable wood trim.



# OUR MISSION

While many companies have recently implemented environmentally responsible strategies, sustainable activities have been a driving force behind VERSATEX since its inception in 2003. VERSATEX employees strive to be industry leaders in establishing environmentally responsible practices while remaining committed to the continuous improvement of products, processes and culture.

The VERSATEX mission is one of conscientious citizenship and constructive action in support of civic and environmental progress. We are committed to converting the company and the products we manufacture from "brown" to "green", developing innovative and practical solutions to reduce the environmental impact of our plant and products while maximizing our recycling and conservation efforts.



# REDUCING OUR CARBON FOOTPRINT





• We combine customer orders to maximize shipments.



is the amount of landfill waste we hope to generate through source reduction and recycling practices.

10% is the minimum recycled pre-consumer

cellular PVC scrap that we use.



# RESOURCE EFFICIENCY

• We provide a scrap buy back program for our OEMs, dealers, and distributors.

100%

of our office paper and cardboard is post consumer recycled content and processed chlorine free.

- We reduce consumption of water within the plant and the offices.
- Use of electronic files and reference materials is maximized and encouraged.



- PVC scrap • Cardboard Plastic Metal
- Wood scrap • End-of-life office furniture and equipment

Wood scrap is converted into mulch and all other plastics and metal by-products with all unusable PVC scrap is converted into secondary products (pipe, decking and fencing). We continue to identify more recycling opportunities.







• To the extent possible, we will purchase goods and services from local companies.



- We support local non-profit organizations, schools and the community.
- Local rehabilitation centers (such as the Beaver County Rehabilitation Center) have been utilized to produce sales and marketing tools.

- Our employees share and promote our core values.
- Our workplace fosters innovation, entrepreneurship, and creativity. We provide and promote balance, good health, and learning through continuing education.

# WHAT MAKES VERSATEX GREEN?

LEED for Homes promotes the design and construction of high-performance green homes. A green home uses less energy, water, and natural resources, creates less waste, and is healthier and more comfortable for its occupants. Benefits of a LEED home include lower energy and water bills, reduced greenhouse gas emissions, and less exposure to mold, mildew, and other indoor toxins.

The LEED for Homes Rating System measures the overall performance of a home in eight categories:

Innovation & Design 11 pts (max) Special design methods, unique regional credits, measures not currently addressed in the system and exemplary performance levels

Location & Linkages 10 pts (max) The placement of homes in socially & environmentally responsible ways in relation to the larger community

Suitability Sites 22 pts (max) The use of the entire property so as to minimize the project's impact on the site

Water Efficiency 15 pts (max) Use of water efficient practices indoors & outdoors

Energy & Atmosphere 38 pts (max) Energy efficiency particularly in the building envelope and HVAC design

Materials & Resources 16 pts (max) Efficient utilization of materials, selection of environmentally preferable materials & minimization of waste during construction

# Quality 21 pts (max)

Improvement of indoor air quality by reducing the creation & exposure to pollutants

Awareness & Education 3 pts (max)

The education of homeowners, tenants and/or building managers about the operation & maintenance of the green features of a LEED home

The LEED for Homes Rating System works by requiring a minimum level of performance through prerequisites. The level of performance is indicated by four performance tiers according to the number of points earned.

### What specific elements within each category may VERSATEX contribute to earning LEED points?

### Innovative Design 2

Durability Management Process - 3 pts (max)

Unlike wood, VERSATEX Trimboard is impervious to moisture, insect resistant, and will not rot, rust, or corrode. VERSATEX requires less maintenance than wood, wood composites, or fiber cement trims and does not require painting for protection.

### Innovative Design 3

Innovative or Regional Design - 4 pts (max)

VERSATEX Stealth exterior trim solutions protect the ends and edges of various siding products from moisture wicking, reducing the potential for mold or mildew growth.

### Materials & Resources 2

Environmentally Preferable Products - 1 pt (max) Use products that meet the LEED emissions specifications - 0.5 pts (component) Product used within 500 miles of VERSATEX manufacturing plant in Aliquippa, Pennsylvania. - 0.5 pts (component)

### Sustainable Sites 5

Nontoxic Pest Control Alternatives - 2 pts (max) Design home features to minimize the need for poisons for control of insects, rodents, and other pests. Keep all wood (i.e. siding structure) at least 12" above soil (code typically requires 8") - 0.5 pts Include no wood-to-concrete connections or separate any exterior wood-to-concrete connections with metal or plastics. - 0.5 pts (component)



# NGBS GREEN CERTIFIED

The NGBS Model Green Home Building Guidelines were written to serve as a voluntary "baseline" so that NGBS members could easily develop local green building programs. NGBS green homes incorporate environmental considerations and resource efficiency into every step of the building and development process to minimize environmental impact.

# What standard within each category can VERSATEX contribute to

Practice 601.7 - Building materials/assemblies do not require additional site applied material for finishing. Receive five points when 90% or more of the installed trim is VERSATEX. Earn two points when more than 50% but less than 90% of the installed trim is VERSATEX.

Practice 602.8 - VERSATEX qualifies as a termite resistant exterior cladding material and is eligible for two, four, or six points, depending on the degree of termite infestation probability (slight, moderate, or heavy).

Practice 605.3 - VERSATEX trim is taken from a project and recycled. If a minimum of two types of materials are recycled off-site earn three points. One point is earned for each additional recycled material.

Practice 608.1 - Material that originates, is produced, and grows naturally or occurs naturally (indigenous materials) in a region within 500 miles of the construction site. If your project falls within 500 miles of the VERSATEX plant, you qualify for two points.

Practice 609.1 - VERSATEX qualifies as a more environmentally preferable product or assembly based upon the use of life cycle assessment (LCA) practices and qualifies for three points.

- Lower operating costs due to water and energy efficiency measures
- Increased comfort due to consistent temperatures, fewer drafts, and improved humidity control
- thus producing a healthier indoor environment.
- · Longer lasting, more durable materials require fewer resources for replacement while reducing repair and maintenance costs.



• Improved environmental quality by reducing moisture in and around the home, as well as reliance on materials containing chemicals,

# HISTORIC PRESERVATION

The original craftsmanship was incredible. But the paint was peeling and the metal was rusting. After restoring this in VERSATEX PVC, the paint sticks and lasts. It will never rot, and it's not going

AFTER



he Congregational & Presbyterian Church, located in Kinsman, Ohio, is one of Trumbull County's oldest extant churches. Built in 1833, by master architect William Smith, the church features a soaring bell tower accentuated with wooden spires mounted at each of the four corners of the tower. After nearly 170 years of exposure to the elements, the structural and trim components of the wooden tower had succumbed to rot and deterioration, making the entire structure a safety concern. Most of the original detail had been lost in a 1970's renovation, when the architecture of the bell tower and spires was simplified and the trim replaced with more modern design concepts. Bill Sandrock was asked by the congregation to restore the top of the church to its original 1800's splendor. Sandrock turned to VERSATEX and the company's complete line of cellular PVC trim components.

"We do a great deal of intricate restoration work, and started using cellular PVC for exterior applications because it can be cut and shaped like wood," commented Sandrock. "We tried a couple of brands, but settled on VERSATEX because it's a denser product with fewer voids. To get to the thickness of the wood panels we were replacing, we laminated the PVC sheet to give us the needed thickness and then milled it to our specifications."

circa. 1945

The Kinsman Presbyterian Church project took over a year to organize and fund, and another year to complete. Today, the bell tower structure is completely restored to its original, historic appearance, symbolizing the beauty of early 1800's Greek Revival/ Gothic Revival architecture popular during that period of American History.



Marting Hall is part of the Baldwin Wallace South Campus Historic District. In 2012, a crew hired to repaint the massive, ornate cupola built in 1897 discovered that painting would not be enough. Its sheet-iron and wood structure had been irreparably damaged by the elements. With the original skills and materials no longer obtainable, a team of restoration experts duplicated the landmark's look using modern materials — primarily free-foam VERSATEX PVC.

Bill Sandrock of Stratton Creek Wood Works LLC in Kinsman, Ohio was the PVC fabricator and architectural millworker.

"The original craftsmanship was incredible. But the paint was peeling and the metal was rusting. After restoring this in VERSATEX PVC, the paint sticks and lasts. It will never rot, and it's not going to peel. The new paints expand and contract with the material.

"Some people shy away from PVC in the restoration business and I don't understand why. We recycle all the dust that we produce when we mill it, and we save the scraps, which all go into new product. So it's as green as can be. The factory is completely green. They have nothing that goes into a landfill."

# VERSATEX Offers AIA/CES Learning Units

# VERSATEX TRIMBOARD PLANT TOUR From Manufacturing to Fabrication and Installation



# AIA CONTINUING EDUCATION

| Provider:      | VERSATEX                   |
|----------------|----------------------------|
| Course Number: | VTX101                     |
| Program:       | PVC101 – The Benefits and  |
|                | Uses of Cellular PVC Trim  |
| Length:        | One (1) Hour               |
| Credits:       | One (1) Learning Unit Hour |
| HSW:           | Yes                        |

Earn beneficial continuing education units and become well-informed in the fastest growing trim product category in the country. Contact us and receive one learning credit in the "Health, Safety & Human Welfare" category for attending this one hour course presented by VERSATEX entitled "PVC 101: The Benefits and Uses of Cellular PVC Trim."

Upon completion of this course, architects and participants will understand:

- The different types and properties of cellular PVC in the building/construction industry
- Common cellular PVC products and their end-use applications
- A few best design practices (Beaded Ceiling, pre-fabricated corners, fabricated column wraps, window surrounds, skirting for homes, pergolas, soffit system, railing applications, fastening methods, painting PVC trim products, thermal expansion joint design) as well as where it can be used, including residential, commercial, multi-family and historic preservations

· Some of the "Green" attributes of PVC that make it an ideal exterior building product

## FACILITATOR QUALIFICATIONS

All facilitators will be VERSATEX territory representatives, distributor Product Specialists or corporate Engineers who have undergone training on CES guidelines and presentation skills. These individuals are thoroughly trained on the specific program content and receive on-going training on the product's physical and chemical characteristics, attributes, quality control performance, etc.

## METHOD OF DELIVERY

The facilitator will utilize a PowerPoint presentation to present the many benefits and uses of cellular PVC. It will be an interactive session that encourages feedback and questions.

The ideal audience size can be 5 to 20 people made up of architects, construction specifiers, designers, owners and other design professionals. The program provides a basic understanding of how cellular PVC meets the needs of professionals at every experience level.

There is no cost to the architectural firm or chapter meeting for participation in this program. American Institute of Architects Continuing Education System AIA/CES Registered Provider Program



## AIA CONTINUING FDUCATION APPROVED COURSE

| Provider:      | VERSATEX                         |
|----------------|----------------------------------|
| Course Number: | VTX102/103                       |
| Program:       | VERSATEX Plant Tour – From:      |
|                | Manufacturing to Fabrication and |
|                | Installation                     |
| Length:        | Two (2) Hours                    |
| Credits:       | Two (2) Learning Unit Hours      |
| HSW:           | Yes                              |
|                |                                  |

Upon completion of this course, architects and participants will understand:

- The composition of cellular PVC trim, including what ingredients affect weatherability and durability
- The process of component blending (micro ingredients) to form a cellular PVC trim compound
- How to extrude cellular PVC free-foam sheet and how the process differs from the "celuka" process
- "In-Line" cutting of cellular PVC free-foam sheet into boards and how to texture the boards
- Tips and techniques for fabricating free-foam cellular PVC sheet into beadboard, mouldings, pocketed trims, pocketed fascia and frieze boards, vented soffit, cornerboards, beaded sheet, and column wraps
- · Best installation practices applicable to soffit systems, beadboard, window surrounds, skirtboard, cornerboards, column wraps, and accessories
- In Plant Recycling/Energy Conservation What steps plastic manufacturers have taken to recycle as much as 99% of all processed waste, significantly reducing waste hauled to a landfill, and how extrusion lines are used to heat the plant in the winter months, minimizing the use of natural gas



## METHOD OF DELIVERY

The facilitator will take the audience on a tour of a PVC blending operation, sheet extrusion plant, cellular PVC fabrication operation and finally to an installation station. All attendees will leave with an understanding of how to blend, extrude, fabricate and install cellular PVC trim and what manufacturers are doing to protect the environment. It will be an interactive session that encourages feedback and questions. VTX102 is delivered on-site at VERSATEX's Aliquippa facility, and VTX103 makes use of a video tour for remote delivery.

### AUDIO/VISUAL REQUIRED

This is a walking tour conducted at the VERSATEX manufacturing plant. Visual aids will be in the form of a PowerPoint presentation and process observations in the facility. Audio aids will be provided for the plant tour.

This course is appropriate for architects, construction specifiers, designers, owners and other design professionals. The ideal audience size should be 10 to 15 people. The program provides an in-depth understanding of how to produce, extrude, fabricate, and install cellular PVC trim that meets the needs of professionals at every experience level.

## COST TO PARTICIPATE

There is no cost to the architectural firm or chapter meeting for participation in this program.

American Institute of Architects Continuing Education System AIA/CES Registered Provider Program



# WHY SPEC VERSATEX?

Let us show you how VERSATEX beats the others.

# BETTER SELECTION

## MOST EXTENSIVE OFFERINGS IN:

- VERSATEXURAL, <u>our custom millwork option</u> for custom mouldings, louvers, brackets, railing systems, and more (available via versatexural.com).
- Trimboard and Sheet sizes
- VERSATEX 2X MAX, a revolutionary 1 1/2" Trimboard and Sheet
- T&G Beaded profiles (including WP4)
- Stealth Trim System, including Window Surrounds, Corners, T&G Beaded profiles, Skirtboard (a VERSATEX creation)
- Complete Soffit System, including Vented and Solid Soffit, with Notched Fascia and Frieze Board. (Only manufacturer with a complete vented system)
- VERSAWRAP, one- and four-piece column wraps with accessory pieces
- Mouldings (an extensive line of over 30 different profiles)
- PVC Biscuits, created specifically for joining VERSATEX Trimboards together

# BETTER OPTIONS

- Eliminate waste on the job site with the VERSATEX cut-to-length program, which makes it easier for our customers to order what they need to the inch in UNIT quantities at no extra cost.
- We created the Mixed Nuts program, one of the industry's only factory-built blended units of different board widths at any one thickness and length. Priced the same as a full unit, Mixed Nuts reduce inventories by offering up to eight different sizes of boards in one neat factory-sealed unit. Over 1,000 different Mixed Nut combinations are available.

# BETTER PAINT ADHESION

• VERSATEX features the lowest gloss of any free-foamed PVC trim. The result is a 5A/4A adhesion rating when tested in accordance with ASTM D 3359 and a 25-year warranty from major paint manufacturers. (PPG, Sherwin-Williams, Blue River Coatings)

CCRR-0149



# BETTER TOOLS

• A free library of BIM (Building Information Modeling) objects can be freely downloaded and customized from the ARCAT website.

# BETTER WARRANTY

• VERSATEX features a lifetime warranty that is fully transferable.

## BETTER FOR THE ENVIRONMENT

 Our products are NGBS Green Certified by Home Innovation Research Labs. In total, 99% of all processed waste that goes through our company is recycled. Our products and company actions provide available LEED points on commercial projects.

ARCAT®

# the SKY IS THE

# BETTER TOLERANCES

- VERSATEX features thickness tolerances of half the industry standard (+/- 1/32" vs. +/- 1/16")
- Our <sup>5</sup>/4" product is between .98 1.02 when competition sells at .92 – .94 and publishes <sup>15</sup>/16" (.9375)

## MORE ACCOUNTABLE

 Our products are third-party tested and the plant is third-party audited for national code listing, granted by Intertek of York, PA (CCRR-0149)

## FDA FOOD CONTACT COMPLIANCE

• Our products are third-party tested and the plant is third-party audited for national code listing, granted by Intertek of York, PA (CCRR-0149)





# SEASHORE HOME BUILDERS, STONE HARBOR, NJ

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A product of VERSATEX Building Products, LLC 400 Steel Street Aliquippa, PA 15001





TRIM **SMARTER**.

724.857.1111 I versatex.com