



MIRATEC[®]

Treated Exterior Composite TRIM

***Offers Superior Performance
at a Better Value***

Company Background

- CMI manufactures and markets three diverse, yet complementary product lines:

MIRATEC[®]
Treated Exterior Composite TRIM

EXTIRA[®]
TREATED EXTERIOR PANEL

 **CraftMaster**[®]
INTERIOR DOORS

-
- CMI was created in 2002 and is headquartered in Chicago, IL.
 - Long history:
 - Producing CraftMaster door facings since 1974 at the Towanda mill
 - Created the technology which produces MiraTEC at the Towanda mill
 - CMI operates 4 door plants in the U.S. and has a position in a door facing mill in Dunhua, China.
 - CMI is owned by a partnership between the principals of two major millwork companies: T.M. Cobb and Woodgrain Millwork.



MiraTEC Trim has been made in Towanda, Pennsylvania since 1999

- MiraTEC Trim is made from the TEC™ process: **T**reated **E**xterior **C**omposite manufacturing process.
- Manufacturing process is patented and proprietary to CMI.
- More than \$300 million has been invested in the Towanda mill since it opened in 1968.
- Towanda mill covers 237 acres, with 17.5 acres under roof in Northeastern Pennsylvania.



TEC™ Manufacturing Process was created specifically to make trim

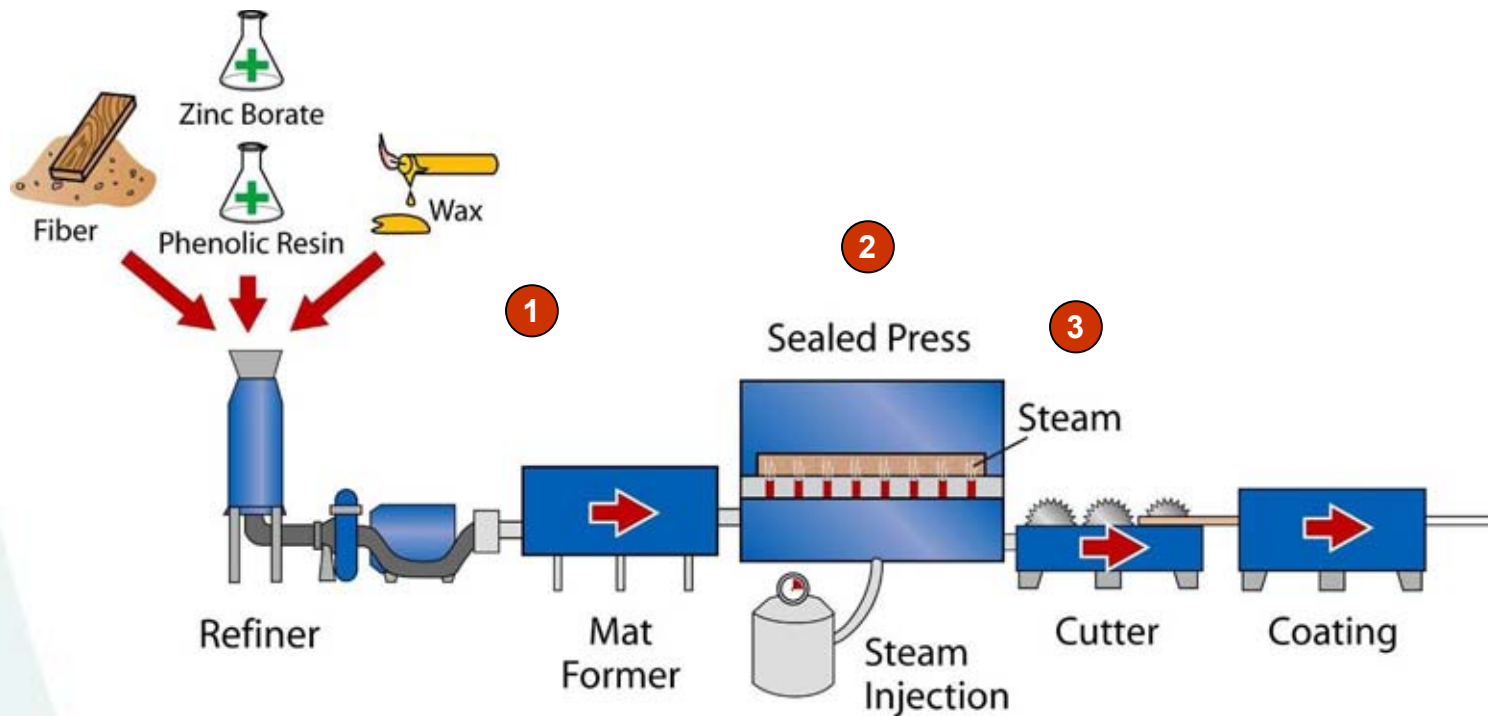
Key Ingredients

1. **Wood fiber**: 100% northern hardwoods which includes maple, beech, oak, cherry and other species. All wood comes from an area within a 200 mile radius of the Towanda, PA production facility and no old growth wood is used.
2. **Zinc borate**: EPA-registered biocide and a naturally occurring earth chemical that is environmentally safe and ensures protection against termites.
3. **Phenolic resins**: Durable, heat and moisture resistant resins that create moisture resistant bonds within the board. There is no added urea formaldehyde; any emissions for the process or the product itself are the same as background levels found naturally in the environment.
4. **Wax**: For moisture resistance.
5. **And other proprietary ingredients.**



The TEC™ Manufacturing Process

creates moisture, rot and termite resistant MiraTEC trim



TEC™ Manufacturing Process

- 1 Ingredients are combined and formed into a thick fiber mat.
- 2 Fiber mat is loaded into the sealed cavity press.
- 3 Steam is injected into the fiber mat; steam escapes the mat evenly from the center to the periphery of the board.

MiraTEC has a broad product offering

- Thicknesses:** 5/4 and 4/4
- Widths:** 3", 4", 5", 6", 8", 10", 12" and 16" and 2" batten
- Length:** 16'
- Surface:** Reversible: clear cedar wood grain texture on one side, smooth on the other.



Cut inventory SKUs in HALF by stocking MiraTEC

How MiraTEC stacks up to the competition:

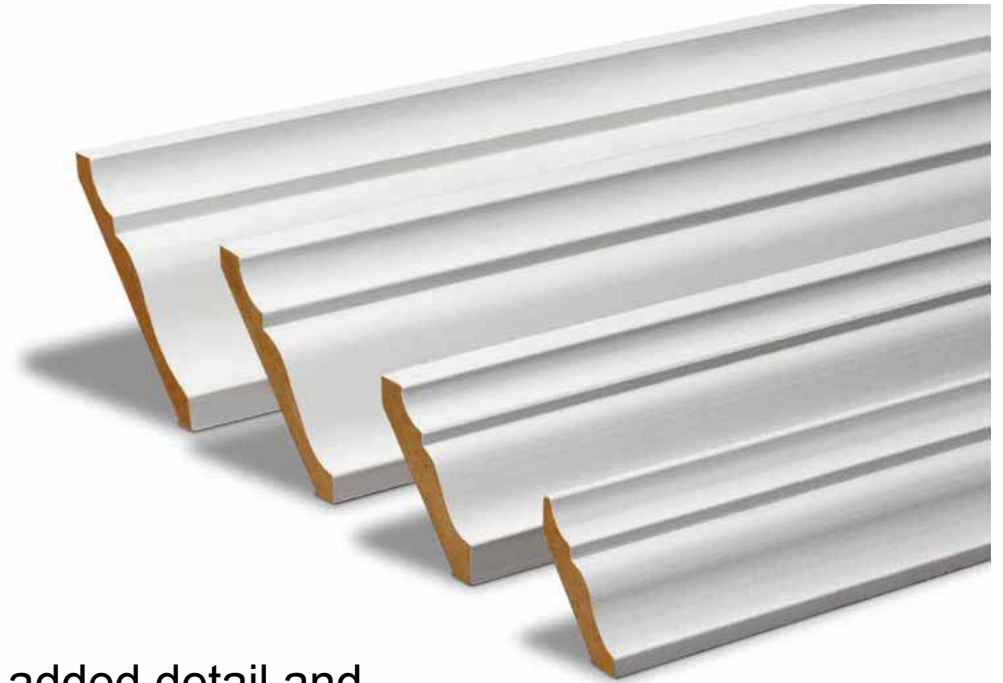
Product	MIRA [®] TEC	Fiber Cement	PVC	OSB	Hardboard	Wood
Surface (Smooth/Textured)	Reversible ³	Smooth and Textured (Double SKUs)	Varies by Manufacturer	Textured	Reversible ³	Varies by species
Coating	Factory Primed 4 sides	Factory Primed 3 sides	None Required	Factory Primed 3 sides	Factory Primed 4 sides	Primed and Unprimed
Length	16'	10' - 12'	8' - 20'	16'	12-16'	Varies

³ Reversible; smooth surface one side and textured on the other
⁴ All widths nominal



New for 2011:

MIRATEC[®]
Treated Exterior Composite
MOULDINGS



- MiraTEC Mouldings provide added detail and dimension for exterior applications.
- Easier to work with than fiber cement and a better value than PVC.
- Smooth surface accepts all shades of paint beautifully.
- Same great features as MiraTEC trim.



MiraTEC offers a 50-year warranty



- Warranty covers excessive edge swelling and hail damage.
- Transferable to two owners of the structure and does not require registration with CMI to be effective.
- 50-year warranty based on long term testing and competitive third party tests.
- MiraTEC has the BEST warranty in the category - no fiber cement, hardboard (fiber substrate), OSB (strand substrate) or PVC trim product offers this level of coverage.

Product	MIRATEC [®]	Fiber Cement	PVC	OSB	Hardboard	Wood
Warranty	50 years	15-25 Years	25 Year - Lifetime ¹	50 years ²	10 - 50 years ²	None

- LP SmartSide Fiber (Hardboard), LP SmartSide Strand (OSB) and TruWood warranties do not protect against hail damage and edge swell. TruWood warranty also does not protect against rot.
- LP requires the homeowner to register the warranty for it to be in effect.
- Most fiber cement trim is covered by a 15-year warranty.
- Wood trim carries no warranty.



¹ Lifetime Warranty for first owner only.

² Hail, Terminate damage and edge swell are excluded from LP warranties.



MiraTEC is not an MDF or Hardboard product

MDF and Hardboard Manufacturing Process

- Wood fibers + resins* are combined to form a mat.
- The mat is bonded in an open press, using hot platens, much like a waffle iron.
- Heat is pressed (transferred) into the board from the exterior surfaces, often “overcooking” the exterior surfaces and leading to an uneven density profile.



For Hardboard Specifically:

- Hardboard trim is laminated together into trim thickness outside of the press, prior to cutting.
- Process was created for the manufacture of exterior siding.

Wood + Urea Formaldehyde Resin



Hot Platens

CONVENTIONAL TWO PLATEN PRESS

MDF/Hardboard



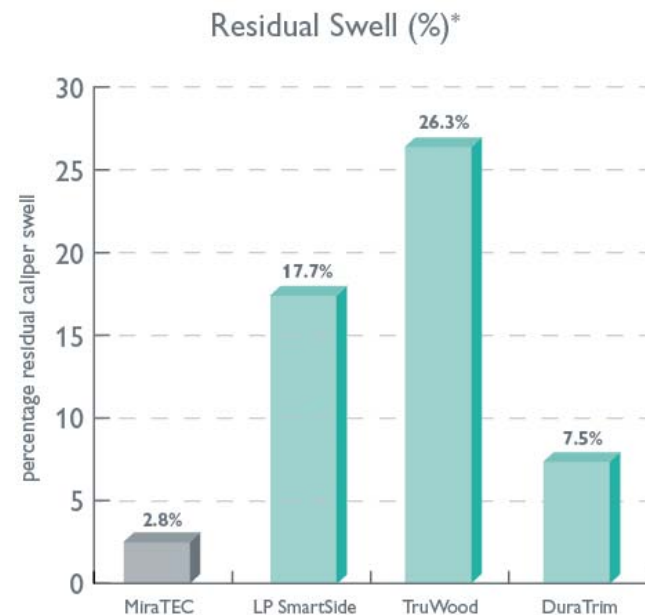
*Urea formaldehyde resins are typically used to make MDF

Drawbacks of Hardboard trim

Hardboard Trim Brands: LP SmartSide Fiber (Hardboard), TruWood Trim by Collins and DuraTrim by Stimson Lumber Co.

- May delaminate. LP SmartSide Fiber (Hardboard) and Truwood are laminated in all thicknesses.
- Manufacturing process may create a product with variable density.
- Poor performance history; significant issues with edge swell and rot.
- Less authentic wood grain texture.
- Warranty excludes hail, termite damage and edge swell.

MiraTEC trim performs up to 9 times better in Weatherability Testing



*All samples tested were 4/4

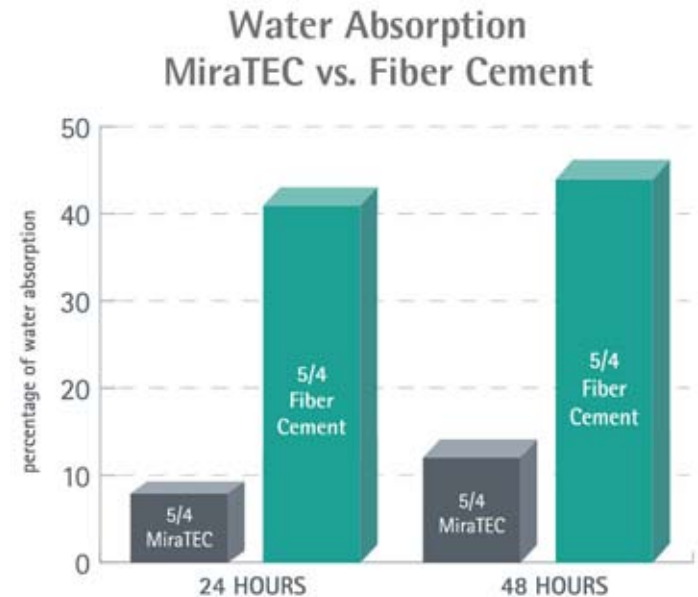
Weatherability Testing is designed to evaluate a product's ability to withstand exposure to the exterior environment over time. It is measured in the swell in thickness of a trim product after it is submitted to an aggressive cycle of soaking, heating and freezing to mimic rain, heat, dryness, cold and freezing conditions. Trim is measured before and after the test. The percentage of thickness swell signals how much water has been absorbed and retained by the product. The greater the percentage increase in total product thickness, the lower the product's resistance is to weather. A product with higher thickness swell has compromised long term performance and is likely to exhibit poor aesthetic properties over time.

Drawbacks of Fiber Cement trim

Fiber Cement Trim Brands: Plycem, CertainTeed and HardieTrim.

- Costs up to 30% more than MiraTEC.
- Cutting fiber cement releases silica, which is a known carcinogen.
- Difficult to nail and requires special tools and handling.
- Brittle and difficult to stack, resulting in yield loss.
- Less authentic wood grain texture.
- Not reversible.
- May absorb moisture that will cause sheathing or structural areas to rot.

Independent tests show Fiber Cement trim absorbs over 5 times more water



Source: Stock Twin City Testing Corp., St. Paul, MN, June 2006. Tested per ASTM 1037-96a and ASTM C121-90.

Drawbacks of PVC trim

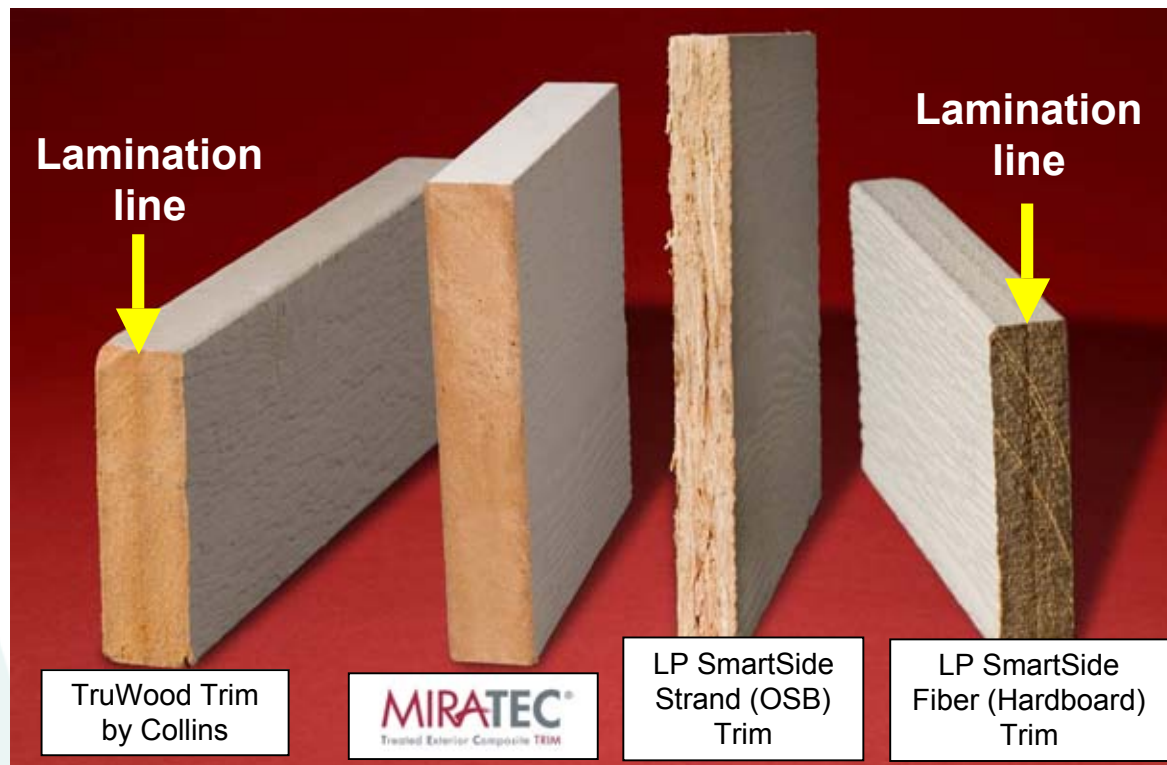
PVC Trim Brands: AZEK, Versatex, Koma, Klear, Plasticlad, XO, Synboard and many others

- Costs up to 50% more than MiraTEC.
- Manufacturing process may create a product with variable density.
- Generally has issues accepting darker shades of paint.
- Special tools are needed to work with the product.
- Cut edges are porous and attract dust and dirt that is difficult to remove.
- Prone to thermal expansion.
- Environmental concerns: not biodegradable and made from unsustainable oil-derived natural resources.
- Less authentic wood grain texture.



MiraTEC is one solid piece so can't delaminate

- Cuts consistently due to uniform product density.
- Won't split, check, crack or warp.



→ ***MiraTEC is not made from gluing two finished pieces of material together like hardboard trim.***

MiraTEC can be machined

- Versatile
- Handles like wood; so it's easier to cut and nail.
- Does not require special tools.
- Competitive products, such as LP SmartSide Fiber (Hardboard), cannot be machined – **because they are laminated!**
- Cutting fiber cement releases silica dust, a known carcinogen.

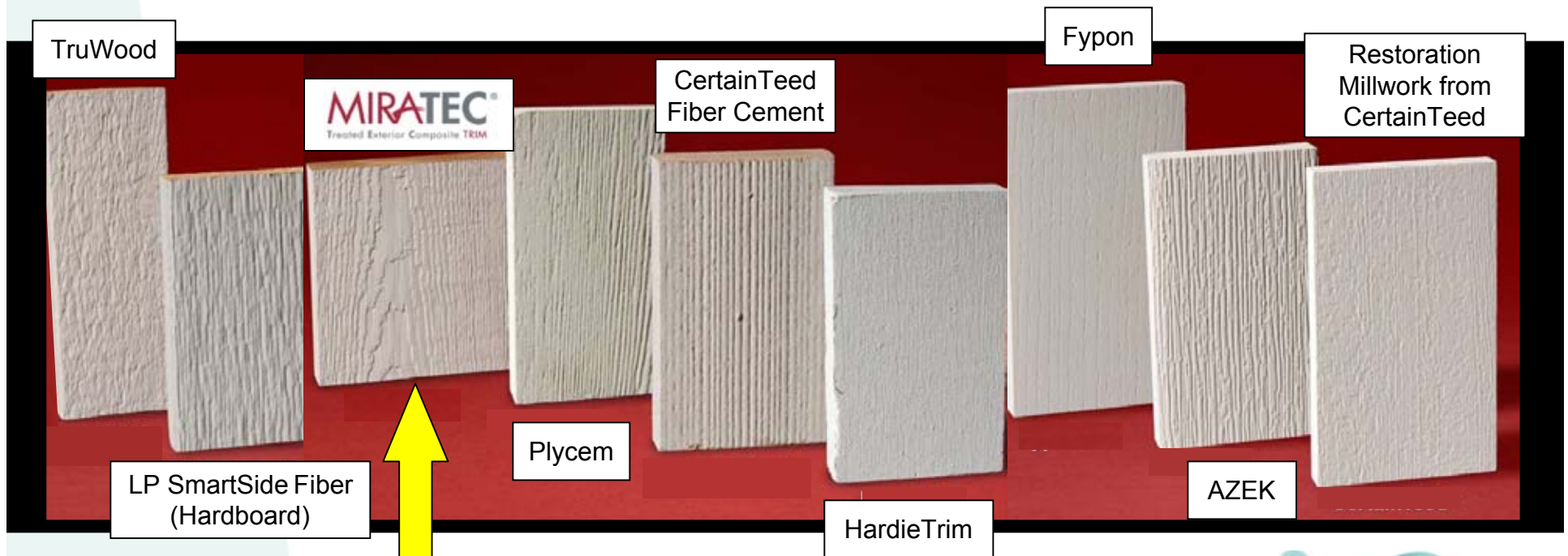


MiraTEC trim machines beautifully into this decorative porch post.



MiraTEC has an authentic wood grain texture

- Has a more authentic texture than hardboard, fiber cement and PVC trim.



MiraTEC most closely replicates the authentic grain of wood.

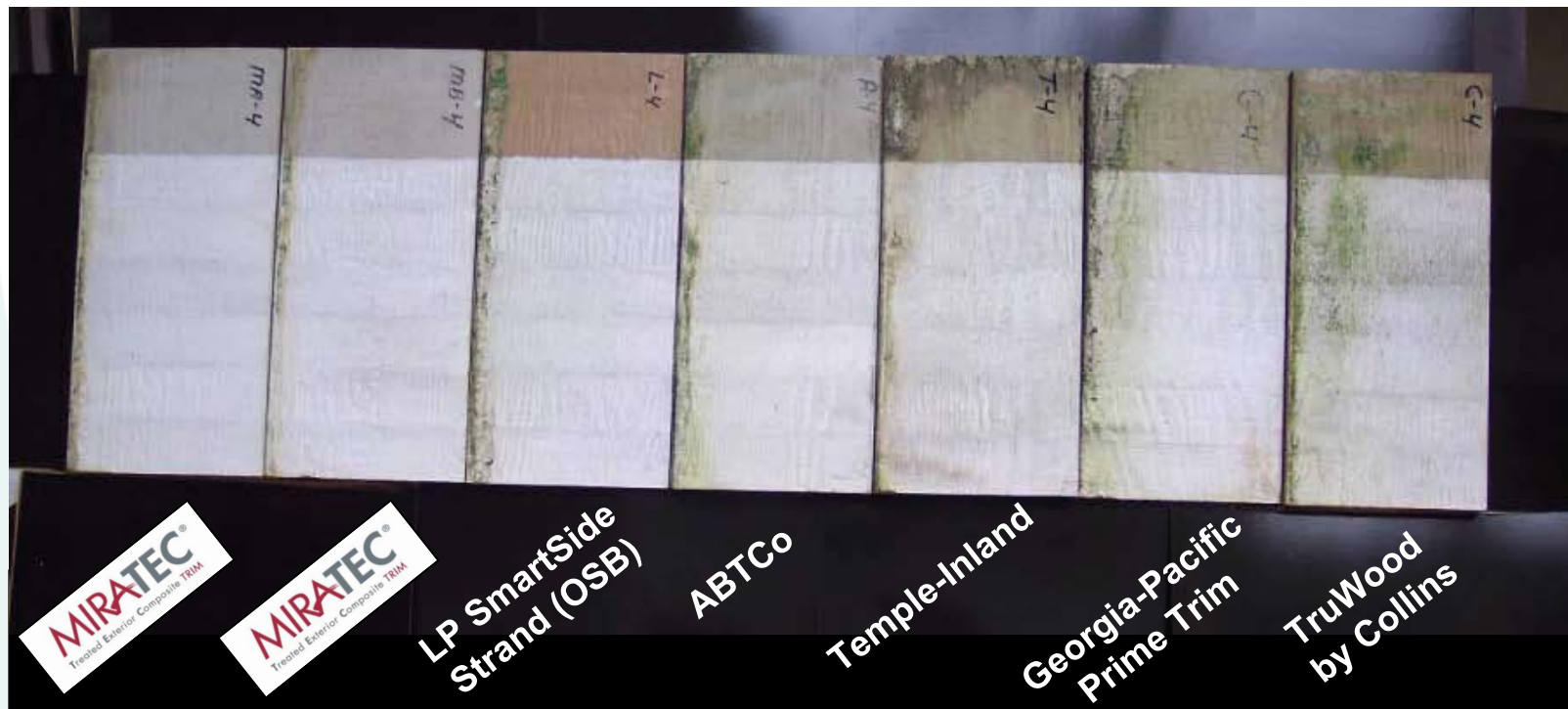


MiraTEC is a green trim product

- Made from sustainable materials.
 - Sourced from 100% northern hardwoods, including maple, beech, oak, cherry and other species obtained within a 200 mile radius of the Towanda, PA production facility.
 - No old growth wood is used.
- Contains no added urea formaldehyde.
 - Emission levels of formaldehyde from MiraTEC are equivalent to safe, background levels found in the environment.
- A low VOC primer is used to coat the product.
 - Conventional primers and sealers may contain high levels of VOCs that diminish air quality.
- In contrast:
 - Cutting fiber cement releases silica dust, a known carcinogen. It also requires special tools which has an impact on the environment.
 - PVC is made from plastic, a non-biodegradable material that is not a renewable resource. PVC cannot contribute to green programs other than locally available materials.



MiraTEC resists mold and mildew – better than the competition



- The samples shown above were installed on a test fence in southern Florida in 2003 and monitored on a monthly basis for 22 months, ending in 2005.
- The photograph illustrates the amount of mold and mildew buildup
- CMI conducted test on several trim products related to mold and mildew resistance. MiraTEC trim showed the greatest amount of resistance, in both primed and painted samples.



MiraTEC is factory primed with a low VOC primer containing a mildewcide

- Primed on 4 sides.
- Accepts paint beautifully.
 - Some PVC trim cannot be painted darker shades of paint and is prone to thermal expansion.
- 5-year primer warranty.



MiraTEC has a Class C fire rating

- ✓ Flame spread 120.
- ✓ Smoke developed 95.



Certified by the Underwriters Laboratories (UL)

- UL is an independent product safety certification organization that has been testing products and writing standards for safety for more than a century.
- Its sole purpose and function is to test for public safety.



MiraTEC is compatible with any siding system



MiraTEC trim is shown here on a house in Ohio.



MiraTEC trim compliments the look of this home in southern Florida.



Applications with MiraTEC Trim



Use MiraTEC to trim windows of any size and shape.



Applications with MiraTEC Trim



MiraTEC trim provides a finished look which adds to the curb appeal of these homes.



MiraTEC is the Best Choice



- **Proven performance:**
 - Resists moisture, rot and termites.
 - Competitive testing shows superior long term performance
- **Reversible product** with authentic wood grain texture or smooth finish.
- **Industry-best 50-year warranty** – the most comprehensive in the categor.
- **Superior value:** Costs 50% less than PVC and 30% less than fiber cement.
- **Green product** made from sustainable materials.



Addendum



MIRATEC TRIM IS THE BEST TRIM OPTION

Product	MIRATEC®	Fiber Cement	PVC	OSB	Hardboard	Wood
Price	\$\$	\$\$\$	\$\$\$\$	\$\$	\$\$	Variable by species
Material	Treated Exterior Composite	Fiber Cement	Cellular PVC	Oriented Strand Board	Hardboard	Redwood, Cedar, Spruce, Fir or Pine
Construction	Single Piece Uniform Density Treated Wood Fiber	Single Piece Portland Cement, Sand, Cellulose Fiber	Single Piece Foamed PVC	Single Piece Laminated Wood Strands	Two Pieces Laminated Wood Fiber	Variable Density
Treatment	Zinc Borate	None	None	SmartGuard™	Varies by manufacturer	None
Warranty	50 years	15-25 Years	25 Year - Lifetime ¹	50 years ²	10 - 50 years ²	None
Surface (Smooth/Textured)	Reversible ³	Smooth and Textured (Double SKUs)	Varies by Manufacturer	Textured	Reversible ³	Varies by species
Coating	Factory Primed 4 sides	Factory Primed 3 sides	None Required	Factory Primed 3 sides	Factory Primed 4 sides	Primed and Unprimed
Length	16'	10' - 12'	8' - 20'	16'	12-16'	Varies
Widths ⁴	2", 3", 4", 5", 6", 8", 10", 12", 16"	2", 3", 4", 5", 6", 8", 10", 12", 16"	2", 3", 4", 5", 6", 8", 10", 12", 16"	2", 3", 4", 6", 8", 10", 12"	2", 3", 4", 5", 6", 8", 10", 12", 16", 24"	Varies
Green	MiraTEC trim is made from sustainable materials, is certified to have no added urea formaldehyde, and offers a low VOC primer with a mildewcide. Cutting fiber cement releases silica dust, which is a known carcinogen. PVC trim is made from plastic and is not environmentally friendly.					

¹ Lifetime Warranty for first owner only

² Hail, termite damage and edge swell are excluded from LP warranties

³ Reversible; smooth surface one side and textured on the other

⁴ All widths nominal

Removing mold and mildew from MiraTEC

Mold and mildew on MiraTEC trim is generally related to dirt and moisture on the surface resulting from improper storage.

REMOVAL

Several commercially available products for removal of mold and mildew work well. These include SCRUB FREE® Mildew Stain Remover and Tilex® Mold and Mildew Remover.

A homemade cleaning solution also works well:

- Mix 3 quarts warm water and 1 cup Trisodium Phosphate (TSP)
- Add 1 quart bleach

Trisodium Phosphate is a safe chemical compound that has been used in dish detergents. It can be found at your local hardware store.

After exposure to either mold or mildew, clean MiraTEC trim as soon as possible. The textured side of MiraTEC trim may require hard scrubbing if the mold or mildew has been on the surface for a long period of time.



Painting and finishing requirements

MiraTEC trim is manufactured from wood and must be painted with an exterior coating system in accordance with the following specifications to fulfill the warranty requirements.

Use a high quality exterior grade acrylic latex paint or oil/alkyd solvent based paint system recommended by the paint manufacturer for application over composite wood substrates. Always follow the paint manufacturer's recommendations for the application and maintenance of field applied paints.

The following topcoats **ARE NOT** recommended by CMI or most paint manufacturers because of short service life, poor protection against UV light, and higher potential for performance problems:

Shake and shingle paints
Flat oil paint
Vinyl acetate co-polymer paint
Transparent or semi-transparent stains

Vinyl acrylic paint
Vinyl acetate paint
Clear coatings
Opaque solvent stains



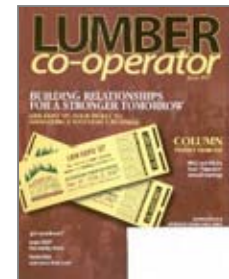
Paint application

1. Prime all exposed field-cut edges of MiraTEC trim and also topcoat those edges which will be exposed to the weather. Use a high quality exterior primer formulated for use on composite wood. All cut or raw edges should be primed within 30 days of installation.
2. Coat all exposed surfaces including the bottom edge.
3. Finish MiraTEC trim with two coats of paint within 90 days of installation. If, due to unforeseen circumstances, the material is not painted within 90 days, reprime the MiraTEC trim using an exterior primer that is specifically recommended for use on composite wood products and is compatible with the topcoat to be used. Use the same primer for repair of any damage to the original factory-applied primer.
4. A total field-applied dry film paint thickness of a minimum of 2½ mils is required on MiraTEC trim. This requires the application of two or more unthinned coats of paint at the spread rate recommended by the paint manufacturer. **Note:** The paint manufacturer may require a primer and topcoat combination. Follow all paint manufacturers' recommendations.
5. Paint performance can be impacted by ambient temperature and the time of day the paint is applied. Contact the paint manufacturer for specific instructions on applying the coating for maximum results. Most companies can be contacted via a toll free number or website for specific information. Consult your retail store for information.

CMi is not responsible for the performance of field applied finishes. Finish performance is dependent upon coating quality and application methods. These factors are controlled by the finish manufacturer and applicator.



MiraTEC Trim features extensive advertising to key target markets



- Media reaches dealers, builders, remodelers, architects and specifiers.
- National and regional print media.
- Reaches an audience of more than 7.8 million people.
- Public relations efforts focus on same audience.



CMI generates awareness among architects

Professional Team of Salespeople for support:

- CMI contracts with architect/engineer rep firms who call on architects and specifiers throughout the U.S. on the behalf of MiraTEC; leads are shared with customers.

Architect marketing tools:

- Architect Binder – hard copy and online versions.
- CSI Guide Specification.
- Product samples.



CMI offers a full range of marketing materials and programs



MiraTEC Samples: 6" X 6"



MiraTEC Banner



MiraTEC Counter Display



MiraTEC Wall Display



MiraTEC DVD



MiraTEC Full Line Display



Product Literature



CMI proudly participates and shares leadership in key industry associations



SFI
Sustainable
Forestry
Initiative



American
Wood
Protection
Association



National American
Wholesale
Lumber Association



Experienced, involved management team



Bob Merrill
President & CEO



Paul Manchester
Chief Financial Officer



Matt Hood
VP & General Manager
Door Division



Peggie Bolan
VP of Sales and Marketing



Steve Fancher
Managing Director - International



Matthew Ameigh
Plant Manager, Towanda Facility



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