

SUSTAINABLE SOLUTIONS

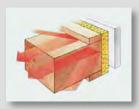






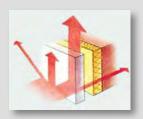


## **Rain Screen Cladding**



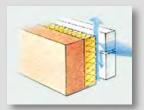
#### **Preventing thermal bridges**

As the insulating material is on the outside of the structural wall, it can easily be mounted without interruptions caused by floor slabs. In this way, any thermal bridges that occur at each floor slab can be prevented. These thermal bridges are also the cause of surface condensation that may result in fungus growth.



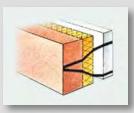
#### Dissipating heat from the sun

The ventilated rainscreen cladding system has a cooling effect when temperatures outside are high. Most of the sun's rays are reflected away from the building. Heat passing through the exterior wall panel is partially dissipated by the ventilating effect of the space between the exterior cladding panel and the structural wall. Any residual heat managing to penetrate buildings is very minor.



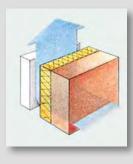
#### Rainscreen

Architectural wall-cladding panels act as a rainscreen on the outside of the building and keep the structural wall absolutely dry. The air space connected to the outside air evacuates water and humidity that might have penetrated behind the wall-cladding panels through its horizontal or vertical joints. This water will never reach the load bearing wall and/or the thermal insulation.



## Protecting the basic structure and load-bearing wall against temperature variations

In view of the fact that the insulation material is applied to the outside of the building, changes in temperature are very minor compared with those found in conventional constructions where insulation is applied on the interior. This principle works in summer and winter in both hot and cold climates.



#### **Prevention of internal condensation**

Insulation material can be applied to the outside of the structural wall because it is protected effectively by the architectural exterior wall panel. Because of differences in vapor pressure and temperature passing through the wall, condensation has been shown to occur close to the ventilated area and not in the structural wall itself. As a result, the ventilating effect is easily sufficient to dry out the thermal insulating material.







### **afc** *cladding* Panels

#### Fiber Cement — **Distinct Properties**

**Sound and Weather Resistant** — Cembrit fiber cement boards deliver optimal sound and weather insulation. Noise as well as changing weather conditions such as freeze/thaw, heat and water pose no threat to fiber cement façades. The boards retain their shape at all times.

**Low Maintenance** — The ability of the boards to resist mold and algae attacks is equally impressive. The result is a long-lived façade that saves you time and effort on inconvenient and costly repairs and repaints.

**Non-combustible** — The boards are non-combustible, which is your guarantee for a safe building.

**Easy Handling** — Cembrit fiber cement boards are flexible and easy to handle. They can be delivered cut to size, ready for installation. All this makes for lower construction costs, shorter construction times, and lower installed costs.

#### Fiber Cement — A Unique Composition

**Natural Ingredients** — With the strong composition of cement, mineral fillers, cellulose and non-toxic, organic fibers — and not to forget a dash of water — Cembrit fiber cement boards are made up of purely natural and environmentally friendly raw materials. This makes for sustainable and fully reusable boards.

**Strong Recipe** — The secret behind the impressive strength and durability of Cembrit fiber cement boards resides in the manufacturing technology. Thin layers of fiber cement are added on top of each other, pressed firmly together under tremendous pressure before completing a slow air curing process. Reinforced by carefully selected fibers, the many thin layers give the fiber cement cladding a strength with few peers in the world of building materials.

**Green Footprints** — The Cembrit boards carry the IBU seal — a sign of green footprints from cradle to site. The seal is a result of an Environmental Product Declaration (EPD) conducted by the Institute Construction and Environment.

The EPD is a green report that describes the environmental impact of the building product. The report is intended to foster sustainable development of environmental and health friendly compatible construction.

The full EPD is available online.

## afc cladding

#### **Product Sustainability**

AFC Cladding is committed to providing the highest quality high density compressed fiber cement panels to the U.S. building markets. In order to do this, we feel it necessary to provide not only high quality products, but sustainable products that can contribute to green (LEED) building projects, which in turn benefit the environment we all live in.

AFC Cladding products currently have a potential contribution in seven (7) areas¹ of LEED credits across multiple LEED rating systems, and have several sustainability attributes in addition to those recognized by LEED rating systems.¹ One of the most important sustainable attributes is the durability of AFC Cladding panels. With their long lifespan, virtually requiring no refurbishment, AFC Cladding panels can contribute to less replacement of materials and to drastically lower maintenance costs over the useful life of the building.

The recommended Ventilated and Insulated Rain Screen Cladding (VIRSC) system, which is used to affix AFC Cladding panels to the exterior of a structure, offers many benefits and green attributes to the performance of the building envelope. Durability and resistance to moisture and mold build-up are noteworthy benefits. Equally important is its ability to accommodate external insulation, which addresses the issues of thermal bridging.¹ These attributes are just a few of the many that have a potential contribution to LEED credits.²

In addition, AFC Cladding is dedicated to further research and analysis of our products to achieve additional LEED credits, and help further the cause of building sustainable and efficient buildings.

#### YRG Sustainability —

Green Product Assessment for American Fiber Cement Corporation

2 Additional credit available for post consumer recycled content in certain markets.

Warranty information available upon request.

Distributed exclusively by:



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## Cembrit Patina

(formerly Cembrit Cembonit)

Cembrit Patina has a natural, textured surface. You can see the fiber and natural characteristics of the raw materials, and you can see and feel the sanding lines on the surface. As the seasons change and the years pass, the natural aging of the fiber cement leaves subtle traces on the surface, and the façade will gradually acquire a distinctive patina.



P 050 922 Graphite



P 070 921 Flint

Grays

**Blacks** 

Whites







P 313 915 Tufa



P 323 941 Magma



P 343 942 Ruby

Reds

Yellows



P 545 911 Sand

P 626

4



P 565 935 Amber



**Blues** 

Greens

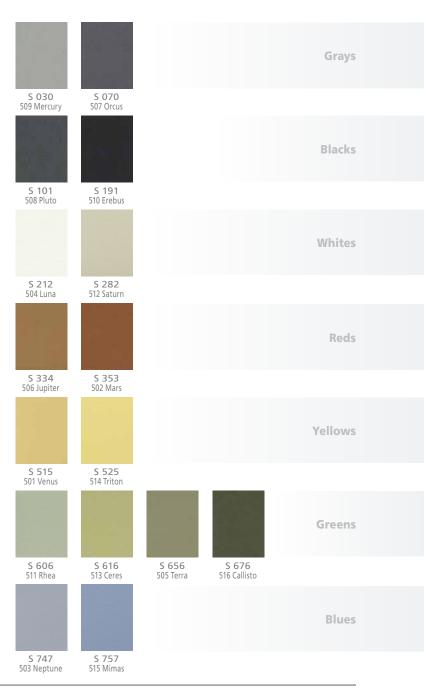
Printed in USA



## Cembrit Solid

(formerly Cembrit Zenit)

The special thing about
Cembrit Solid boards
is that they're the
same color all the way
through. Each core color
is matched with a full-coverage
painted surface in vibrant yet resilient colors. This means
if you choose Cembrit Solid boards to provide a façade
with a particular color, every board will feature that
color on every surface and edge, and with the same
color on the edges of any cut-outs or drilled holes.



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## Cembrit Cover

(formerly Cembrit Metro)

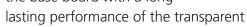
Cembrit Cover is the ideal solution if you prefer the strongest colors and bolder design statements. The natural gray fiber-cement core is completely covered by a layer of water-based acrylic paint, with 26 standard Colors and more than 2,000 NCS® colors to choose from.



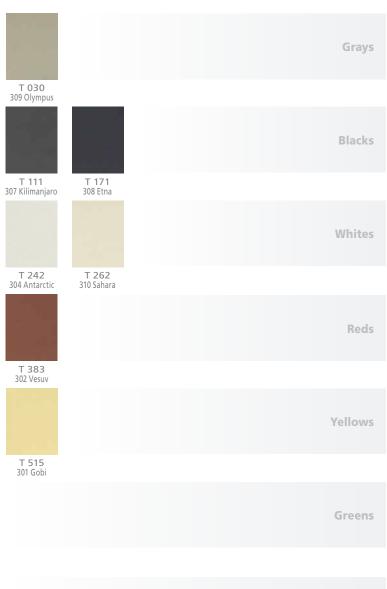


# Cembrit **Transparent** (formerly Cembrit True)

Cembrit Transparent façade boards combine the textured nuances and natural characteristics of the base board with a long-



top coat. The color added to the fiber cement reveals and highlights the fibers and other raw materials that provide its strength and character. The extremely durable transparent coating then protects the board and ensures a smooth surface with a long service life.



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**Blues** 

## Minerit **HD** (Raw)

Minerit HD is an uncoated fiber cement board that allows the authentic appearance of the fiber cement to stand out. In application, Minerit HD is a building board that can be installed for cladding purposes when a natural expression is desired. Minerit HD is an unpigmented material, and variations may occur in the individual boards and from board to board, adding a lively expression to your façade.



RAW

Minerit HD combines value with the unique properties of fiber cement that make the board resistant to extreme weather conditions as well as mold and algae. The uncoated board is virtually maintenance-free no surface treatment required. However, if you wish to add a colorful expression to your façade, it can be painted on-site with acrylic paint systems or transparent stains suitable for cement-based materials (specific instructions for painting/staining are available).

## Technical **Properties & Dimensions**

Cover, Patina, Transparent & Solid								
	<b>U.S. Trim</b> r in. (r	Weight (lbs/ft²)						
Thickness	8 m	8 mm						
Width	48 (1	3.2						
Length	96 (2,440)	120 (3,050)						

Minerit HD												
	Trimmed sizes — in. nominal (mm)				Weight (lbs/ft²)							
Thickness	3.2 mm, 4 mm, 6 mm or 8 mm		10 mm	3.2 mm	4mm	6mm	8mm	10 mm				
Width	48 (1,220)	48 (1,220)	48 (1,220)	1.2	1.5	2.2	3.0	3.7				
Length	96 (2,440)	120 (3,050)	96 (2,440)									

Color Charts: The color charts give an impression of the available colors. Reproduction of the exact color is restricted by the printing process. For an exact color match, samples are available upon request.