

# Decision time: CERACLAD vs Low Budget Fibre Cement



**CERACLAD**  
Rain Screen Exterior Siding System

## Comparing the CERACLAD System to typical Fiber Cement Siding



FACADE SYSTEMS INC.

Thickness

Surface Durability and maintenance

UV resistance

Simple install designed in

Single source for all parts

Subframing

Custom Colours

City approvals

	Low Budget Panels	CERACLAD
Thickness	11mm	16mm
Surface Durability and maintenance	Paint?	Ceramic Coating
UV resistance	<10 year fading	>30 year little to now change
Simple install designed in	Ship lap, Reveal no	Complete system
Single source for all parts	No	Yes
Subframing	required	not required
Custom Colours	No	Yes
City approvals	Resistance	Acceptance

# WHY CERACLAD – SUMMARY OF PERFORMANCE BENEFITS

When comparing CERACLAD to Hardie fiber cement, benefits are achieved throughout the building lifecycle.

## DESIGN BENEFITS

- Multitude of texture options
- Easily complies with Design Review Standards
- Available in standard factory finished colors or can choose custom color that is factory finished
- All supporting technical information is instantly available on the web
- Local technical support eliminates RFI's and ensures proper detailing
- Architectural Support, Sales and Technical Support are specialized eliminating conflicts of interest
- Product samples are kept at the USA Headquarters located in Redmond WA for fast delivery
- Proven performance in the local market with millions of square feet of local reference points

## INSTALLATION BENEFITS

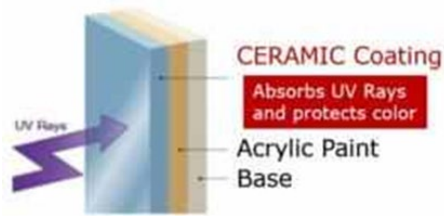
- Factory finish means installation is done in a single stage
- Scaffolding comes down often as much as 3 weeks sooner
- Can be installed in any weather
- Consistent quality of factory finish eliminates the need for onsite QA of finished color
- Clean-up and staging is much simpler
- No taping or protection of finished elements is required
- No liability for paint overspray
- No sub-framing required
- Entire system comes in a single job pack from the manufacturer which means sole source responsibility and ensures all components are compatible
- Installation of the air gap is always precise and out of plumb walls can be shimmed behind the clips
- Local technical support eliminates delays

## PERFORMANCE ROI BENEFITS

- Factory finish with Ceramic Coating eliminates the need to repaint over time
- Ceramic Coating is graffiti resistant allowing for graffiti removal rather than requiring repainting
- Maintenance costs are very low and typically only require cleaning with water
- Long life backed by a 50 year product warranty and a 20 year finish warranty.
- Stable color keeps building looking new which helps maintain building value
- Ventilated drain back rainscreen cavity improves thermal performance and promotes drying in the wall to prevent mold growth

# WHY CERACLAD – FACTORY FINISH

CERACLAD is always factory finished which ensures quality, provides long-term performance and significantly reduces maintenance cost over the life of the building



## CERAMIC COATING

Choose our original CERACLAD System with the industry's best Ceramic Coating

- Six stage factory finish process
- Sealed with UV-blocking Ceramic Coating to provide extremely long lasting color backed by our 20 Year Limited Warranty against fading
- Made with a minimum of 44% recycled materials



## UV Inhibiting Coating

Bring Color to Life with our CREATIV™ custom color option

- Choose virtually any color swatch from Miller Paint, Sherwin Williams or Benjamin Moore paints
- Available in Contemporary Smooth or Cast Stripe textures
- Two Stage factory finish process
- Sealed with UV-inhibiting coating

Hardie is usually primed and painted after installed. Field painting extends the time scaffolding is on site and must be scheduled to coincide with acceptable weather conditions.

Field painted products experience color fade quickly in the Northwest and often have to be repainted in as little as 3-5 years.

Hardie Color Plus eliminates field painting for an overall increased installed cost but provides little to know protection against color fading.

By eliminating paint maintenance cost, CERACLAD provides the lowest lifecycle cost of the most common cladding materials.

System Type	Installed Cost	Maintenance Cost	Lifetime Cost
CERACLAD	Base Line	Base Line	Base Line
Lap Siding	-33%	+507%	+10%
Stucco	+7%	+462%	+39%
Brick Veneer	+95%	+470%	+220%
Full Brick	+71%	+470%	+200%
Corrugated Metal	-28%	+503%	+14%

# WHY CERACLAD – FACTORY FINISH

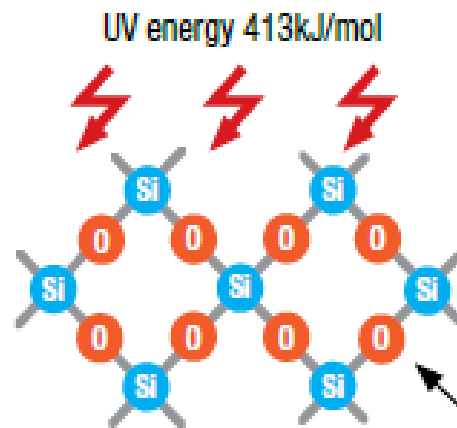
## The molecular technology behind the Finish.

CERACLAD's inorganic ceramic has excellent UV-blocking properties to protect the color layer from harmful UV and minimizes fading. Organic pigments go through a molecular change when exposed to UV and this change affects the way light is reflected off the pigment. It is this change in light reflection that causes color fading over time.

The CERACLAD Ceramic Coating prevents this molecular change from occurring and this results in incredibly stable color performance for at least 30 years.

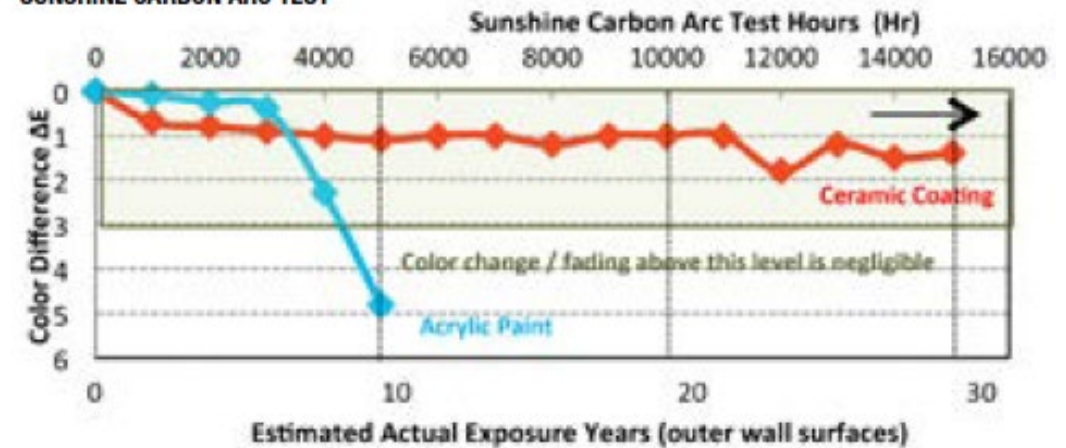
### PRINCIPLE

The main skeleton is 100% inorganic so bonding is stronger than the ultraviolet energy and there is almost no deterioration.



The orange symbols are UV absorbers. Since they are inorganic their ability to absorb ultraviolet rays is sustained.

### SUNSHINE CARBON ARC TEST

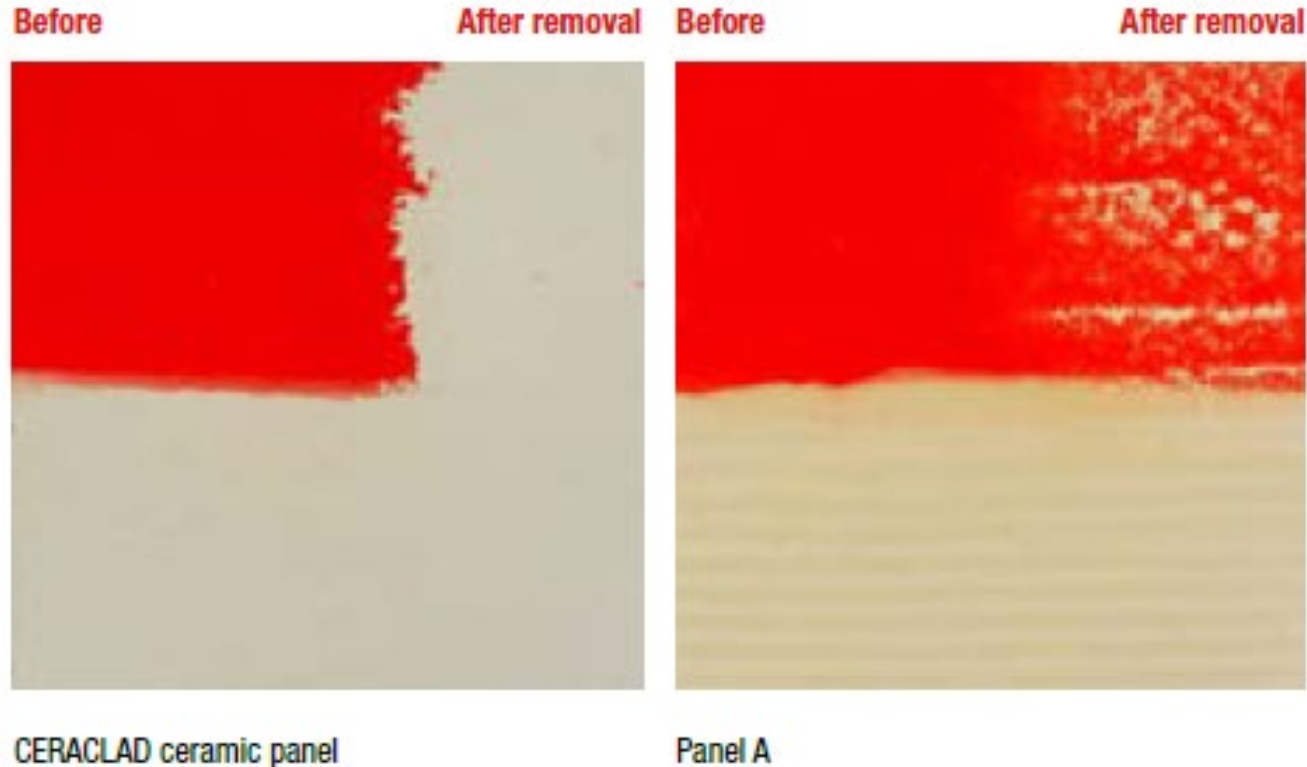


CERACLAD panels have been tested in Arizona, Florida and Singapore. Even in Singapore where ultraviolet rays are particularly strong, there was almost no color change.

And in the Sunshine Carbon Arc test, an accelerated weathering resistance test which simulates 30 years of sun exposure, there was almost no color change on the CERACLAD panels.

# WHY CERACLAD – GRAFFITI RESISTANCE

The CERACLAD Ceramic Coating also provides significant graffiti resistance



## EASY GRAFFITI REMOVAL

The protective coating on CERACLAD ceramic panels makes removing graffiti possible without the need to repaint.

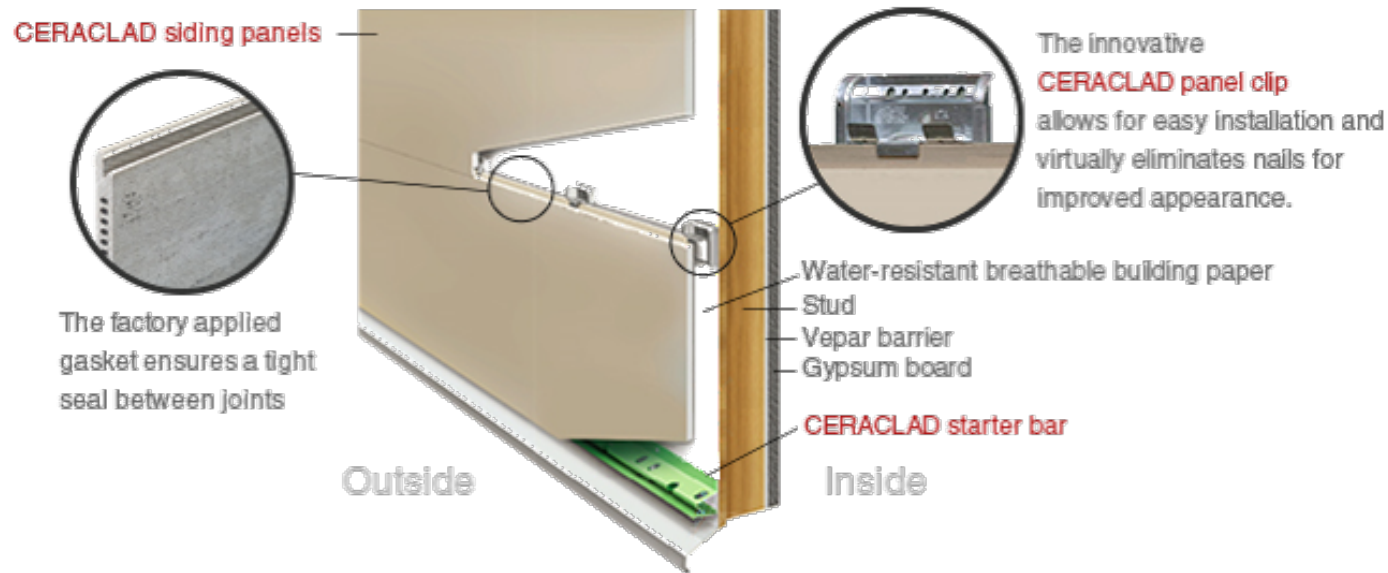
The images to the left show what happened when we painted a CERACLAD panel and a competitor's panel with standard acrylic lacquer paint and then tried to remove it with ethanol.

The CERACLAD panel cleans up nicely; the other panel, not so much.

Prosoco has also conducted graffiti removal testing on CERACLAD panels and their recommendation was "Based on the laboratory testing, no anti-graffiti treatment is deemed necessary" for CERACLAD fiber cement panels.

# WHY CERACLAD – FASTER INSTALL, LESS LIABILITY

A factory finished panelized *system* eliminates the need for sub-framing, provides single source responsibility and allows for faster installation.



CERACLAD provides all of the system components as a job package so you get single source responsibility and only have one call to place if there is an issue. All components have been designed, engineered and manufactured to work together. Installed with a hidden clip, the large panel size means a fast installation with consistent results.

When the panels are installed the project is done and the scaffolding can come down. You never have to wait and hope for good weather to install or paint on site.

GC's such as Marpac and Walsh have estimated saving on average 3 weeks when installing factory finished CERACLAD versus field painted Hardie.

Hardie requires a capillary break which typically means placing wood furring over the WRB before the planks/panels can be installed. This adds time and unnecessary waste which reduces sustainability.

The capillary break in a typical Hardie installation provides a drain back cavity which doesn't allow for air flow to promote drying and take advantage of thermal buoyancy to counteract condensation and vapor drive.

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The CERACLAD System provides a 15 mm ventilated drained back cavity that studies have shown improve drying in the wall cavity by as much as 36% which significantly reduces the chance of mold growth and eliminates moisture and vapor in the cavity space.\*

**Karagiozis A, Desjarlais A. (2007). Developing innovative wall systems that improve hygrothermal performance of residential buildings, Oak Ridge National Laboratory.**



# WHY CERACLAD – DESIGN OPTIONS

Design review boards are becoming increasingly resistant to traditional lap siding and reveal panel fiber cement and are driving designers to incorporate higher quality, durable materials in their designs.

With eight different texture options that are all fully interchangeable, CERACLAD provides design options that are well accepted by the various Seattle Design Review Boards that can provide the look of more expensive cladding materials such as metal, wood, concrete, terra cotta, raked limestone and stucco without the added cost or maintenance associated with these material types.

The universal size and attachment of the CERACLAD panels make transitioning from one texture to the next fast and cost effective during installation.



**Legacy @ River Park**

**Four textures with 6 different colors installed with seamless integration**

## **AMLI Mark24**

**Easily blended colors for design flexibility without added cost or time.**



Hardie offers very limited texture options and is most commonly specified in smooth or cedar mill texture.

The market is inundated with buildings that all look the same and provide little differentiation which is driving designers to seek alternative cladding options that often don't fit well with the owners budget.

Designers are also increasingly specifying bright and bold accent colors to differentiate low end siding which increases long-term maintenance cost since these bold colors are more susceptible to color fade.

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By choosing CERACLAD, designers can meet the Seattle Design Requirements of providing “durable, high quality materials” while providing a variety of design options that fit within the project budget. And this is accomplished without increasing the complexity of the installation which improves quality and saves time.

# PHYSICAL PROPERTY COMPARISON

Physical Properties	CERA CLAD		James Hardie			
	Hollow Core	Solid Core	Plank	Shingle	Vertical Panel	Reveal
Thickness	5/8"	5/8"	5/16"	1/4"	5/16"	7/16"
Weight (/ft2)	2.8	4.0	2.4	1.85	2.4	3.1
Panel Size (exposure)	18" x 10'	18" x 10'	5.25-12" x 12'	5-7" x 4'	4' x 8/9/10'	4' x 8'
Subframing	Not required	Not required	Wood batten	Wood batten	wood batten	wood batten
Fastening	Hidden Clip	Hidden Clip	Face Nailed	Face Nailed	Face Nailed	Face Nailed
Finish	Always Factory	Always Factory	Usually Painted	Usually Painted	Usually Painted	Usually Painted
Standard Color Coating	Ceramic	Ceramic	None	None	None	None
Custom Color Coating	Wet Cut UV	Wet Cut UV	None	None	None	None
Product Warranty	50 year	50 year	30 year	30 year	30 year	30 year
Finish Warranty Standard Factory Colors	20 year	20 year	15 year	15 year	15 year	15 year
- Includes color fade	Yes	Yes	No	No	No	No
Finish Warranty Custom Color	15 year	15 Year	None	None	None	None
- Includes color fade	No	No	No	No	No	No
Color Retention	No Visible Color Change	No Visible Color Change	Color Fades	Color Fades	Color Fades	Color Fades
Single Source Responsibility	Yes	Yes	No	No	No	No
Air Gap Ventilation	Required	Required	Not required	Not Required	Not Required	Not Required
Sound Control	33db	33db	??	??	??	??
Thermal Barrier	0.14 w/mk	0.18 w/mk	??	??	??	??
Graffiti Resistant						
- Standard Color	Yes	Yes	No	No	No	No
- Custom Color	No	No	No	No	No	No