
PORCELANOSA FACADE/



Hi,

When you're designing a building façade, if you're like most architects, you'll call a contractor friend and ask for a cost per square foot for a material you'd like to use. Or you might go to RS Means for a number. Or look at the estimates or schedule of values from a recent project.

And based on that number, you'll decide if the material fits your project's budget.

Today, we'll look at why that's the **WRONG** way to go.

Most architects make these design mistakes because they never formed a habit of doing it any other way. And they lose their design vision before they even get started.

In today's newsletter, you'll discover:

- A not-so-obvious value of using porcelain for your façade
- A project example that stuck with porcelain cladding to make their project a success
- Essential questions you need to ask for the most cost-effective open-joint porcelain façade

Your Porcelain Cladding Resource

Another Hidden Reason Porcelain is the Best Material for Your Façade Design

To be clear, we're not talking about ceramic tile. Or interior porcelain tile.

We're talking about technical porcelain. We fire your exterior porcelain cladding panels so they absorb less than 0.1% of water. Making them virtually impervious to moisture.

Compare that to industry standards for other tiles (water absorption rates):

- Porcelain: $\leq 0.5\%$ (which is great)
- Ceramic: between 0.5% - 3.0%

Let's look at it from the other direction: Glass has a water absorption rate of 0%. Our technical porcelain is at 0.1%.

That means glass is 100% waterproof, and our porcelain cladding panels are 99.99% impervious. Not too shabby, right?

Here's an interesting fact worth knowing: *It only takes an additional 25 degrees Celsius to go from ceramic to porcelain. With that little bit of extra heat, the "vitrification" process occurs. Vitrifying means particles begin fusing to fill more of the remaining pores in the material – leading to impervious porcelain qualities.*

Here's what these comparisons and percentages mean... You and your client don't have to worry about thermal expansion & contraction, freeze-thaw, or efflorescence issues. And graffiti comes off like it's nothing. Our porcelain cladding system is ideal for all climate zones your projects require.

See how Porcelain compares

Not all exterior cladding materials are made the same. Check the chart below to see if Porcelain is a good choice for your next exterior façade project.

Attribute	Porcelain	Fibercement	Terracotta	Metal (ACM)	HPL	UPRC/Concrete
Aesthetic Versatility	✓					
Impervious to Water < 0.1%	✓			✓		
Resilience to Water	✓	✓	✓	✓	✓	
Non-Combustible	✓		✓			✓
Resistance to High Wind Loads	✓		✓	✓		✓
High Texture Freedom	✓					✓

See how your other favorite exterior cladding materials stack up against porcelain cladding panels [here](#). Just scroll down to the chart at the bottom of the website page.

Your Porcelain Cladding Project Example



3200 Washington Street Condominiums

Location: **Boston, MA**

Architect: **RODE Architects**

Building Typologies: **Multi-Family, Mixed-Use, New Build**

Year Constructed: **2020**

Porcelain Cladding Used: **8,300 SF**

Colors: **Max Grey Nature & Lappato (Stone Porcelain Series)**

This month's featured project is a great example of porcelain cladding panels used on a wood-framed building. [Here's a link](#) to see more images and details.

For this multi-family, mixed-use project, RODE Architects looked for something different from what everyone else is doing for their building facades around the city.

Here's what the architect had to say about this project's challenges, choosing exterior porcelain cladding, and working with our team:

"We'd never considered using porcelain panels in an exterior application... I feel like it used to be a more European application. So, lack of knowledge was the main reason we hadn't considered it before [this project]."

...the main concern was understanding the costs associated with it.

... We got the project approved with the porcelain cladding. Then the client sold the project approvals to a different client. The new client's first step was to do a project cost assessment and value-engineering of the project. The unknown costs associated with an unfamiliar system like porcelain cladding were a concern to the new client. So, as a preemptive measure, we reduced the scope of the porcelain cladding from its original design.

Another challenge regarding using porcelain was that we build with wood in New England, leading to the concern of how square and plumb the wood framing of the building would be. We didn't know if the porcelain cladding system would need an exactness that we don't see in wood frame construction, especially on this size of a building. Most of the project examples Porcelanosa showed us were steel stud framing, which has less movement than this project, which is five stories of wood over a one-story steel podium.

It turns out our concerns about using porcelain with wood were unfounded. The building did end up an inch or so out of plumb, but Porcelanosa was able to incorporate some deeper members or extension pieces to manage that variation.

...The contractor initially had concerns because porcelain cladding systems were new to them. But, after the install was complete, they too were very impressed by the system and the way it went in. There was a lot of upfront concern, but as you get through the process, everyone notices, 'It works out really well.'



...We were looking for a bold, modern material that was different. We wanted the façade to be contemporary and different from other projects around New England. We achieved that goal through the use and quality of the porcelain cladding joints. The system's flexibility ends up with a clean look that is worthy of a museum. But the material's scale and patterning can still be consistent with a residential project.

... we're seeing a huge building boom in the city of Boston, but there is a lot of "same-same" materials and underwhelming design elements. The porcelain cladding brings a crisp, contemporary aesthetic to your design..."

Eric Robinson, AIA, LEED-AP, Principal & Co-Founder
RODE Architects, Boston, MA

Do you have a great project you've worked on with us that you'd like to see featured here?

Hit reply and let us know...

Exterior Porcelain Cladding: Important questions to consider **Part 1 / The Cladding**

Porcelain cladding is an effective way to achieve a crisp, clean look on a building's external appearance. As a result, it's becoming hugely popular, with many manufacturers springing up.

But how much do you know about it?

To help you wade through your design decision-making process, we've developed a Design Guide to give you a step-by-step system. To help you design the most cost-effective open-joint porcelain façade for your building projects.

As a quick overview, the ten steps include the following.

The Cladding

1. What are your cladding panel sizes?
2. Color-body or through-body porcelain?
3. What color and finish does your design need?
4. Do you want exposed or concealed fasteners?

The Substructure

5. What are your building's design pressures?
6. What's your build-up requirement?
7. What's the pattern for your panels?

Your Application & Use

8. What's your waste-to-yield factor?
9. Do you want field-cut panels or pre-cut from the factory?
10. Does your design require window returns?

Today's newsletter looks at the first four critical questions about your project's cladding and considerations you need to ask and answer before choosing the proper porcelain cladding for your project. And to make sure it fits within your client's budget.



1) What are your cladding panel sizes?

We produce exterior porcelain cladding panels with standard pre-set molds in various sizes (i.e., 6'x2', 4'x4', 4'x2', etc.). Selecting these standard mold sizes is your more economical choice because we're using the industry's standard technology. **Cost Impact: \$**

Another tip to keep your costs down and get other sizes is to choose a size that cuts down these standard mold sizes in halves or thirds.

However, if your design requires it, slab-size porcelain can be produced in a large format as a raw sheet. And you can cut that sheet down to multiple custom panel sizes. This customization does come at a premium cost because we're using the latest "continuous press" cutting technology to produce your porcelain cladding. So, you'll want to keep that in mind and look for other cost-saving opportunities in the panel design options. **Cost Impact: \$\$\$**



2) Color-body or Through-body?

What is “color-body” versus “through-body” porcelain, and which should you prefer?

It’s important to note, the difference between these types of exterior porcelain panels is only aesthetic.

Provided the thickness is the same, from a technical standpoint, they’re both equals.

Color-body porcelain: The color comes from a ***surface-applied finish*** over the panel body.

Also called glazed-body porcelain, this is a more decorative solution. But it could be a more cost-effective option if you want to customize the porcelain so its unique to your project. And, with our color-body technology today, you don’t see a significant contrast between the edge and the visible surface of the porcelain panel. **Cost**

Impact: \$

Through-body porcelain: The color comes from the panel’s body itself.

Its ingredients define the aesthetics. What you see on the edge of your porcelain panel is what you see on the surface. If you choose this option, the cost of your panels will increase. **Cost Impact: \$\$**



3) What color does your design need?

As you start choosing the right color for your cladding panels, you'll need to know how many square feet of your façade is porcelain cladding. Knowing this will help you quickly determine which colors and finishes are available for your project.

Active Stock Production (Readily-available):

Does your façade use ***less than 15,000** square feet of raw porcelain material***? If so, you can select from our active stock of colors within specific panel sizes.

With so many possible color and finish combinations for your porcelain cladding design, having them all readily available for any project size would be a little crazy-making. And unsustainable.

Here's how to choose your active stock porcelain color:

- Go to the Porcelanosa Facades website: www.porcelanosafacades.com
- Select the “colors” menu, which takes you to our collection of colors.
- Filter by “Active Stock” Items.
- You can also download the current [Active Stock Catalog PDF](#) document from the resources tab.

Special Production (Choose your porcelain and size):

If your façade design uses ***over 15,000** square feet of raw porcelain material***, you have two more options to consider.

The first option is our Special Production. You can choose between the many existing colors in our catalog. And we'll form it into the mold size that best suits your façade while maximizing and meeting your budget.

And remember, “special production” doesn't mean “more expensive.”

We simply take an existing finish “recipe” and put it in a standard, pre-set mold size we already have. This optimizes your exterior facade design intent.

Hit “Reply” and ask us about our Design Assist service. We'll partner with you to develop a cladding system that fits your design intent and budget.

Custom Production (Your unique design):

This final option is our “Design Your Porcelain” Program.

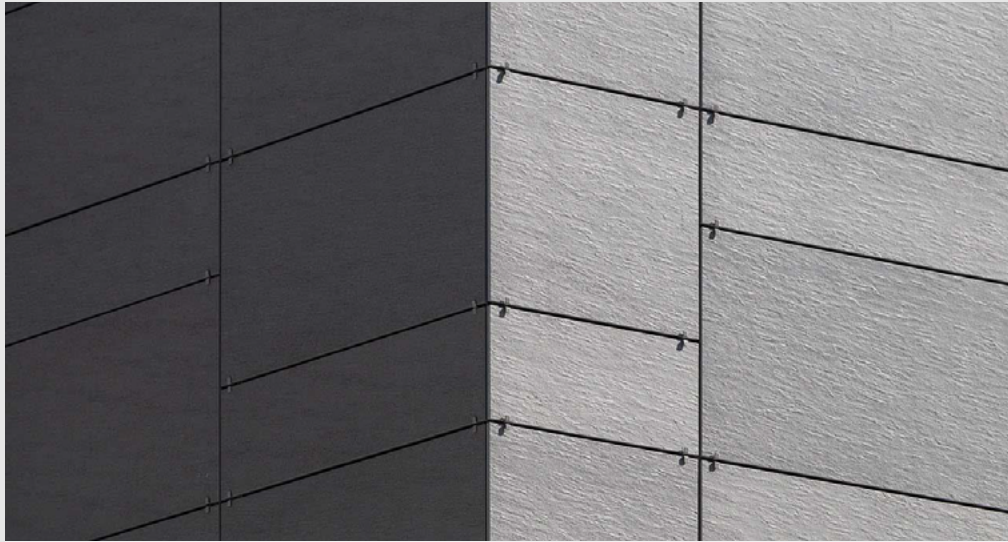
You can read more details about this program on page 32 of our [catalog](#)

We'll help you design your own unique, signature façade panels. If this sounds like what you're looking for on your next project, be sure to check out our program.

Take your building's exterior facade design to the next level by designing your unique cladding material.

*(**Please Note: With an average waste factor of 15%, if your façade's net area of exterior porcelain cladding is 13,000 SF, it will use 15,000 SF of raw material. And, as we said above, we're happy to help you figure this part out.)*

Once you've figured out your color and finish, ask yourself...



4) Do you want exposed or concealed fasteners?

You'll find most cladding materials offer either exposed or concealed fastener options. And, when asked, most architects choose concealed fasteners for the cleaner look for their façade.

However, it's well worth considering the cost impacts of each fastener type to keep your façade materials within the project's budget. Below are the fastener options to consider for your panel size category (review step 1 above):

If you have standard size porcelain panels, you can choose from the following:

- Exposed fasteners; **Cost Impact: \$**
- Concealed fasteners with kerfs; **Cost Impact: \$\$**

If you have large-slab size porcelain panels, you can choose from:

- Exposed rivet fasteners; **Cost Impact: \$**
- Concealed undercut anchors; **Cost Impact: \$\$\$**

More critical questions to ask...

This article covers just four of the questions we use as a design guide to help you achieve your vision and make it possible. As you can see, each decision you make along the way here impacts your façade costs. But knowing how each factor can affect your expenses will help you control those costs and tweak the system to meet your budget.

In the next newsletter, we'll look below the surface and explore your options for the substructure.

Can't wait? Reach out, and we can help you find the cladding system that will help you stay on budget and keep your design vision intact.

Just hit reply and let us know. We read every response.

Until next time
Your Partners in Design at

PORCELANOSA FACADE/

P.S. Here's three ways we can help you right now...

1) Sign up for our Virtual Online Lunch & Learn CEU presentation.

[Sign up here](#) for our presentation called, "Ventilated Façade System for Buildings."

You'll earn **1 AIA HSW CEU**, and you'll learn more about when & how to use a ventilated façade, as well as the advantages you'll get using a ventilated façade over using other cladding systems.

SIGN UP TODAY!

2) Contact us for a free, no-obligation project consultation.

Go [here](#) to schedule a no-obligation call. Get to know us and share your vision for your project. If this project isn't a great fit, we'll just let each other know. And part as new BFFs looking forward to the next chance to work together.

Or you can always give us a call at 1.866.FACHADA

3) See if your project is a good fit for our Design Assist service.

Check out our two-page Design Assist Services description [here](#) to help understand a bit more about this awesome way we can work together.

The TL;DR version: If your project meets just two simple requirements, our **complimentary** Design Assist service will help ensure your façade design's success, while saving your design team time, money, and headaches.

[Check it out](#) today!