PORCELANOSA FACADE/



Hi,

There's a saying that ONE is the most dangerous number in business. Why is it so dangerous? Because having one of anything can lead to ONE, SINGLE point of failure.

It can also lead to you working too hard.

The same idea can be applied to design. If you're trying to design in a vacuum, it can lead to you working too hard. And maybe missing out on some simple tweaks or opportunities to make your design vision a reality, and still fit within your client's project budget.

In today's newsletter, you'll discover:

- A new twist on an old material to consider for your next project
- A project example that used our Design Assist program to help make their project a success
- Part two of the essential questions you need to ask for the most cost-effective open-joint porcelain façade

Your Porcelain Cladding Resource

New Product Alert: Terracotta Porcelain Series

Architects and designers loved the look of architectural terracotta for centuries. And it's making a return in our modern building facades. Now, you can have the look of terracotta cladding panels without the worries.

The warm, classic look of terracotta without the danger of your cladding deteriorating or failing over the years.

With technical porcelain, you can get the warm, soft color and texture of terracotta cladding without the fear of water-related deterioration. No more crazing or spalling that comes from traditional glazed terracotta cladding.



Your Terracotta Upgrade

Did you know if you specify architectural terracotta, it's only required to meet the same standards as clay brick (ASTM C67)? That means it can have 4% to 7% water absorption and still pass. So, it allows water in to do its damage.

Not in our house. Our terracotta porcelain series panels (like all our technical porcelain) meet the much more rigid ASTM C373. That means they have water absorption of 0.1% or less. So, water doesn't get in.

Check out our terracotta colors and textures <u>here</u> and let us know if you'd like a sample to review for your current or next project.

Your Porcelain Cladding Project Example



Fitler Nine Townhouses

Location: **Philadelphia, PA** Architect: **Qb3** Building Typologies: **Multi-Family, New Build** Year Constructed: **2018** Porcelain Cladding Used: **10,000 SF** Colors: **Boston Bone & Boston Topo (Stone Porcelain Series)**

<u>Here's a link</u> to see more images and details about this set of four luxurious townhomes that transformed their Philly neighborhood's look through cutting-edge design and a customized façade.

But you don't have to take our word for it... Here's what one of the firm's partners had to say about this project's challenges, choosing exterior porcelain cladding, and working with our team:

"... We went through our design process and came up with the initial schematic idea. Being a relatively large building, over 60 feet high, our big concern was that the building would appear very monolithic if we used only one material color or cladding with no articulated joints.

In the 11th hour, my partner, Kevin Angstadt, and I chose two subtly different colors from their Stone Porcelain Series: Boston Bone & Boston Topo. We also introduced two to three different panel sizes to give the façade a little more character and variation.

Also, our design called for vertical panels, but Porcelanosa typically installs their panels horizontally. So, their team helped us apply their materials in new ways and a few uncommon details on this facade to help break up the massing.

Through their Design Assist process, the Porcelanosa team worked through all our details, and in the end, the product turned out quite nice, and I felt their process to get there worked out well.

We took our first shot at drawing the preliminary elevations and details. Our façade design had a lot of pushing and pulling of surfaces. Their team detailed all inside and outside corners and how other materials met the porcelain. Specifically, how the porcelain cladding engaged a window or how it engaged a sill or a coping.

It was their willingness to think outside the box. Given the building's size, the number of windows, and façade penetrations, there were many places for things to go wrong with respect to water infiltration.

... In the beginning, we were reluctant to use the porcelain cladding system because wood-frame buildings inherently have their flaws. They're very rarely true and plumb, but we worked through that concern with the Porcelanosa team. They explained the sub-girt system allows us to bring the panels together perfectly. They can adjust the system behind the panel, make it plumb and true, and create the desired alignments.



Self-leveling is a significant part of their system. Most rainscreen systems we've used are furring strips on the framing and can only follow the structure. So, if the builder framed it with flaws, the cladding reflects those flaws. The Porcelanosa's cladding system allowed us a secondary plumb and self-leveling process. I thought that feature was impressive.

...The one property I love the most about the porcelain cladding is its timeless quality. It feels like in 20 or 30 years, it is still going to look and feel as good as it does right now..."

Stephen Mileto, Partner Qb3, Philadelphia, PA

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 2 / The Substructure**

In our last newsletter, you learned the first four essential questions you need to ask yourself and answer before choosing the right porcelain cladding for your project. And to make sure it fits in your client's budget.

To help 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?

In today's newsletter, let's learn the next things you need to consider when you're choosing the perfect look for your next building façade...

The Substructure

With your cladding chosen after the first four questions, your next steps will determine which substructure you need or prefer.



5) What are your building's design pressures?

How tall is your building? What's the required design pressure? (The higher the application and design pressures, the higher the strength of your support system.)

In your preliminary building code review, work with your structural engineer to determine where your building falls in relation to its risk and exposure categories. You'll typically find these in Section 1609 of your edition of the International Building Code. From there, you'll be able to determine your wind loads and design pressures you need to design for.

- Design pressure below 60 psf are more standard; Cost Impact: \$
- Higher design pressures require additional framing in the substructure (i.e., 80 psf); Cost Impact: \$\$



6) What's your buildup requirement?

Placing continuous insulation on the outside face of your exterior sheathing is required by most energy codes today. And it's a recommended best practice for *all* your envelope designs.

With a minimum buildup of 4-1/2", our cladding allows 3" of insulation in the cavity (Your R-value will depend on the type of insulation you specify).

• Standard buildup 4-1/2"; Cost Impact: \$

If you need a higher R-value, you can get a thicker continuous insulation layer with longer support brackets.

• Buildup of 5" to 8"; Cost Impact: \$\$

Check out our Thermal Analysis Report (TAR) <u>here</u> to find out how to achieve your required R-values based on your building's conditions and requirements.



7) What's the pattern for your panels?

You have almost unlimited layout possibilities for your porcelain panels. However, your panel pattern will determine the number, size and spacing of the vertical supports behind your system... which can affect the cost of your design.

Reach out, and we can help you find the best pattern layouts that will help you stay in budget.

In general, a more economical layout would be:

• 48x24 inch panels; landscape orientation; stacked pattern; Cost Impact: \$

A more costly layout would require more vertical and horizontal sub-girts and connectors to support smaller panels with staggered joints. An example would be:

36x8 inch panels; portrait orientation with the horizontal joints staggered;
Cost Impact: \$\$

Keep in mind... many systems can have limitations. So, be sure to check with us to see what's possible for your project. Our two-page Design Assist Services description <u>here</u> will help you understand a bit more about this awesome way we can work together.

Even more critical questions to ask...

This article, along with last month's newsletter, covers the first seven questions we use as a design guide to help you achieve your vision and make it possible. Each step can impact your façade costs.

We're here to help you see how each factor can affect your expenses and help you control those costs and tweak the system to meet your budget.

In the next newsletter, we'll look at the last three steps and questions you need to consider.

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.

That's all for today. We hope you've enjoyed reading this issue of our newsletter.

We'd love to hear what you think of it! What you'd like to hear more about... Or hear more about what you're working on.

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

Until next time, keep a look out for number ONE... 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 <u>here</u> 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 <u>here</u> 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!