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# precaster

FIRST QUARTER 2024



In-Depth Look Northwest Precast Block 216, Portland, Oregon





APA Tour APA Leaders Tour Hotel Construction Site









DEPARTMENTS

President's Message

#### PRESIDENT'S MESSAGE

Jesse Thompson, Northern Design

As we settle into 2024 I hope everyone is happy, healthy and blessed with a strong back-log. Every New Year brings reflection: A chance to look back and digest twelve months of decisions, battles, failures and accomplishments. Each New Year also brings projection: A chance to look forward and target growth, opportunities, improvements and goals.

As producers in this industry we are always on our toes. There are surprises and hurdles at every turn and the quality of our product and success of our business hinge on our ability to navigate those challenges. It's a daily lesson of best practice and a never-ending commitment to continuous improvement. It's being open to change and willing to experiment. It's having confidence through experience while strategically managing risk. It's caring about the outcome and working hard to be the best you can be, every day. That's what APA Plants bring to the table, that's who we are.

We're entering a unique chapter of precast history with the upswell of UHPC's usage in structural applications which is now increasing interest in architectural applications. Thin and light, strong & huge, unprecedented & awesome -- a designer's dream. A handful of our producers are fully engaged and setting the standard for this relatively new product which is why UHPC is the focal topic of the APA Spring Workshop. Please come to Tacoma April 4th – 6th to learn about the versatility and composition of a UHPC mix. Experience batching, material placement and product handling firsthand at Northwest Precast's brand new, impressive 80,000 s.f. facility.

This type of hands-on education and collaboration is what makes the APA special -- we come together to share, grow and succeed.

The APA Annual Convention is in Park City, Utah October 25th – 28th, please save the date. This year's Convention will include informative, relative educational sessions, golf, awards, networking and other fun events. Not to mention the opportunity to visit another impressive plant: Unlimited Designs in Salt Lake City has set the bar when it comes to GFRC products, as documented with the slate of impressive APA Awards they've earned over recent years. I am excited to be your new APA President and I vow to work hard for our Industry. Please join me in being active and benefiting from



the collaboration, education and comradery that the APA's provides. We are so fortunate to be surrounded by so many loyal, hard-working Producers, Associate & Professional Members. We all strive for excellence and we have collectively set the benchmark when it comes to producing the highest quality Architectural Precast, Cast Stone, GFRC & UHPC products!

Enjoy the Winter and we'll see you in Tacoma!

Jesse





#### IN-DEPTH LOOK

### An In-Depth Look at an APA Award Winning Project

BLOCK 216 NORTHWEST PRECAST APA 2023 CRAFTSMANSHIP AWARD WINNER GBD Architects (Architect) Howard S Wright (General Contractor)

#### Overview

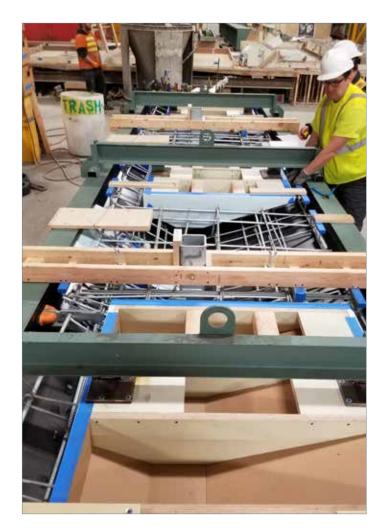
This project features honed white architectural precast that encases the seven-story podium base of a 38-story high rise in the heart of downtown Portland, Oregon, home of the Ritz Carlton Hotel. The precast interfaces with glazed storefront and punched window assemblies, with most vertical elements spanning two floors.

The 'twisted vertical fins' of polished white precast average 29 feet in length and coming to a point, intersect with the receiving horizontal spandrel bands. The twisted geometry with changing planes and precise interface of opposing elements results in an impressive convergence of sharp crisp angles and lines, creating a kaleidoscope of shifting shape and color with the rise and fall of the sun.

#### Design

Walking up to this towering structure, the strong angular and intersecting lines are dramatic and create the impression of movement. Twisting polished white vertical elements with jutting angular faces, cast shadows and reflections in the deep blue tinted glass. The design allowed this striking geometry to run 126 feet above the sidewalk, and freedom of the architect to not introduce another color or texture to the precast, was a brilliant piece of discipline. The simplicity of the project highlights the high level of complexity, and the clean tight intersection of over 550 elements forms makes a lasting impression on the observer.

Three entrances into the podium were pictured framed with deep returns and high precast soffits. Some precast elements weighed more than 16,000 pounds and had to be installed after the structure above was in place. Northwest Precast's detailer provided 26 locations to install 6" diameter sleeves through the post tensioned

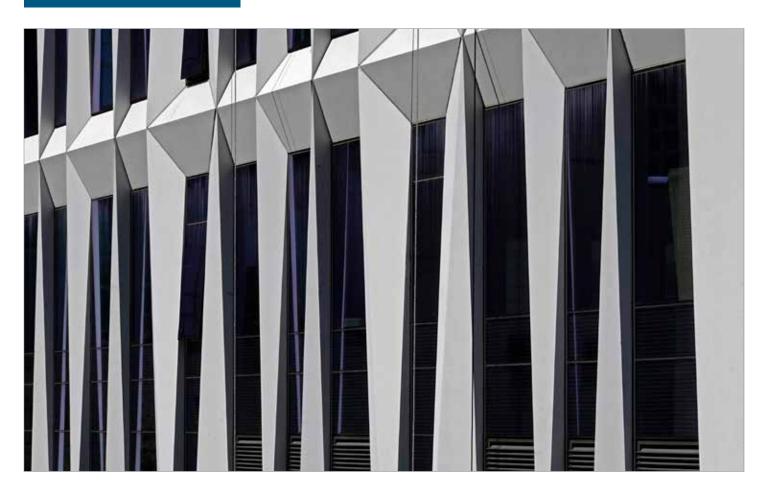


slabs above these precast panels. This allowed for a cable to be lowered down through the sleeves to the slab and hoist the pieces vertically into place.

#### Compatibility with Natural Surroundings

As often is the case of unique design in the heart of a metropolitan city, this building stands alone in good company. The design is in a modernist style, with aweinspiring lines and angles, it embraces minimalism and

continued on next page



functionality. Rising above and connecting with its surroundings, this building both stands out and remains grounded at the same time. The white precast base appears almost as granite coming out of the earth and lifting the glass crystal building into the sky. Despite the modern materials of precast, steel, and glass, the structure design creates a feeling of movement and appears organic in how it plays with light and reflections over the change of day. A unique feature of the building is the proximity of a light rail stop directly in front, connecting it to the whole community.

#### Manufacturing Excellence

The use of white cement and white aggregates in different gradations were used in the mix design. When color is provided through aggregates and no colored dyes are used, mix design color consistency is very high. A Self-Consolidating Concrete mix design allowed for a very low cement to water ratio, improving color consistency and providing excellent aggregate distribution. Quality Control was a contiguous process and involved all facets of Northwest Precast's project delivery team. Clear standards of performance and quality checks were performed throughout detailing, carpentry and form building, reinforcement and embedment fabrication, casting and curing, and final finishing and shipping phases.



Tim McGourty

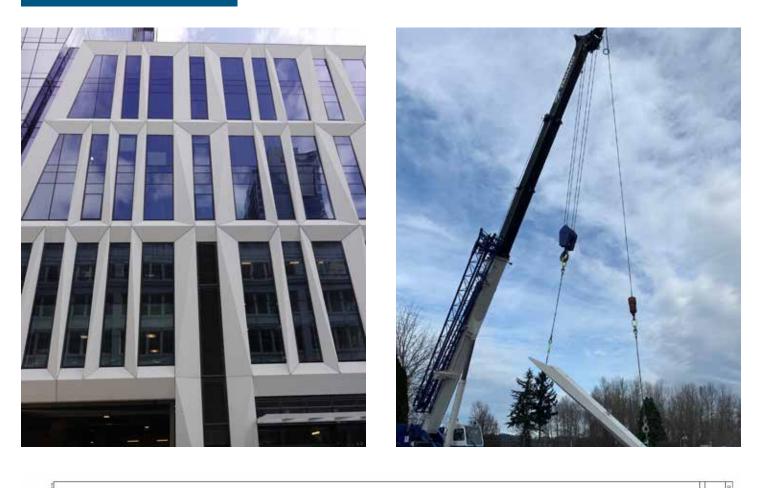
Northwest Precast's owner, Tim McGourty, commented, "It's a testament to the skill and professionalism of our entire team, that they were able to successfully execute this complex project at an award-winning level."

#### Challenges

This project was detailed by Northwest Precast on REVIT over the course of 16-months beginning at the project schematic design phase. The precast REVIT model eventually was used as the design model for the podium

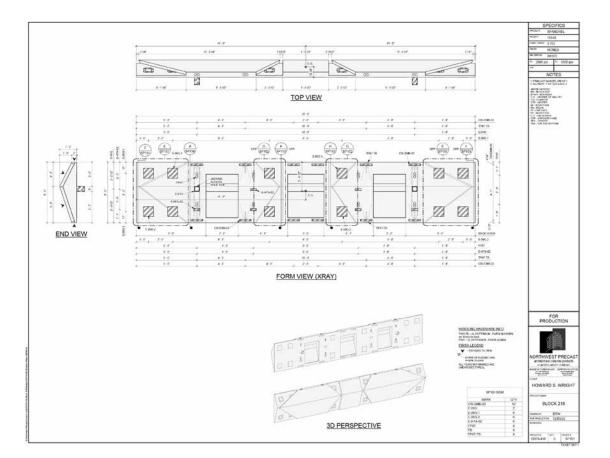


#### **IN-DEPTH LOOK**





#### **IN-DEPTH LOOK**



portion of the tower. One of the many challenges overcome was how to reinforce, engineer, and cast the sharp points the vertical elements contained at the top and bottom of each piece of precast.

Another challenge was how to address a 1 ½" drift and the need for slip connections at the back of the horizontal spandrels and the top and bottom ends of the fins. Glazing tolerances of less the ¼" over the 29 feet of the vertical elements required precision in all phases of precast production. Designing and maintaining tight tolerances in forming and casting was accomplished in part using adjustable steel molds and magnetically attached steel rails.

The design team and the general contractor considered the precast cladding component to be both a hallmark feature and one the most difficult to complete. The over 550 pieces of precast intersecting into one another at angles and controlling the lines for the glazing with less than ¼" of tolerance made this project challenging.

Steel forms from Helser Industries were also used to

manufacture exceptionally complex forms for some of the higher repetition elements.

#### Awards

This project received an APA Craftsmanship award in 2023. In reviewing the project, the Craftsmanship Jury noted the complexity of the build and the amazing consistency across the job. In addition, the beautifully honed finish and sharp edges that come close to a "blade edge" made a strong impression on jurors. McGourty said, "the entire Northwest team and I are honored that the APA recognized the tremendous amount of talent and craftsmanship that went into this project."

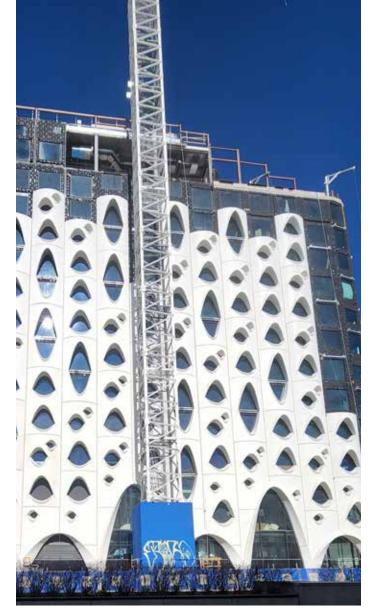
#### BY THE NUMBERS:

Concrete produced: 875 Yards Pieces produced: 550 Production time: 16 Months Total

### APA Leaders Tour Populous Hotel Construction Site

The APA Board of Directors met in Denver, Colorado, on February 8 in conjunction with the Precast Show. While in town for the meeting, the board and several Associate Members toured a fantastic new project site, The Populous Hotel, thanks to Unlimited Designs and The Beck Group. The hotel is a "flatiron building" wedged into an extremely small parcel on the corner of 14th and Court streets in downtown Denver. APA Member Unlimited Designs is producing the exterior GFRC panels for this amazing project. The hotel will feature 265 rooms, event spaces and spectacular views of the Colorado State Capitol building and Rocky Mountains. The unique windows (some up to 30 ft. tall) are shaped to represent the dark markings left behind on the white bark of Aspen trees after they shed their lower branches.

> more photos overleaf



External View of the Populous Hotel



Indoor portion of the rooftop bar



The APA crew crammed in the service elevator

A view of the Colorado Capitol Building from the rooftop bar



A corner view of the flatiron



Tim McGourty and Jennifer Welding inside the hotel



# 2024 UHPC Workshop

APRIL 4-6, 2024 TACOMA, WASHINGTON



Ultra-High Performance Concrete's (UHPC) remarkable compressive and flexural strengths, versatility in creating most any shape, light weight nature and superior resistance to freezing and thawing make it a product all producers should know more about.

#### WHAT YOU'LL LEARN

Discover the secrets of UHPC production at Northwest Precast's new state-of-the-art, 80,000 sq. ft. facility. The NW Precast team has been crafting high-quality UHPC products since 2020 – from eye catching signage to durable wall panels and deck planks. The NW team and other UHPC experts will share best practices and valuable insights on all facets of UHPC production.

### **TOPICS COVERED**

- Mix design characteristics
- Form design/set-up
- Mixing methods
- Placement techniques
- Curing
- Handling
- Storage, shipping and more

## **Schedule of Events**

### Thursday, April 4

8:30 a.m 11:30 a.m.	APA Board Meeting (Marriott Courtyard Tacoma Downtown - Mt. Adams Room)
1:00 p.m. – 5:00 p.m.	Golf Outing (Washington National)
6:30 p.m. – 7:30 p.m.	Welcome Reception (Beers and Bites at Zeek's Pizza, Tacoma)

### Friday, April 5

#### Plant Tours and On-Site Demonstrations & Training

7:15 a.m. – 7:40 a.m.	Grab and Go Breakfast (Hotel lobby, 2nd floor)
7:45 a.m.	<b>Bus Departs for Concrete Technology Corporation</b> 1123 Port of Tacoma Rd, Tacoma, WA
8:00 a.m.	Plant Tour I: Concrete Technology Corporation 15333 110 Ave. E., Puyallup, Washington
9:30 a.m.	Bus Departs for NW Precast
10:00 a.m. – 1:00 p.m.	Plant Tour and UHPC Hands on Instruction – Northwest Precast <i>Tim McGourty, Owner, Northwest Precast</i> <i>Roy Welch, Q.C. Lab Manager, Northwest Precast</i> <i>Adam Whitehurst, Q.C. Manager, Northwest Precast</i> Station I: Mold Making – Form Strength, Setup and Finish Station II: Mixing and Pours – Timing, Temperature, Hydration and Equipment Station III: Materials Station IV: Color – Proportions and Matching with Cast Stone / Precast Station V: Samples and Finishes
1:00 p.m. – 1:45 p.m.	Lunch
1:45 p.m. – 2:15 p.m.	Marketing of Architectural UHPC Tim McGourty, Owner, Northwest Precast
2:15 p.m. – 3:30 p.m.	<b>Lessons Learned: How to Successfully Produce UHPC</b> Roy Welch, Q.C. Lab Manager, Northwest Precast Adam Whitehurst, Q.C. Manager, Northwest Precast
3:30 p.m.	Bus Departs for Hotel
4:00 p.m.	Bus arrives at Marriott Courtyard Tacoma Downtown Evening on your own

### Saturday, April 6

#### Classroom instruction - Courtyard Marriott Tacoma Downtown - Mt. Tahoma Room

8:00 a.m. – 9:00 a.m.	Practical Application: What You Need to Know for the Successful Use of UHPC Anthony Ragosta, Dir. of Engineering & Operations, ceEntek
9:00 a.m. – 10:00 a.m.	<b>Business Case: When Does it Make Sense to use UHPC?</b> Gary Arkin, President/Owner, Premier Precast Daniel Arkin, V.P., Premier Precast
10:00 a.m. – 10:15 a.m.	Break
10:15 a.m. – 11:15 p.m.	<b>Sustainability &amp; Uses of UHPC</b> Larry Rowland, Sustainability Market Manager, Heidelberg Materials
11:15 a.m. – 12:15 p.m.	<b>The Future of UHPC and Material Technology</b> Vic Perry, President/COO, ceEntek North America
12:15 p.m. – 1:00 p.m.	Lunch
1:00 p.m. – 2:00 p.m.	Ultra-High-Performance Concrete: A Blueprint for Leadership in Sustainability and Architectural Precast Jamal Nelson, Dir. of Business Development, Northwest Precast
2:00 p.m. – 2:15 p.m.	Break
2:15 p.m. – 3:00 p.m.	<b>Facilitated Discussion and Wrap Up</b> <i>Tim McGourty, Northwest Precast</i> <i>Jesse Thompson, Northern Design</i> <i>Vic Perry, ceEntek</i> <i>Roy Welch, Northwest Precast</i>
5:30 p.m.	Dinner Cruise on the Puget Sound 5:30 p.m - Boarding begins 9:00 p.m Ship returns to port Location: Foss Waterway Seaport 705 Dock St, Tacoma, WA (1 mile from the hotel)



### THANK YOU TO OUR EVENT SPONSORS!

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 $SEAY \mid {}_{\text{consultants}}^{\text{management}}$ 

### 2024 Human Resources Management Checklist

The Seay Management Human Resources Management Checklist includes 20 key HR flash points that will help to ensure that you are up to date and in compliance with the employment regulations and with HR "Best Practices" and is sent with our compliments and our sincere appreciation!

- 1. <u>EMPLOYEE HANDBOOK</u> Your handbook is your most important employment document because it describes how you will handle work issues that arise with your employees. Here are some thoughts to consider:
  - **Dress Code** Tattoos are becoming ubiquitous in the workplace and many employers are relaxing their "no tattoos" policy. Make accommodation for applicants and employees with race based hair styles or cultural/religious attire.
  - Social Relationships at Work A supervisor or manager dating an employee should be prohibited. It is TWTH -- Trouble Waiting to Happen ...!
  - Working Remotely More employees are working remotely these days so a Remote Work policy should be included in your employee handbook covering getting advance permission to work remotely, what constitutes working time, recording remote work time, accidents at home, accountability, etc.
  - Words to Avoid Like the plague, avoid using words like (a) cause or good cause, (b) condition of employment, (c) annual salary, (d) permanent employee, (e) yearly, etc. As Labor Relations expert Paul Sommerville remarked, these words can cause "entanglements of biblical proportions!"
  - **Social Networking** Prohibit employees from accessing social networking sites at work. Supervisors should be forbidden from accessing the personal sites of their employees and must never "friend" their employees. National Labor Relations Board regulations prohibit employers from telling employees about what they can and cannot post on their personal social networking sites.



- 2. <u>HARASSMENT AWARENESS AND PREVENTION TRAINING</u> Conduct Harassment Awareness Training annually for all managers and employees. This training should cover all forms of unlawful harassment including harassment based on sex, race, religion, age, ethnicity, etc.
- 3. **DRUG FREE WORKPLACE** Management should reserve the right to require a drug or alcohol test for "reasonable suspicion." Synthetic drugs like K2, Spice, Ecstasy, etc. should be prohibited at work. Employees having medical marijuana cards may not consume marijuana at work and may not report to work under the influence of marijuana.
- 4. **PERSONALITY TEMPERAMENT ASSESSMENT** To hire employees that are a "fit" for your organization, consider having Seay Management administer the DISC profile, particularly for your Leadership Team.
- 5. **AFFIRMATIVE ACTION PLAN** If you are covered, your Affirmative Action Plan must be up to date and in compliance with the latest regulations. We can help.
- 6. <u>EEO-1 REPORTS</u> Employers of 100 or more employees are required to electronically submit an annual EEO-1 Report. We can help.
- 7. <u>VETS 4212 REPORTS</u> Most government contractors are required to file this report. We can help. Seay Management is veteran owned and operated.
- 8. **<u>NEW HIRE REPORTS</u>** Employers must submit specific New Hire Reports to the state employment agency database, on a regular basis.
- 9. JOB DESCRIPTIONS Both the employment regulations and HR Best Practices require a valid job description for each job. We can help.
- 10. <u>MANAGEMENT TRAINING</u> Consider conducting several Management Training sessions this year on important subjects like:
  - How to Counsel and Discipline Employees.
  - How to Make Your Employee Handbook Your Friend.
  - How to Manage Difficult Employees.
  - How to Hire and Retain Good Employees.
  - "What Leonardo da Vinci Teaches Us About Management." Sandy's personal favorite.
  - Performance and Experience, Personality Temperament, and Character 3 Keys to Hiring Good Leaders.

- 11. <u>EMPLOYMENT LABOR POSTERS</u> Check that you have all current required employment posters, placed in prominent locations. Federal regulations require 6 posters; the various states require additional posters.
- 12. <u>I-9 FORMS</u> Have valid I-9 Forms on file for every employee and use the latest iteration dated August 1, 2023. E-Verify is required by some states and for federal government contractors, but it's a quick and easy way to verify Social Security numbers and we recommend it for all employers.
- 13. <u>EMPLOYEE FILES</u> Drug test records, financial statements, court orders, background checks, and other private or personal documents should not be included in the employee file. Get pre-employment reference checks on all candidates you are seriously considering.

#### 14. UNEMPLOYMENT COMPENSATION

MANAGEMENT

- In most states, employees dismissed within the 90 day probationary period will not have those benefits charged to your account.
- Employees who are dismissed for resigning due to a work change, will be eligible for unemployment benefits.
- Employees who are dismissed for performance or "bad attitude" will almost always be awarded benefits.
- Fraudulent unemployment claims are widespread. Check your unemployment claims report for accuracy.
- 15. **NATIONAL LABOR RELATIONS BOARD** Under the "protected concerted activity" category, employees have the right to discuss their wages, benefits and working conditions among each other and employers may not prohibit them from doing so.
- 16. <u>EMPLOYEE OPINION SURVEY</u> You will never know how your employees feel about working for you unless you ask them through an employee opinion survey or satisfaction survey. Many are the times an opinion survey has prevented serious problems.
- 17. **<u>TIME RECORDS</u>** Lots of employers are using digital time records now rather than a time clock or a paper time card. It's more efficient and employees like this method better. Some employers allow employees to clock in on their mobile phones.
- 18. **EXEMPT CLASSIFICATION** The exempt salary classification has a salary test and a duties test. Employees must meet both in order to be exempt. Some states and cities have higher salary requirements for exemption.



- 19. <u>**COMPENSATION STUDIES**</u> Perform annual compensation studies to make sure your pay rates are competitive. We can help.
- 20. HR MANAGEMENT COMPLIANCE AUDIT REVIEW Having Seay Management complete an HR Audit will help you reduce or eliminate any potential liability or exposure, provide you with the comfort and assurance that you are in compliance with all of the employment regulations, and check to see that you have the "HR Best Practices" you need to hire and retain good employees.

We trust that this Human Resources Management Checklist will be helpful to you as you establish and refine your employment goals and objectives. Please contact Seay Management Consultants with any questions you may have. We are always glad to talk with you.

Very best regards,

### SANDY, DAN, MIKE, SISSY AND THE ENTIRE SEAY MANAGEMENT CONSULTANTS TEAM

Remember, if you have an employment issue or challenge, and you need an answer right away, and you want the very best Human Resources Management advice available, you need to call . . The Seay Team!

It is our goal to:

- 1. Help ensure that your business is in compliance with all of the state and federal employment regulations and guidelines which affect your company and your employees;
- 2. Help eliminate your financial exposure in these areas; and
- 3. Develop the policies and systems which will help you employ and maintain a satisfied, happy and productive work force.

Seay Management provides Human Resources Management and Labor Relations consulting services. Seay Management does not provide legal advice and does not engage in the practice of law. If you need an attorney, we'll be glad to recommend one to you.



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#### THE COST OF CULTURE





### ATTN LEADERS: The Toxic People On Your Team Are Damaging YOUR Integrity. And, You're OK With That? By Mack Story

WARNING contains Leadership Truth: Leaders when you allow a toxic, negative person to remain on your team, you'll find the best people will leave because you're allowing the worst to stay. They may not leave immediately. BUT, THEY WILL LEAVE EVENTUALLY. The clock is ticking!

The result: Those who would and could truly help you and your team perform at a higher level will be helping another team perform at a higher level.

And...you and those who remain with you will continue to have the privilege of dealing with the toxic individual(s) and all of the problems, frustrations, and stress they cause on a daily basis. "Do not tolerate brilliant jerks. The cost to teamwork is too high." ~ Reed Hastings

The toxic person is nothing more than a reflection of your character. They're only on your team because you allow them to be on your team. You may not be responsible for their behavior and character. But, you are responsible for allowing them to be a part of your team.

By the way, those who remain with you don't respect you as a leader. They know you aren't willing to do what's best for the team. They know you won't make the tough decision. They know you are avoiding dealing with it. They know you aren't a good leader, much less a great leader. Everyone knows!

That's a fact, not an opinion!

#### THE COST OF CULTURE

# precaster

They talk about you behind your back daily, and they won't stop as long as you allow toxic people to contaminate the team.

They all know you are a weak leader and wish you would do the right thing or be fired...so maybe, your replacement would do the right thing.

But, if you're the owner, they know their best chance is to change their work address because you aren't likely to change and you don't have to change. You get to decide what's best for you, but they get to decide what's best for them.

Your character is personal, but it's not private.

Your choices serve as an open window revealing your character and values, and everyone is on the outside looking in.

When you allow toxic team members to contaminate your team, you lose integrity with all of those who are watching and all of those they are talking to about you.

You've shown your team who you are and what you value.

It's clear to them that you definitely don't value them and that you're a great example of how not to lead.

High impact leaders have high impact followers who respect them.

Low impact leaders have low impact followers who despise them.

You can try to defend your actions, but you're not fooling anyone but yourself.

Your hollow words are overshadowed on a daily basis by your actions and your lack of action.

Your team already knows you are a weak leader, whether you know it or not. They also know if you have a track record of this behavior, and it's nothing new.

# What if you report to one of these weak, insecure, low impact leaders with poor character?

If you report to one of these weak leaders who allow toxic team members to contaminate your team, MOVE ON as soon as possible. There are opportunities everywhere right now. The job hunter has the advantage. You'll get an opportunity to report to a better leader and work with a better team. You'll most likely get a raise too, especially if you've developing yourself in advance!

Toxic teammates with a low degree of character and with values that conflict with yours are much more likely to try and bring you down to their level rather than choose to join you at a higher level.

Stop hoping and wishing your leader will do the right thing. They aren't interested. If they were, they would have already done the right thing. If your leader won't terminate toxic team members, it's because they value them on some level. That's not a leader you want to report to any longer than you have to.

Stop waiting for them to do what should be done. YOU do the right thing! Make YOUR life better as soon as possible! YOU deserve a better leader!

Intentionally develop yourself, so you'll have more options. Then, act on those options. Don't leave a job. Go to a job.



Mack Story is the founder of Blue-Collar Leadership. For more information on his books, podcasts and more, go to: https:// bluecollarleaders.com

Welcome back, in this addition of the APA Precaster we will dive into repairing architectural GFRC.

### Repairing Architectural GFRC

By Kiley Marcoe, Metro Precast & Stone Services, Inc.

Repairing GFRC is not different to repairing precast or cast stone, all the same steps are followed, simply substitute glass fibers for large aggregate and fiber mesh for mechanical anchors/patch-pins.

Repairing small, thumbnail sized, damaged areas

Step 1 - Eliminate any feathered edges.

Step 2 - Fill the prepared area with the repair mix without any glass fibers.

**Step 3** - The repair is troweled flat and flush with the adjacent surfaces. When the repair has partially hardened the surface matrix is removed using clear water and sponge exposing the fine aggregates to achieve the desired texture and to mimic the architectural finish.

**Step 4** - After the repair has cured 3 to 7 days, brush wash with a mild muriatic acid solution to remove any laitance and efflorescence expediting the color blending process.





#### Repairing small to medium sized damaged areas

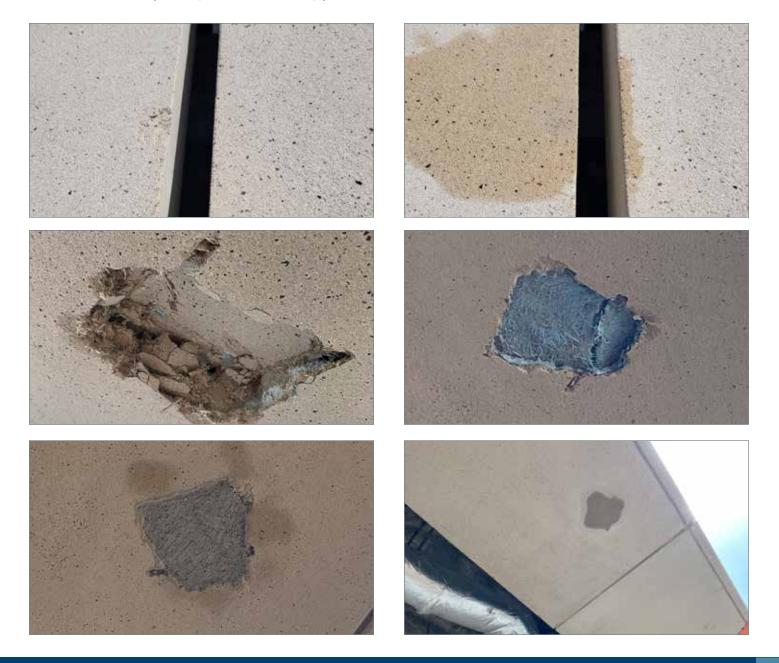
Step 1 - Eliminate any feathered edges.

Step 2 - Fill the prepared area to within a ¼" of the finished surface with the repair mix with glass fibers.

Step 3 - Fill pre-patched area with the repair mix without any glass fibers.

**Step 4** - The repair is troweled flat and flush with the adjacent surfaces. When the repair has partially hardened the surface matrix is removed using clear water and sponge exposing the fine aggregates to achieve the desired texture and to mimic the architectural finish.

**Step 5** - After the repair has cured 3 to 7 days, brush wash with a mild muriatic acid solution to remove any laitance and efflorescence expediting the color blending process.



#### KILEY'S CORNER

#### Repairing large sized damaged areas

Step 1 - Remove any loose and fractured material.

Step 2 - Eliminate any feathered edges.

Step 3 - Use forms to prevent sagging of the repair material and to maintain the shape of the GFRC unit.

**Step 4** - Fill the prepared area to within a ¼" of the finished surface with the repair mix with glass fibers and fiber mesh.

Step 5 - Fill pre-patched area with the repair mix without any glass fibers.

**Step 6** - The repair is troweled flat and flush with the adjacent surfaces. When the repair has partially hardened the surface matrix is removed using clear water and sponge exposing the fine aggregates to achieve the desired texture and to mimic the architectural finish.

**Step 7** - After the repair has cured 3 to 7 days, brush wash with a mild muriatic acid solution to remove any laitance and efflorescence expediting the color blending process.











#### **KILEY'S CORNER**

















A successful precast repair is equal parts following procedures, experience, and artistic ability.

Until next time, Kiley Marcoe

Metro Precast & Stone Services, Inc. Metroprecast.com

### 2024 SAVE THE DATE!



OCTOBER 25–28, 2024 2024 APA ANNUAL CONVENTION Grand Summit Hotel – Park City, Utah

# The APA knows that having the right tools is essential to your success.

APA members are NOW ELIGIBLE for substantial discounts on office supplies through Office Depot's ODP business to business platform. You can receive up to 75% off ODP's "Best Value List" items and the average savings for participants is 24%.

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For more details, go to: https://bit.ly/APA-ODP