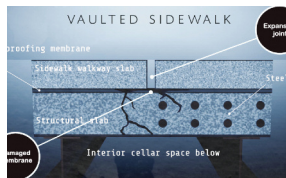




ENGINEER'S CORNER
THE EFFECTS OF
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**BELOW-GRADE
WATERPROOFING**
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**SKYLINE'S 30TH
ANNIVERSARY**
RESTORING NEW YORK
BUILDING BY BUILDINGSM

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**11TH ANNUAL
GOLF CLASSIC**
JULY 1ST - REGISTER AT
SKYLINEFOUNDATION.US

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SKYlines

A SKYLINE RESTORATION PUBLICATION

**ANNUAL NYC DOB
BUILD SAFE | LIVE
SAFE CONFERENCE**

On Friday, May 10, the NYC Department of Buildings will present its annual Build Safe | Live Safe Conference 2019, a daylong series of seminars led by DOB experts who discuss safe construction methods and explore industry trends. The industry-wide mega-event marks the culmination of **Construction Safety Week** (May 6-10) when DOB staff visit construction sites to promote safety as part of the multi-lingual "Experience is Not Enough" campaign. The centrally located Build Safe | Live Safe Conference will take place at Convene, 117 West 46th Street. For tickets and schedule, visit nyc.gov/buildings.



VIDEO FRAME: LEIGHTRONIX, INC.

Construction Safety Training Deadline May Be Extended Again

June 1, 2019 is currently the deadline for workers to obtain a minimum of 30 hours of safety training and supervisors 62 hours under Local Law 196 of 2017. By September 1, 2020, workers will need an additional 10 hours for a total of 40 hours. The law pertains to all projects requiring a site safety manager.

During the April 18th NYC Stated Council Meeting, **Council Member Carlos Menchaca** (*photo*) said that an extension in some form will be approved during the Council's next Stated Meeting on May 8, which —according to *Politico*— was confirmed by the office of Speaker Corey Johnson.

Fariello: people seem to be procrastinating
Speaking at a preliminary budget hearing at the

Continued on page 4

**RISE
CONSTRUCTION
COSTS**
**HOW DOES THE
INDUSTRY COPE?**

Construction costs have continued to rise in New York City at a rate of roughly 5% for the past two years, keeping the City the highest cost of construction market in the nation according to the **New York Building Congress** (NYBC)'s annual report *Construction Outlook Update: New York City Construction Costs* (February 2019). The NYBC attributes the increase to multiple factors with materials and labor at the forefront.

Still, NYBC President and CEO **Carlo A. Scissura, Esq.** takes a highly positive outlook saying, "The rewards have never

Continued on page 3

FIVE BOROUGHES

Hudson Yards Opens – Inaugural Walk Traverses the Vessel

On Friday, March 15, 2019, Hudson Yards, the largest private real estate development in the nation and the largest in New York City since Rockefeller Center, held its official opening ceremony emceed by **Anderson Cooper**. A year ago, *Commercial Observer* said the site “is poised to become a global destination, reimagining urbanization and how we live in cities.” Invited guests viewed the ribbon-cutting in the five-acre public space and took an inaugural walk up the interactive landmark centerpiece Temporarily Known As the Vessel (photo)—a competition to rename it is underway— which *Architectural Digest*



PHOTO: COURTESY OF FORBES MASSEY HEATHERWICK STUDIO

dubbed the site’s “crown jewel.” The Shops & Restaurants occupy the one-million-square-foot retail center and tenants have started moving into several towering buildings.

Speakers at the opening ceremony included Hudson Yards’ developers Related Companies Chairman **Stephen M. Ross** and Chair of

Oxford Properties Group and President of OMERS **Blake Hutcheson**; plus NYS Senator **Charles E. Schumer**; President of the Building and Construction Trades Council of Greater New York **Gary LaBarbera**; and **Thomas Heatherwick** of Heatherwick Studio, designers of the Vessel.

SKYlines

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MONDAY, JULY 1, 2019

SKYLINE RESTORATION'S

**11TH ANNUAL
GOLF CLASSIC**

REGISTRATION IS OPEN

WWW.SKYLINEFOUNDATION.US

Rising Construction Costs – How Does the Industry Cope?

Continued from page 1

been greater.” In Scissura’s February 12 column in *Commercial Observer*, “Peak Construction? Are You Nuts?!” he notes, “...We can safely say that the state of New York City’s construction activity remains strong” and that planned work “is astonishing,” promising a bright future.

SKYlines asked:

How is your company coping with the industry’s rising costs and finding ways to realize the rewards?

**TINA NOCERA
DIRECTOR OF CULTURE,
EXTECH BUILDING MATERIALS:**



At Extech Building Materials, we look to reduce our transaction cost,

making it easier to do business with us, but not at the risk of compromising service. The path to efficiency happens when we first recognize the need for change, and then focus on the

behaviors we want from people, and design the work environment to foster those behaviors.

We accomplish this by focusing on our culture which will create lasting change and pave the way for the use of technology which helps directly reduce the cost of doing business.

**QADIR NADEM
WATERPROOFING MANAGER,
NEW CASTLE BUILDING
PRODUCTS**



The cost of materials is rising 3% to 5% annually, and with some products

even more – as high as 10%. We cannot control price increases, but it helps when the manufacturer notifies us of the increase ahead of time. We e-blast and call our customers as soon as we learn of a price increase and advise them to plan accordingly. Sometimes they’ll be able to buy the material(s) before the increase.

Communication and having a

good relationship with our customers are very important to us. We operate like a partnership.

We always keep the lines of communication open so customers know they can trust us.

**JACK TERRANOVA
DIRECTOR OF PURCHASING AND
LOGISTICS, ANDROMEDA
ADVANTAGE:**



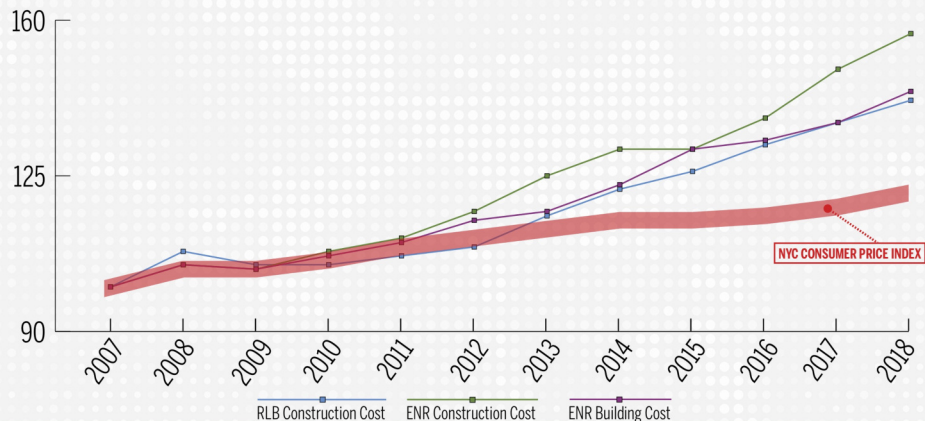
We are seeing an increase in materials costs every year,

varying from 5% to 8% depending on the manufacturer and if they are passing on an increase from the prior year.

We systematically research the market and we offset hikes by being able to buy in bulk and to stock materials and consumables in large quantities, passing on the savings to the companies we service. We also purchase from vendors who can ship items directly from the manufacturer, thus saving in shipping costs.



NEW YORK CITY CONSTRUCTION COST INDICES, 2007-2018
BASE YEAR: 2007, INDEX 100



IMAGES/GRAPHICS: NEW YORK BUILDING CONGRESS

This report is available at www.buildingcongress.com/uploads/COU_-_NYC_Construction_Costs_v5_digital_distro.pdf

Construction Safety Training Deadline May Be Extended

Continued from page 1

New York City Council Committee on Housing Buildings in March, Acting Commissioner **Thomas Fariello** detailed the DOB's progress in enforcing the regulations governing over one million buildings and 45,000 active construction sites "all while facing a scale of construction unparalleled in the City's history."

Politico reported that in response to a question on LL196, Fariello voiced concern that safety courses are not filled and "people seem to be procrastinating, waiting for the June deadline."

SKYlines asked:

To what do you attribute the procrastination on getting the required training -- the workers, the companies, a combination of factors?

PETER AMATO

PRESIDENT, SITE SAFETY LLC:

This is a result of the City having a high volume of courses and providers to approve. Now that schools like us at *Site Safety* are approved, there has been an influx in training.

ROBERT DEMARCO

PROGRAM DIRECTOR/SENIOR INSTRUCTOR, SWING STAGING TRAINING & SAFETY LLC:

We believe it is a combination of all and unfortunately it will require the DOB to enforce (as they have been) in greater number inspections with fines that will move the needle. In addition, the dramatic uptick in providers and a change in the approval process has slowed the ability for all providers to obtain approval of required and elective courses.

JAKE TOTH, CHST DIRECTOR, ANDROMEDA ACADEMY OF CONSTRUCTION TRADES LLC:

As construction is such a fast-paced industry, unfortunately there remain companies that concentrate on daily tasks, especially smaller companies. They will have to deal with the consequences. The companies we support through the *Academy* will meet the requirements.

Do you have any suggestions for keeping workers compliant – and what are you doing to inform the industry?

PA: We suggest that all workers take the 30-hour OSHA course to be in compliance by 6/1. This is enough to get a limited Site Safety Training (SST) card. We have been holding free seminars to disseminate information and updates on LL196 since November 2017. We regularly send reminders to the industry,

notify all clients and project sites to get the word out. We also do 'lunch and learns' with contractors and potential clients.

RD: We are advertising by email, messaging and directly contacting potential and existing clients. Updates and reminders to get them in compliance will and should also come from the media and from NYC DOB alerts. Companies will act either to avoid fines issued in DOB inspections or, unfortunately, as a result of DOB fines.

JT: There is some help, especially for supervisors who require 62 hours by June 1, in that certain types of prior training will be counted under the DOB equivalency table. The clock is ticking but it's still not too late. *Andromeda Academy* offers flexible scheduling including evening and weekend classes. We'll make it happen.



PHOTO: NYC.GOV

DOB'S ACTING COMMISSIONER PLEDGES CONTINUED COMMITMENT TO SAFETY

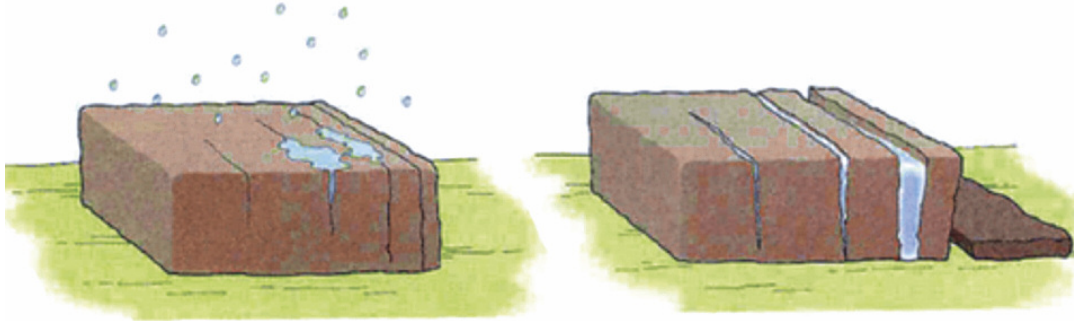
Thomas J. Fariello, R.A., became the acting commissioner of the NYC Department of Buildings (DOB) on February 1, 2019, following the resignation of Commissioner **Rick Chandler**. In the DOB's February issue of

Buildings news highlighting the **Build Safe | Live Safe Conference** (page 1), he says, "No building is worth a life, and that's a belief every person in the development industry should keep in mind whenever they step onto a construction site."

His career with the DOB began in 2003 as a deputy borough commissioner in Brooklyn, followed by several years as borough commissioner in Brooklyn and in the Bronx before he was appointed the DOB's first deputy commissioner in 2011. Prior to joining the DOB, Fariello worked as a private-sector architect and plan examiner with the New York City School Construction Authority. A Queens resident, he holds a B.S. in Architecture from the New York Institute of Technology.

ENGINEER'S CORNER

The Effects of “Frost Jacking” on Building Façades



Cycles of precipitation at temperatures above freezing followed by temperatures below freezing expand the sizes of cracks, in a phenomenon known as “frost jacking,” eventually causing visible distress. GRAPHICS: SUPERSTRUCTURES ENGINEERS + ARCHITECTS

By **Paul Millman, PE, RA**
SUPERSTRUCTURES Engineers + Architects

Now that spring has arrived, it’s a good time for building owners and managers to assess the wear and tear on building façades due to the winter just past— and in particular to be aware of the effects of “frost jacking.”

In New York City, every time it rains or snows, water seeps into crevices, pores, and even micro-cracks in building façades and parapets, whether in concrete, brick and mortar, or other architectural materials. Unlike other liquids, water expands in size after it freezes. Cycles of precipitation at temperatures above freezing followed by temperatures below freezing expand the sizes of cracks, in a phenomenon known as “frost jacking,” eventually causing visible distress. This distress needs to be investigated to ensure that hazardous conditions haven’t occurred. As buildings age, these cracks can also become the source of water damage and even leaks into the interior of the building.

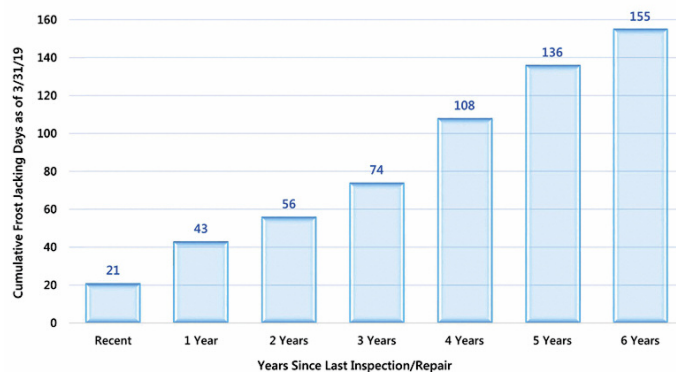
In our region about two-thirds of the days below freezing are freeze/thaw days, and about one-third of the days below freezing are frost-jacking days, so a colder winter will produce proportionally more frost jacking days. Cold or warm, frost jacking days persist into March and even April.

What is important with respect to potential damage to the building envelope is the accumulation of those days over time. **SUPERSTRUCTURES’ website** includes a **Frost Jacking Day Tracker**,

which shows this accumulation – as of March 31st 2019 there had been 155 in the past 6 years.

We’re using data provided to the **National Weather Service** by the weather station in Central Park. Since minimum and maximum temperatures are recorded at midnight, we look for days where the minimum temperature is 30 degrees F or lower preceded by days where the maximum temperature is 33 degrees F or higher, with rain and/or snow one or two days before.

The cumulative number of frost jacking days isn’t a precise indicator of façade behavior: there are other variables, such as age, condition, orientation, materials of construction, etc. But it may help you understand why your building may be experiencing new problems and why it needs to be periodically inspected.



SUPERSTRUCTURES’ Frost Jacking Day Tracker shows that as of March 31st 2019 there had been 155 such days in the past 6 years. (superstructures.com)



Skyline Celebrates Thirty Years of Building Restoration

May 2019 will mark **Skyline Restoration's** 30-year anniversary, a time for Skyline to visualize its future as well as reflect on its past. Since its inception in 1989, Skyline set out with a clear vision – to build and sustain a successful organization that respects the people and places it interacts with each day.

Today, this vision is still deeply rooted in every facet of its business; from the culture it nurtures, to the relationships it cultivates, and finally in the work it performs. It is this mentality that has allowed Skyline to embrace the responsibility of maintaining the safety and integrity of New York City and its inhabitants. But with this great

SKYLINE responsibility come even greater challenges. Challenges that Skyline has been able to meet and grow through over time, because it instructed and entrusted its people to do what is right. Challenges that have not only helped Skyline progress, but that have pushed the industry to evolve into what it is today.

From its start, Skyline has embraced the philosophy that excellent people produce excellent results, and so it has continuously invested in the resources its employees need to conquer these hurdles. In the coming years, Skyline has the opportunity to reach and interact with more people than ever before, making it imperative that it plans for tomorrow with the past in mind. Skyline Restoration is excited to take on the next 30 years alongside the organizations, colleagues and friends that have made the first 30 years a truly rewarding experience.

DHS increases number of H-2B visas for summer

NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA): The Department of Homeland Security has nearly doubled the number of temporary guest worker visas available this summer, according to *The Washington Post*. DHS and the Department of Labor plan to grant 30,000 more H-2B visas this summer in addition to the 33,000 that already were planned.

The H-2B visa allows foreign workers to come to the U.S. legally and work for several months at companies such as landscapers, construction companies, amusement parks or hotels. In 2018, about 80 percent of these visas went to people from Mexico and Central America.

There is bipartisan support in Congress pushing the administration to take action. A group of senators, including **Sen. Susan Collins** (R-Maine) and **Sen. Amy Klobuchar** (D-Minn.), sent a letter to the Trump administration urging it to let in more H-2B workers. DHS decided at the end of March to increase the number of visas offered and is expected to publish details in the Federal Register soon.

The H-2B program is supposed to grant 66,000 visas per year, with about half for the winter and half for the summer, but Congress gave the Trump administration the authority to issue an additional 69,000 this fiscal year. The Trump administration is on track to grant 96,000 H-2B visas this fiscal year. DHS ultimately decided to issue the extra 30,000 to people who have held H-2B visas before.

These visas typically are all gone within minutes of the application process opening. Many firms say they are in desperate need of workers and have no other options. The government says it received 30 times more H-2B visa applications this year compared with 2018. NRCA has been pushing for additional H-2B visas to address demand for workers and wrote to then-DHS Secretary **Kirstjen Nielsen** and Department of Labor Secretary **Alexander Acosta** to urge them to approve additional visas for 2019.

PROJECT

Façade Restoration at One Wall Street

The building at One Wall Street was constructed in 1929-31 as the corporate headquarters of the **Irving Trust Company**. This 50-story, limestone-faced Art Deco tower designed by the noted architect **Ralph T. Walker** of the firm of **Voorhees, Gmelin & Walker** is situated on what was considered the “most expensive real estate in New York”.

Limestone for the façade was shipped in 400 boxcar loads from quarries in Indiana, some weighing as much as 20 and 30 tons, and were carved to specific dimensions at a workshop in Long Island City.

A 30-story addition, created by the architectural firm of **Voorhees, Walker Smith & Haines** occupies the southern end of the lot and was added to the original building in 1963-65. The setbacks begin above the twentieth story, leading gradually to a narrow tower on the top 15 stories.

In 2016 **Skyline Restoration** was commissioned by **Gilbane Residential Construction LLC** to perform façade restoration at the building. A year later the project transitioned to **J.T. Magen & Company Inc.**

The scope of work consists of: Clean, repair and replace cracked and displaced limestone panels; create new window openings and install decorative headers, jambs and sills; install new limestone panels to accommodate the installation of new curtain glass

walls, by others.

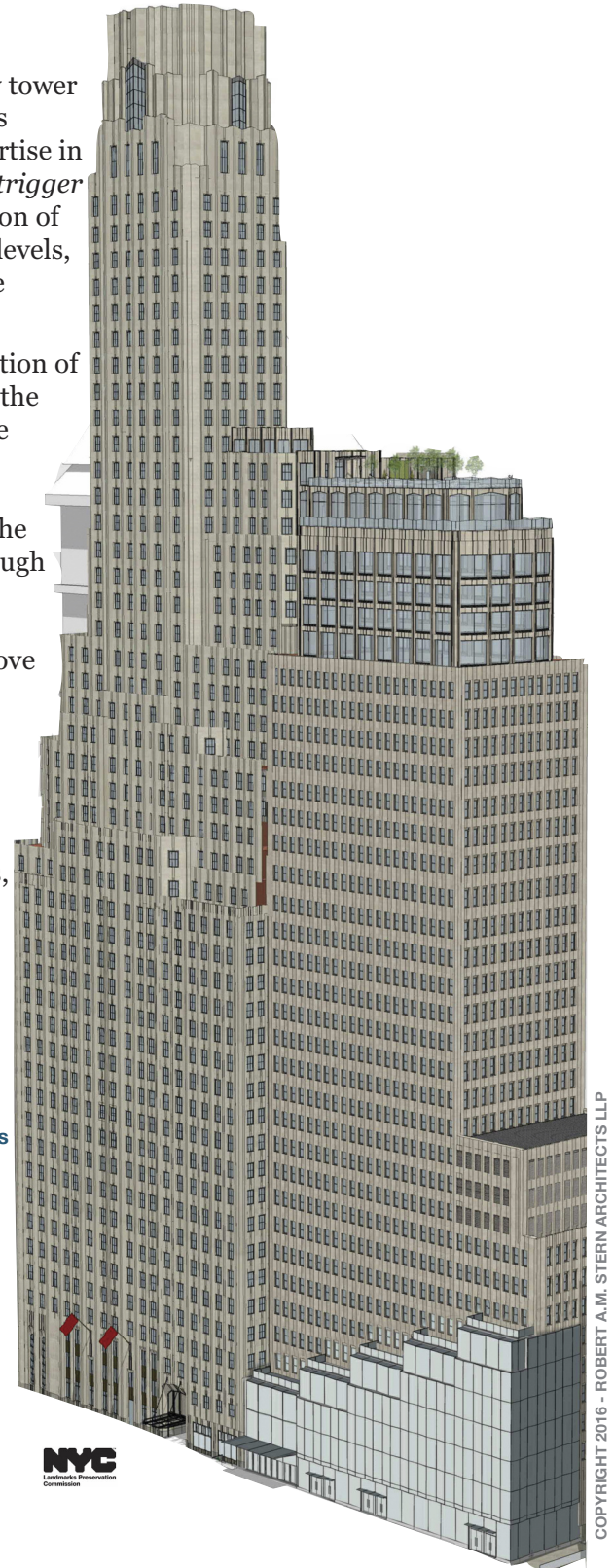
The access to the 50-story tower with narrow set-backs was challenging but with expertise in rigging, *rolling trolley outrigger scaffolds* and a combination of *c-hook scaffolds* at lower levels, the locations of work were successfully reached.

Noteworthy is the installation of *needle beam scaffolds* on the 28th floor of the Exchange Place and New Street elevations, by **Universal Builders Supply Inc.** The beams were installed through the window openings and four levels of supported scaffold were installed above the beam to provide safe access to the floors above.

Skyline Restoration catalogued and replaced over 200 Standard Indiana Limestone panels, sills and lintels, provided by **Traditional Cut Stone Ltd.**

The restoration project is scheduled for completion in 2021.

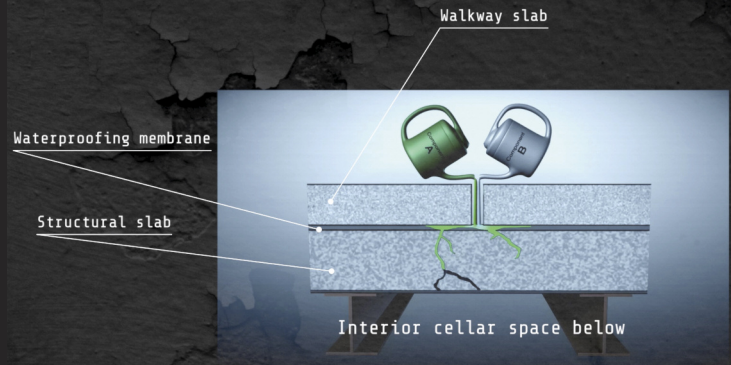
Developer: **Macklowe Properties**
 Construction Manager: **J.T. Magen & Company Inc.**
 Design: **Robert A.M. Stern Architects LLP**
 Architect of Record: **SLCE Architects**
 Project Architect: **Hoffmann Architects**
 Contractor: **Skyline Restoration Inc.**
 Account Executive: **Stephan Andreatos**
 Project Manager: **Wilson Cajilima**



NYC
 Landmarks Preservation
 Commission

Below-Grade Waterproofing: Gravity Feed and Pressure Injection Applications

CGI's gravity feed waterproofing application incorporates feeding the 2 water-like viscosity liquid components within the cleaned out expansion joints to create a gel barrier, followed by the application of new urethane caulking.



CGI Northeast's concrete gel injection waterproofing system is best known for its ability to eliminate water intrusion using a two-component hydrophilic resin system in below-grade structures without costly and disruptive exterior excavation common with traditional waterproofing applications. As a result of its beneficial methodology, property owners and managers can leverage CGI's technology to effectively tackle damaging waterproofing issues in creative ways. Today, we will explore two of CGI's unique applications – its gravity feed waterproofing application, along with its pressure injection waterproofing application.

CGI's **gravity feed waterproofing application** incorporates feeding the 2 water-like viscosity liquid components within the cleaned out expansion joints to create a gel barrier, followed by the application of new urethane caulking.

Typically, a vaulted sidewalk structure is comprised of a horizontal structural slab with a top-side waterproofing membrane and a walkway slab on top of the structural slab. The structure typically has expansion joints installed every 20 ft. or 4 flags apart, which are prone to deterioration as a result of freeze-thaw cycles and pedestrian traffic, giving way to rainwater to enter from the compromised membrane locations on top of the structural slab.

CGI's gravity feed waterproofing application begins with mechanics removing the deteriorated old caulking and debris from within these joints, allowing for two liquid components to be gravity fed at a longer setting time. As a result of the two components' water like viscosity, the combined solution chases through the opened joints like rainwater, allowing the resulting gel to form a band where the membrane was compromised. Subsequently, backer rod is inserted within the joints followed by caulking with the appropriate

urethane sealant. In the case of a granite slab, where the top sidewalk expansion joint runs to the cellar underside of the granite, CGI's mechanics insert oakum within the joint to act as a form, which then allows the gravity feeding waterproofing method to take action utilizing new urethane caulking.

The second application we'll touch upon is CGI's **pressure injection waterproofing method** through the underside of vaulted overhead horizontal slabs in sidewalks and plazas. This system can be implemented through the underside of the structural sidewalk slab through defined water intrusive cracks and joints.

A vaulted plaza location with sidewalk level pavers and/or planters is constructed in the same manner as a vaulted sidewalk (as described above), with the addition of soil on top of this membrane for planters/landscaping or a mud-set mortar for pavers. In this scenario, CGI's mechanics drill and inject through the underside of the concrete horizontal structural through the water entry points from the cellar ceiling slab below, allowing the two liquid components to seek the sources of water entry and seal them with the resulting gel. Using this application, the pavers and/or planters need not be removed, avoiding the need to repair or re-install a new top-side waterproofing membrane, which can be a big expense.

With the CGI waterproofing system the mechanics never need to drill to the exterior top side, which would puncture and further compromise the existing waterproofing membrane. This methodology is unlike grout injection with ports, where the grout injection holes are drilled all the way to the exterior side for the grout to form a foam curtain. Also grout injection does not have the water-like viscosity that CGI offers and cannot be utilized in this type of application.

(More info at www.cgineortheast.com)