

To: Mr. Tim Askin, City of Milwaukee HPC  
From: Ken Gowland RA, NCARB  
*MetroStudio, LLC*  
Re: Requested Narrative Construction/project information and proposed product information  
for the Scottish Rite Temple addition.  
Date: 02.03.17

Mr. Askin:

The following project information is provided as requested regarding the proposed redevelopment of the existing Scottish Rite Temple building located at 790 N. Van Buren Street. The legal property description is as follows:

*Parcel 1 of Certified Survey Map No. 4864 being part of the Southeast 1/4 of the Northwest 1/4 of section 28 Township 7 Range 22 East.*

This property is currently zoned C9F(A) "Office and Service District." There is currently no restriction on building height at this location under the current zoning.

### **Project Description**

The proposed project entails the redevelopment of the existing building to serve as a new Four (4) Star, independently operated hotel. The proposed program for the project includes:

- 230 Guest Suites
- Lobby/Guest service areas
- Restaurant and Bar Areas
- Auditorium
- Meeting/Conference Center
- Private Dining/ Club Rooms
- Workout and Spa Areas
- Operations Areas, Building Services
- Roof deck with outdoor Biergarten

The proposed redevelopment strategy currently utilizes the existing building and its primary existing assembly spaces to accommodate the public space functions of the hotel (lobby, bar(s) restaurant, meeting/conference center etc). A portion of the projected guest room totals will be located at the existing third floor level of the building with the majority of rooms accommodated in the proposed tower addition. The current tower addition is comprised of 14 floors with an average floorplate of 6,600 GSF (see provided typical floor plan, elevations and building section).

### **Anticipated Project Schedule**

Based on the current project timeline (and pending HPC approval) construction would commence in the 4<sup>th</sup> quarter of 2017. Anticipated construction duration is 16 months based on the current building program and design requirements. Please note that the proposed project timeline is subject to revision/modification pending actual durations for required municipal approvals, coordination with local utilities, weather conditions or other normative factors that may impact project delivery. Anticipated project completion would be 4<sup>th</sup> quarter 2018-first quarter 2019.

**Impact to Historic Materials: Existing Building Façade(s)**

The current redevelopment strategy has been selected as a viable means to minimize impact to the interior and exterior of the building while providing the minimum number of guest suited required to support the proposed variety of public spaces and functions currently planned for the hotel. Please refer to the provided elevation drawings for details. A summary of exterior modifications to the existing primary façades is as follows:

- Cleaning/restoration of existing stone work and masonry utilizing means, methods and products currently approved by the National Park Service.
- Removal of stained glass panels set at existing windows at the North and West façades (see elevation drawings for specific locations). Retained Stained glass panels to be incorporated into the design of the building interior. Existing windows to be have clear glass installed at these locations matching adjacent existing conditions. Please note that these panels appear to have been installed as part of the extensive art deco façade renovation in 1936/1937.
- Installation of vertical banner signage at existing building entrances (see elevations and renderings for additional information)
- Installation of point supported steel and glass canopies at the existing building entrances.
- Removal of the existing fabric awning at the N. Van Buren entrance (see elevations); this appears to be a fairly modern installation that has occurred in recent years.
- Cleaning, restoration of existing woodwork and leaded glass transoms, windows and sidelights at the existing building entrances.
- Removal of the existing signage currently obscuring the leaded glass transom units at the N. Van Buren entrance. This signage appears to have been installed at the same time as the adjacent fabric awning (exact age currently not known).

**Impact to Historic Materials: Tower Structure Coordination**

As previously mentioned the current proposed redevelopment strategy has been conceived as a means of maintaining the integrity of the existing historic façades as well as preserving the main interior historic interior spaces, materials and details.

This strategic coordination between the existing building structure and the proposed tower core and supports is facilitated by appropriating the existing stage, stage house and fly tower of the main auditorium. This existing double height volume of space within the building provides an ideal location for the proposed pile supported concrete foundation, building core and supports. Locating the tower in this manner allows for the following accommodations (see provided building section drawing for additional detail):

- Existing Auditorium and ornamental proscenium are maintained with accommodation for a reconfigured stage area suitable for corporate presentations, small ensemble performances, and limited theatrical performances.
- Proposed tower structure is located between two primary east/west load paths allowing for structural retention and minimized structural impacts to the existing building areas to the North and the South.
- Proposed tower structure footprint accommodates the existing 3<sup>rd</sup> floor vaulted ceremonial chamber located to the South of the proposed tower core and supports (see provided building section for additional details).

- By locating the tower in the open volume of the stage impacts to existing adjacent interior floor areas will be minimized, in this sense the proposed tower should be understood as an infill of an existing open volume within the building.
- Proposed tower location will accommodate the existing ornamental assembly spaces, chapel and meeting rooms located at the building interior areas fronting N. Van Buren and East Wells Street at basement level and floors 1-3.

Based on the current projected construction anticipated impact to building features may be limited to the following conditions:

- Existing theatrical rigging lighting, gridiron and fly tower located above the existing stage will be removed and current the open volume of the existing stage house to be occupied by tower supports and core.
- Existing basement areas beneath stage level will be demolished to facilitate installation of new pile supported foundation (time periods are various as the basement areas have undergone a series of renovations over its history).
- Existing roof areas above the existing stage will be removed to accommodate tower support columns and core. This roof opening will also be required for anticipated overhead construction access. Adjacent retained spaces to be protected throughout construction activities.
- Existing roof to have a new structural roof deck installed above existing condition as required to accommodate currently planned roof deck and Biergarten (see provided roof top renderings and building section)
- A construction access opening is currently planned along the existing Eastern/Alley façade. Removed masonry materials to be reinstalled as required with matching masonry materials provided as may be required.
- The existing steel mechanical platform located at the eastern alley may be removed temporarily during construction.
- Existing parapet cap material at the existing roof may be removed and reinstalled as part of the planned waterproofing improvements and roof modifications. These existing material are planned to be retained and reinstalled as required.
- Existing roof materials and framing will be removed as required to accommodate the extension of the existing stair and elevator located at the northwest building corner (east of the existing conical turret). See roof plan and building elevations/sections for additional information. This proposed penthouse location is based on the locations of existing stairs and elevators within the building below.

### **Proposed Tower Design and Materiality**

The proposed tower design was conceived as a sympathetic yet modern addition to the existing building. As previously described the tower location was determined as a potential solution to mitigate impacts to the existing building interior and exterior. This project does employ a “façade-ectomy” approach that retains a building that is merely a shell of its historic self.

Through strategic integration the proposed addition seeks to maintain the integrity of this landmark building while positioning this property in as an economically sustainable component of Downtown Milwaukee.

It is interesting to note that the existing building in its current form is the result of several extensive renovations, modifications and additions that have occurred over the history of the building:

- **1889:** Building originally constructed as Congregational Church in Richardsonian Romanesque style.
- **1912:** A new approximately 24,000 SF addition is built along the southern side of the building
- **1936/1937:** The entire building façade is modified and “modernized” to the current Art Deco manifestation.

In many respects the proposed addition can be understood as the next chapter in the building’s long history in Downtown Milwaukee.

The proposed tower addition seeks to differentiate itself while referencing the forms and scales represented in the existing façade in a sympathetic manner. Notable features of the proposed tower design include:

- Conception of the tower as a lightweight glass “Lantern”. The addition is conceived both as a contrasting element to the ponderous stone historic building and as a symbolic architectural reference to traditional Masonic allegories of the Lantern as illuminating “truth and knowledge”.
- By providing a reveal/separation between the proposed tower and the existing roof a visual/spatial separation is created that allows for a more independent reading of the existing building from the tower.
- The tower footprint setbacks from the edges of the existing roof serve to visually reinforce and emphasize the original street level façade of the existing building and reinforce the original scale of the building.
- The vertical grain/orientation of the proposed fenestration references the scale of the existing stacked windows and fluted stone paneling represented at the existing facades.
- The proposed frameless glass curtain wall provides for a clean, concise articulation that does not compete with the ornamental stonework and historic detailing of the principal facades.
- The subtle undulating façade with diagrid structure further reinforces the formal concept of the “Lantern” while differentiating the addition from the more normative office/commercial building fabric of downtown.
- The use of deep bronze metal components for the proposed metal cladding, fenestration hardware and steel supports references and matches the existing fenestration in the existing building.
- The use of engineered stone veneer paneling at the proposed building core areas and mechanical screens references the existing stone at the primary facades and helps create a visual/material relationship between the tower and the existing building.
- By adopting a contemporary yet sympathetic architectural vocabulary the addition marks its time and place in history and allows for a clear understanding of the historic development pattern of the property.

Material specifications for the primary proposed components of the tower are attached to this document. These materials are representative of the current proposed design final manufacturers may vary depending upon product availability.

**METROSTUDIO**  
NEW ORLEANS  
architecture planning interiors

Should you have any questions or require additional information please do not hesitate to contact this office.

Best Regards,

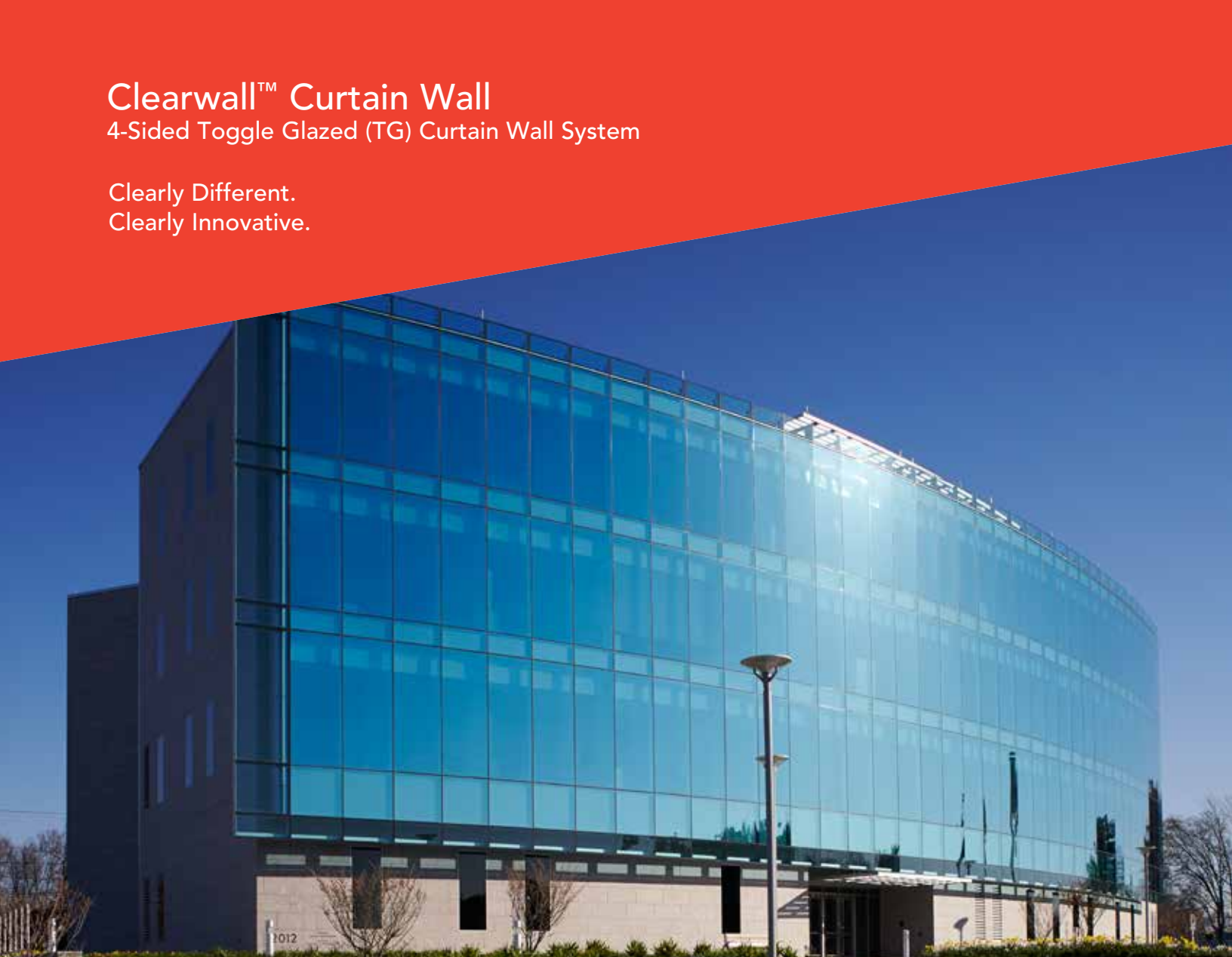
A handwritten signature in black ink, appearing to read 'K. Gowland', written in a cursive style.

Kenneth Gowland RA  
MetroStudio

# Clearwall™ Curtain Wall

## 4-Sided Toggle Glazed (TG) Curtain Wall System

Clearly Different.  
Clearly Innovative.



Architect: Gund Partnership, Cambridge, Massachusetts, USA  
Glazing Contractor: Ipswich Bay Glass Co. Inc., Rowley, Massachusetts, USA  
Photographer: © Greg West

Today, a growing number of architects are designing buildings with sleek, uninterrupted all-glass façades. Clearwall™ curtain wall, an innovative 4-sided Toggle Glazed (TG) system\*, delivers this highly desired aesthetic for low-rise applications. Clearwall™ curtain wall strikes a balance of form and function through its groundbreaking toggle design, which reduces installation labor, simplifies on-site logistics and enhances safety while providing superior aesthetics. Featuring inspired design, tight construction and brilliant results, Clearwall™ curtain wall is clearly different and clearly innovative.

### Aesthetics

Now aesthetics have a clear option when they want an admired monolithic look for low-rise applications. Kawneer's Clearwall™ curtain wall, an outside glazed system, achieves the desired appearance of a 4-sided structural silicone glazed (SSG) system using a unique toggle assembly that directly captures glass. And because it was developed specifically with low-rise commercial and institutional building applications in mind, Clearwall™ curtain wall provides the same aesthetic as 4-sided SSG, point-supported glass or unitized curtain wall systems at a fraction of the cost. The innovative curtain wall system also features various mullion depths for increased design flexibility based on project requirements.

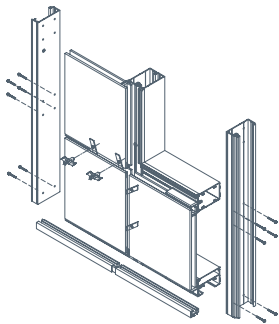
\* Multiple patents pending



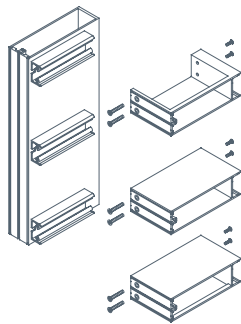
## Fabrication and Installation

Clearwall™ curtain wall's greatest efficiency is achieved by eliminating the field application of structural silicone and its associated cure times. During glazing, the toggle assemblies mechanically capture the inboard lite of adjacent recessed spacer insulating glass units. Other glazing options allow toggles to capture a metal interface attached to a regular insulating glass unit. Additionally, straight cuts without notching simplify fabrication, while screw spline construction allows frames to be pre-assembled in the shop and shipped ready to glaze to the job site, reducing on-site handling and labor time. Shear block construction is also available with deeper mullions and optional steel reinforcement for higher free span applications.

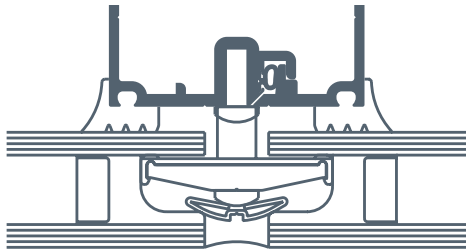
### Screw Spline System



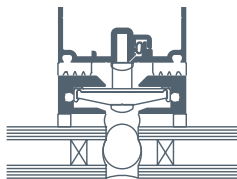
### Shear Block System



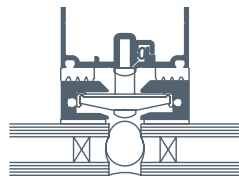
Clearwall™ curtain wall offers three Toggle Glazing (TG) options (Screw Spline System shown)



**1. Clearwall™ SS (Screw Spline) or SB (Shear Block):** In this standard glazing option, toggles capture the inboard lite of 1-1/8" recessed spacer insulating glass units†. This combination completely eliminates the use of any structural silicone, thereby saving costly application and cure times.



**2. Clearwall™ SSI (Screw Spline Interface) or SBI (Shear Block Interface):** In this glazing option, toggles capture a metal interface, which is shop-applied to standard 1" insulating glass with structural silicone.



**3. Clearwall™ SSIT (Screw Spline Interface Tape) or SBIT (Shear Block Interface Tape):** In this glazing option, toggles capture a metal interface, which is shop-applied to standard 1" insulating glass with 3M™ VHB™ Structural Glazing Tape (SGT)††.

† Recessed spacer by qualified glass supplier  
†† 3M and VHB are trademarks of 3M Company

Kawneer Company, Inc.  
Technology Park / Atlanta  
555 Guthridge Court  
Norcross, GA 30092

kawneer.com  
770 . 449 . 5555

## Performance

For enhanced energy efficiency, the system accommodates 1-1/8" and 1" insulating or laminated glass, which provides increased thermal performance and enhances STC and OITC (sound resistance) performance. Clearwall™ curtain wall has been tested in accordance with North American performance standards, including seismic, thermal cycling and dynamic water.

### CLEARWALL™ CURTAIN WALL – PERFORMANCE TEST STANDARDS

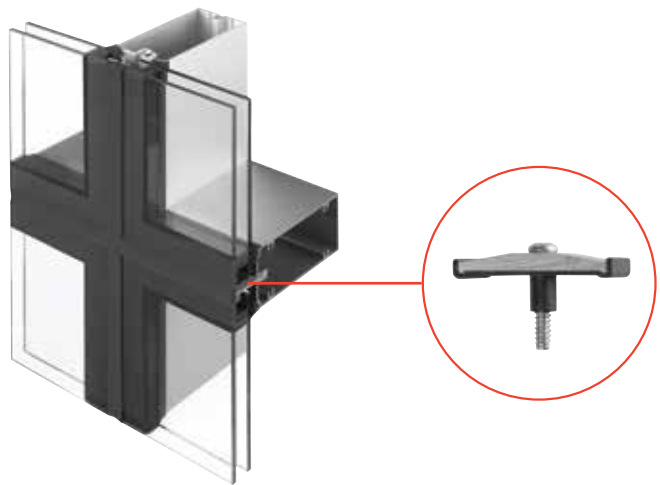
Air Infiltration	ASTM E283
Water – static	ASTM E331
Water – dynamic	AAMA 501.1 AAMA 520
Structural – uniform wind load	ASTM E330 & TAS 202
Thermal Cycling	AAMA 501.5
Thermal Transmittance – U factor	AAMA 1503 AAMA 507 NFRC 100
Condensation Resistance (CRF, I, CR)	AAMA 1503 CSA 440 NFRC 500
Overall Solar Heat Gain Coefficient (SHGC & VT)	NFRC 200 AAMA 507
Sound Transmission Class (STC, OITC)	ASTM E90 ASTM E1425
Seismic	AAMA 501.4

### For the Finishing Touch

Architectural Class I anodized aluminum finishes are available in clear and Permanodic® color choices.

Painted finishes, including fluoropolymer, that meet AAMA 2605 are offered in many standard choices and an unlimited number of specially designed colors.

Solvent-free powder coatings add the "green" element with high performance, durability and scratch resistance that meet the standards of AAMA 2604.



Exterior view of Clearwall™ SS curtain wall with toggle





Ordinary glass is green with envy.

## Vision Glazings

**Starphire®** Ultra-Clear Glass by PPG provides commercial designers with a new and unprecedented option for all their vision glass applications. For entire building facades or retail showroom windows, to maximize light transmission and bring an uncommon brightness and clarity to the interior, no commercially available glazing product comes close to the pristine personality of **Starphire** glass.

### **Starphire vision glass is clearly remarkable:**

- Maximum transparency – 5% higher Visible Light Transmittance than ordinary clear glass (in a 1-inch IG unit)
- High fidelity color transmission – undistorted view of exterior
- New level of visual brightness and clarity
- Jewel-like brilliance and character
- Easily fabricated to required specifications

For vision glazings in which enhanced energy performance is required, **Starphire** glass can be combined with solar control, low-e coatings to satisfy energy requirements while maintaining the unique ultra-clear visual character of **Starphire** glass.

**Starphire** glass is available in thicknesses from 2.5 mm to 19 mm and is stocked regionally to assure consistent supply reliability. For **Starphire** glass samples or a list of distributors, contact our Solutions Hotline at 1-888-PPG-IDEA, or visit [www.ppgstarphire.com](http://www.ppgstarphire.com).

All PPG architectural glass is **Cradle to Cradle Certified™**

**PPG IdeaScapes®** Integrated products, people and services to inspire your design and color vision.

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7073 07/13 5M

## Ultra-Clear Glass



**Tokyo Kasai Rinkai Park View Visitors Center**

Chiba Prefecture, Japan  
(Complete project details on our web site)

*The ultra-clear character of **Starphire** glass is exemplified in this Tokyo visitor center project. The difference between the unglazed lower-level breezeway and the **Starphire**-glazed areas is nearly imperceptible. Contrast that to the green appearance of the glass hand rails which are glazed with conventional clear glass.*



**Alcoa Corporate Center**  
Pittsburgh, PA

(Complete project details on our web site)

***Starphire** glass was the choice of both owner and architect to bring the brightness and color fidelity of the outdoors into this magnificent new structure. For energy efficiency, **Starphire** glass is combined with a solar control, low-e coating to clad the entire exterior facade.*



**IdeaScapes®**  
Glass • Coatings • Paint

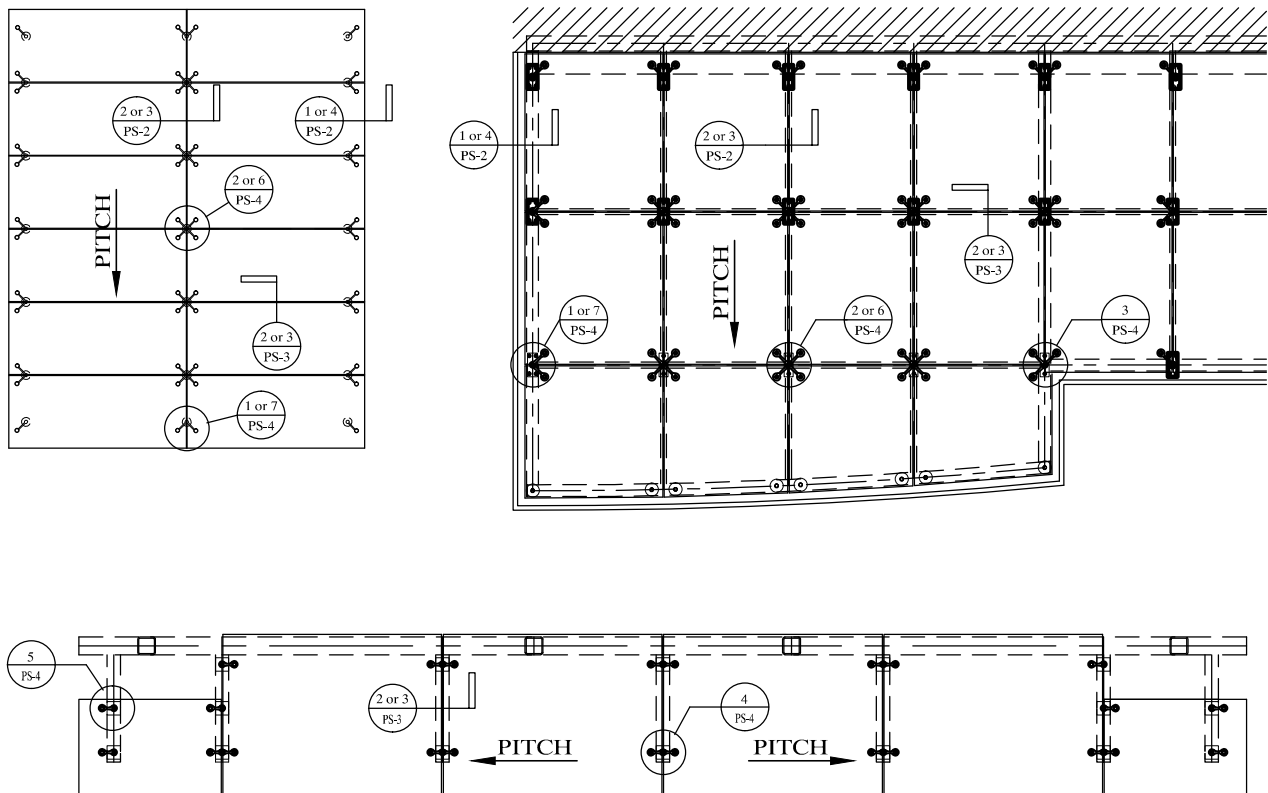


# GLASS SYSTEMS: POINT SUPPORTED GLAZING

As an alternative to the conventional skylight systems, Super Sky offers a Point-Supported Glazing (PSG) option. This type of skylight requires minimal framework, other than the primary steel structure (by others), and solely relies on precision machined stainless steel "spider fittings" and "rotules" to support the glazing. This type of system has no exterior pressure plates, thereby resulting in a flat glass plane allowing for unobstructed flow of water off the skylight and extremely clean aesthetics.

In a PSG system, rotules are threaded through holes in the glass (pre-drilled by the glass fabricator). The rotules are then attached to spider supports, that in turn are attached directly to the supporting steel (by others). If the support structure is level, the spider support may vary in height to give the skylight the pitch it needs to shed water. If the steel structure is pitched, then the spider supports will all be the same height and the skylight will follow the established pitch of the steel.

Super Sky offers its time-honored experience to create elegant and competitively priced PSG systems using either single laminated safety glass or insulating/laminated safety glass. PSG designs are flexible, customizable and unlimited in scope. Super Sky's engineers and project teams can convert your design intent into reality. Our erection crews will install the system, or materials can be purchased for installation by others.



PLAN VIEWS



SUPER SKY PRODUCTS ENTERPRISES, LLC

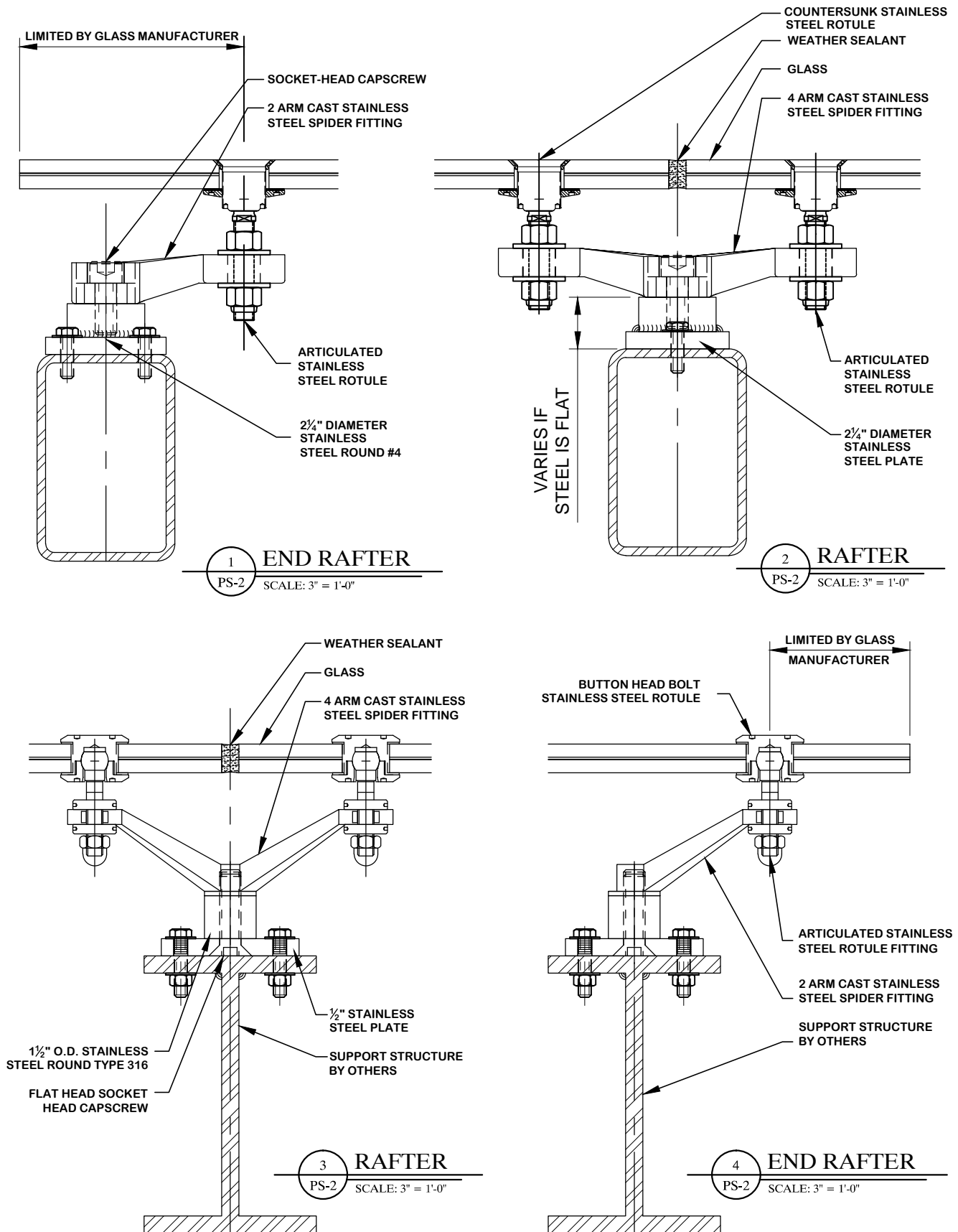
[www.supersky.com](http://www.supersky.com)

10301 N. Enterprise Drive  
Mequon, Wisconsin 53092

Phone: 262.242.2000  
Fax: 262.242.7409

PS-1

# GLASS SYSTEMS: POINT SUPPORTED GLAZING



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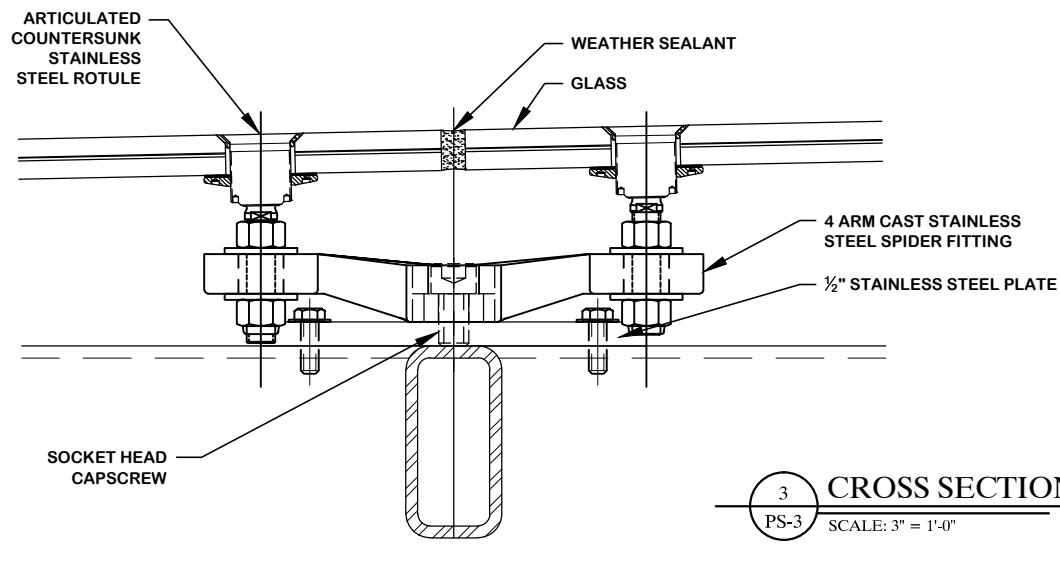
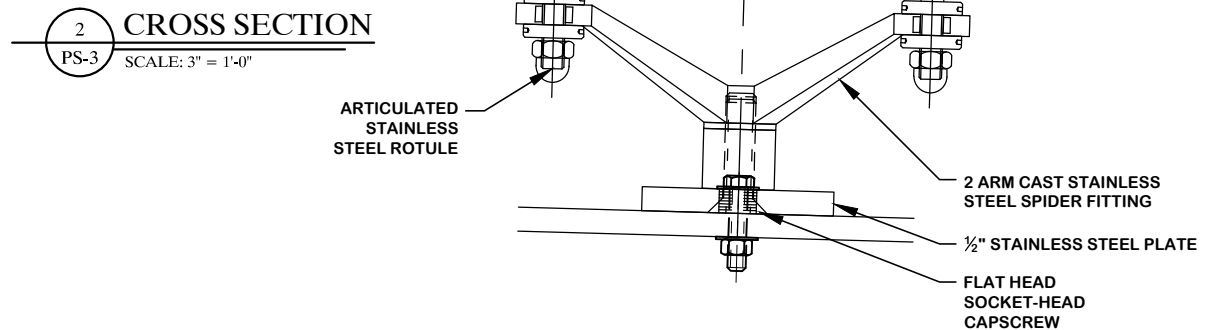
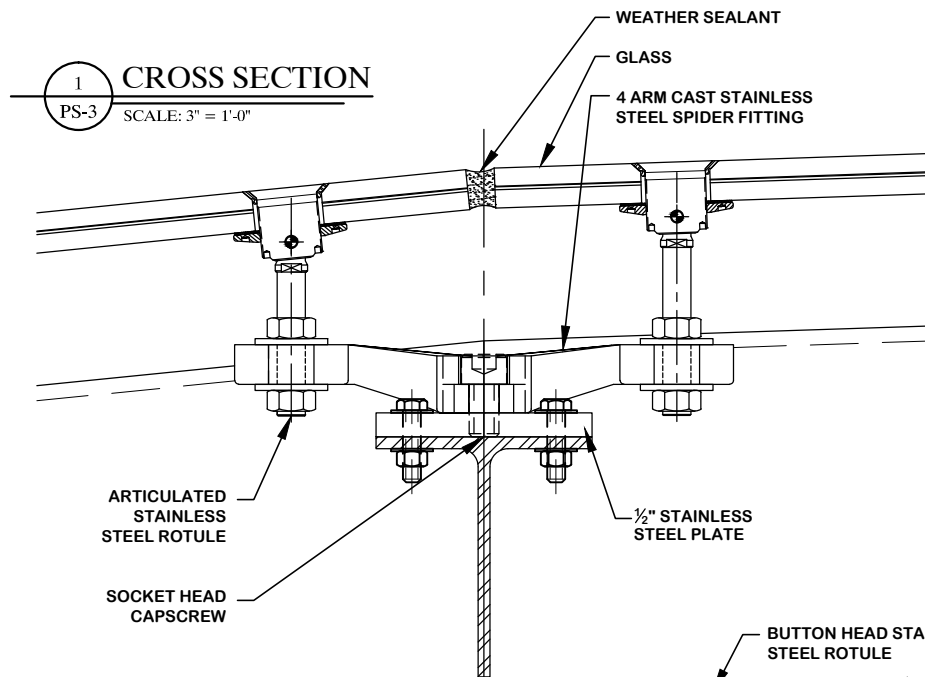
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# GLASS SYSTEMS: POINT SUPPORTED GLAZING



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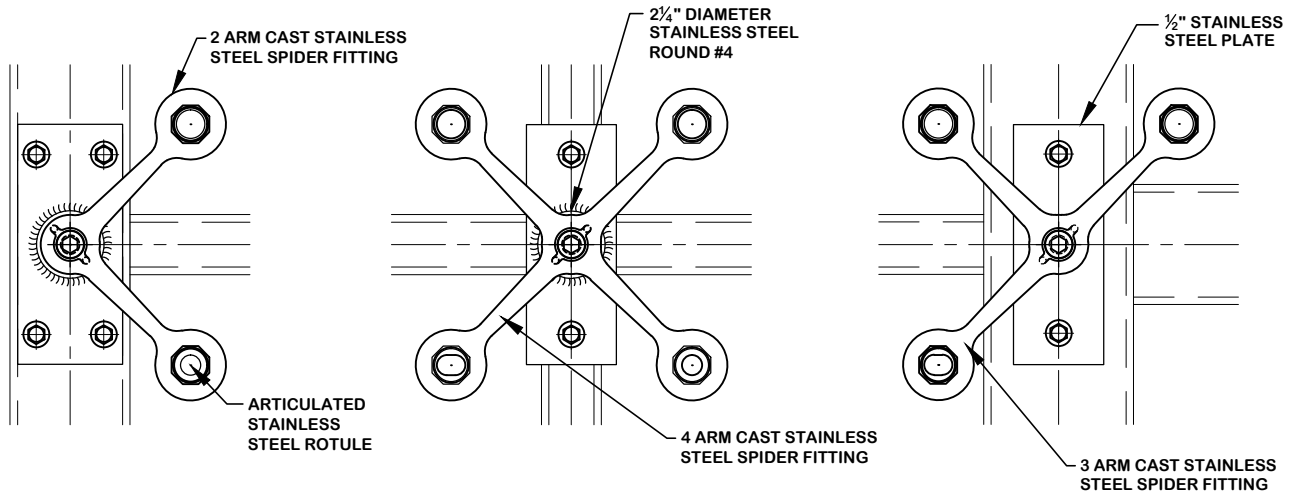
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**PS-3**

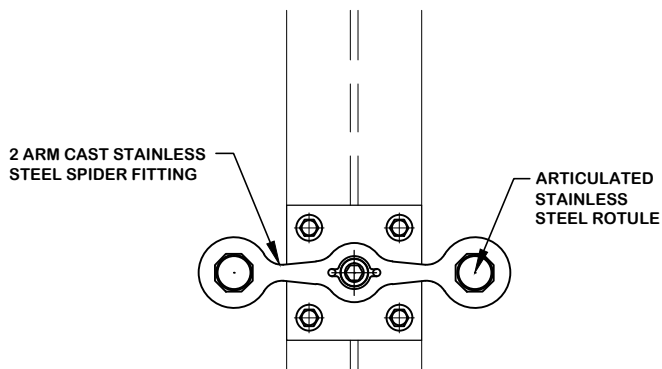
# GLASS SYSTEMS: POINT SUPPORTED GLAZING



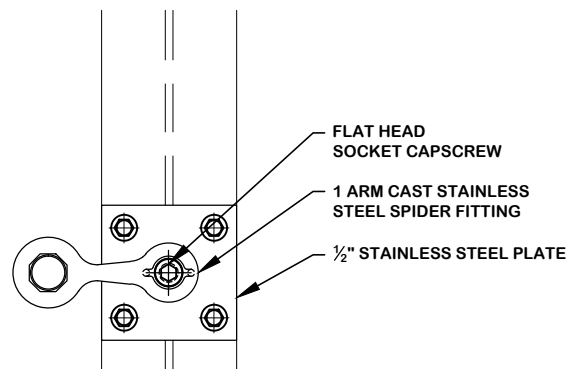
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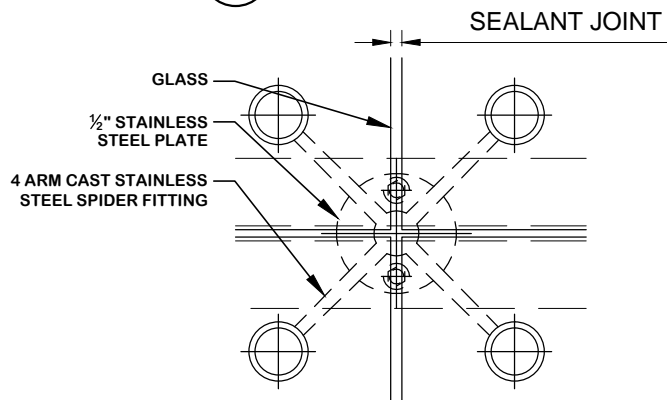
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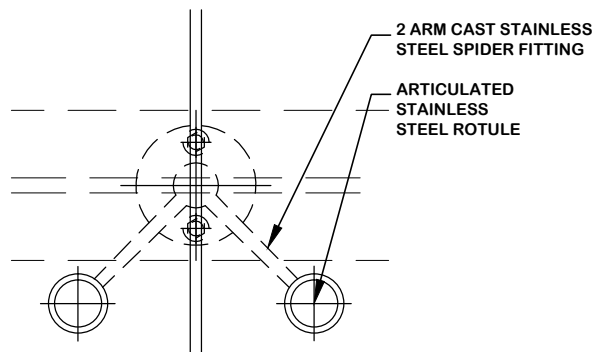
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7 CONNECTION  
DETAIL  
PS-4 SCALE: N.T.S.

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**Reynobond®**  
Architecture

Reynobond® Aluminum  
Composite Material





## Versatile Solutions for Any Project.

Whether you're an architect, engineer, designer, fabricator, installer or contractor, each new project presents a fresh set of challenges. And your ability to meet those unique challenges is how your clients measure your work. That's why we are committed to finding new ways to help you achieve your vision with the beauty, affordability and ease of installation of Reynobond®.

Discover stylish and functional cladding solutions for both interior and exterior applications with our innovative products, including Reynobond Aluminum Composite Material, Reynobond Natural Metal Composite Material, Reynobond with KEVLAR® hurricane impact panels, Reynobond with EcoClean™, Reynobond Design Line, Anodized Reynobond and Reynolux®. And each of our product offerings provide the durability to ensure your project will look pristine for years to come—with minimal maintenance.

We're constantly extending our range of support services, such as comprehensive CAD drawings, custom design solutions, on-site consultation and more. Discover how we can help expand your design possibilities with many versatile solutions for any project—from inspiration to implementation.

Chihuahua's Businessmen Foundation (FECHAC) Regional Office  
Ciudad Juárez, Chihuahua, Mexico



# Reynobond® – Make a Statement.



## Exceptionally Flat

The strong, rigid construction of Reynobond® composite material consists of a polyethylene or fire-retardant compound core between two sheets of aluminum, brushed aluminum, zinc or copper. This creates a flat surface that virtually eliminates dimpling, buckling and oil canning—even retaining its flatness after folding!

## Daringly Formable

Achieve small-radius curves, reverse curves, angles, tessellated geometric shapes and other contours you never thought possible. Reynobond is easily routed, drilled, punched, cut, bent, curved and formed.

## Distinctively Colorful

Get outstanding color and gloss retention in a virtually limitless range of hues. Standard and custom finishes are available, including anodic colors and even nature-inspired Design Line advanced polymer finishes. Continuous coil application ensures consistent, long-lasting color.

## Surprisingly Light

The light weight of Reynobond allows a wide variety of design options, and installation is quick and easy. For renovation work, cladding can often be installed with little or no alteration to existing structural elements.



United Therapeutics Corporation  
Silver Spring, Maryland



## Easily Integrated

Reynobond integrates easily with the curtain wall provided by most manufacturers. The result is a seamless look for a building's façade – with the added design characteristics that only Reynobond can offer.

## Beautiful Accents

Reynobond's family of Natural Metal products allows every component of the structure to become a design element. Reynobond's strength, weight and formability allow you to achieve designs that are not feasible with other materials.

## A Perfect Match

Reynolux® Aluminum Wall Panels and Flashing Sheets are the perfect complement to our family of Reynobond Aluminum Composite Material products. The ability to combine these high-quality products in pre-matched or custom colors gives you a number of distinct design advantages.

## Safe & Compliant

Reynobond is designed and tested to meet safety and environmental building codes around the world. It is available with either a polyethylene (PE) core or a fire-resistant (FR) core material, both of which provide the flatness and formability required for your most demanding applications.





## Reynobond® Natural Metals – Strikingly Beautiful. Naturally Bold.

Get all the functional benefits of Reynobond® along with the aesthetic appeal of nature with our Reynobond Natural Metals. Our Brushed Aluminum, Zinc, and Copper composite panels give you bold options for interior and exterior walls and accents. And since it's Reynobond, you get the flatness and formability you demand that may not be possible with other building products.

### **Reynobond Natural Brushed Aluminum**

Reynobond Natural Brushed Aluminum combines the natural beauty of brushed aluminum with a high-performance protective coating to meet your consistency and durability requirements. It's ideal for exterior architectural wall panel applications, and is fingerprint resistant, making it perfectly suited for interior applications.

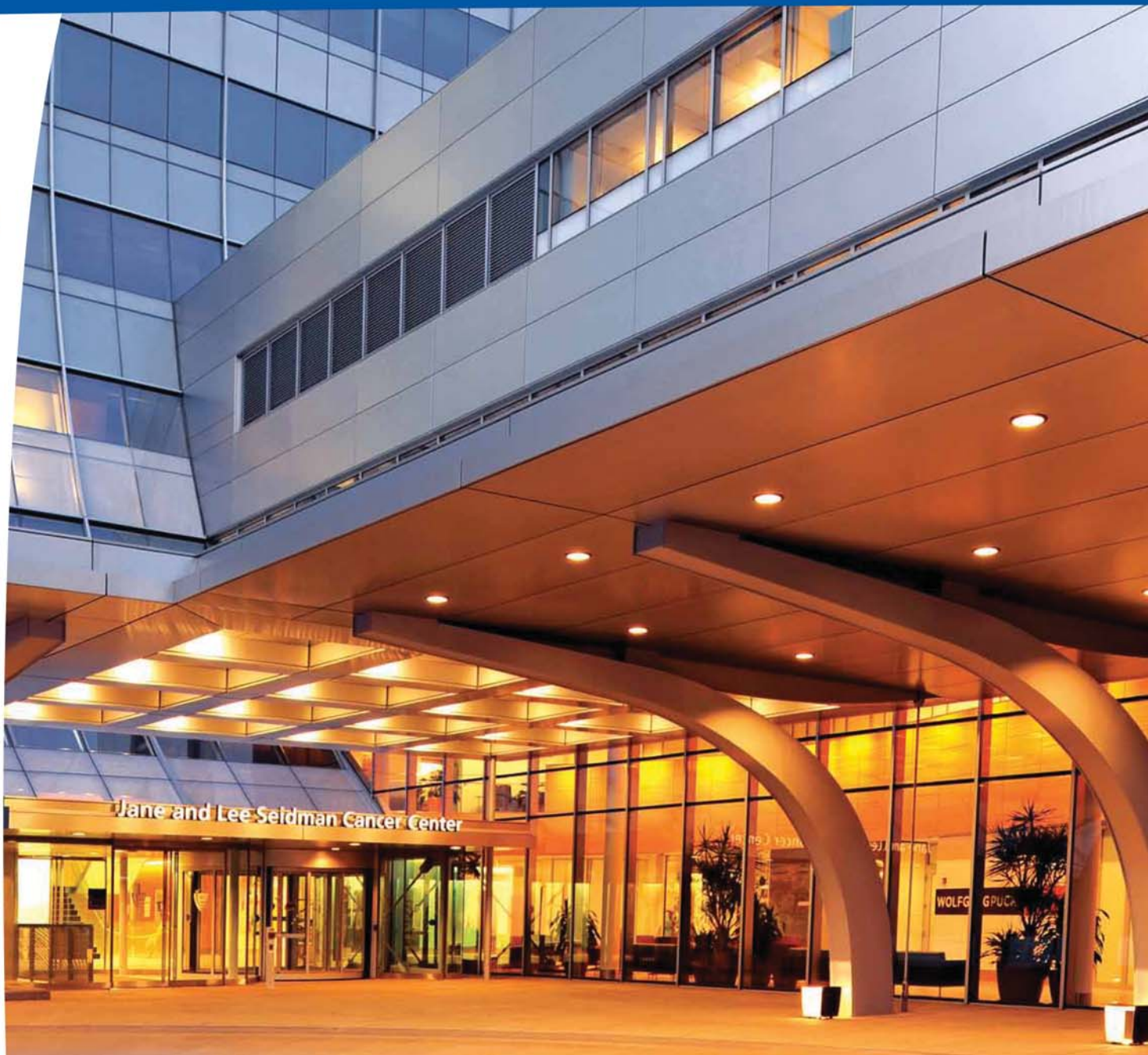
### **Reynobond Zinc Composite Material**

Made with a metal-zinc alloy that's stronger than common zinc, ZCM weathers naturally with no coatings required – scratches and imperfections melt away over time. It greatly expands the number of architectural applications where zinc façades and accents can be used on your building's envelope.

### **Reynobond Copper**

Created specifically for use as an interior or exterior wall accent panel, Reynobond Copper blends the natural beauty of copper with the flatness and formability of composite panels. With a natural green patina that develops over time, Reynobond Copper lends a classic look to any architectural project.

University Hospitals Seidman Cancer Center  
Cleveland, Ohio





## Innovation Meets Functionality.

### **Reynobond® with KEVLAR® – Lightweight. Flexible. Impact resistant.**

When you combine the benefits of Reynobond® with the impact-resistant strength of KEVLAR® you get the first and only aluminum composite panel system that eliminates the need for protective heavy backer materials such as plywood, steel or concrete behind the panel system. DuPont™ KEVLAR® is five times stronger than steel on an equal weight basis, making Reynobond with KEVLAR® the only standalone aluminum composite material that meets the stringent requirements of the Miami-Dade County Building Code. It's the only light, flexible aluminum composite panel that can withstand hurricane-propelled debris and similar types of impact.



### **Reynobond with EcoClean™ – Innovation for a greener, cleaner planet.**

EcoClean™ is an advanced titanium dioxide coating that, when applied to Reynobond, reacts with NOx (nitrogen oxide), the primary component of smog, breaking it down into harmless nitrates. This proprietary process enables the slightest bit of moisture, such as light rain or morning dew, to wash away organic particles. EcoClean™ is a photocatalytic coating that also destroys organic pollutants in reaction with UV light. Architects and building owners who are looking for positive ways to impact the environment and keep building surfaces looking fresh over time will find Reynobond with EcoClean™ the smart, innovative way to combine form with function.



### **Reynobond Face Fastened Solution – Utility meets style.**

Now you can get all the durability, versatility and flexibility of Reynobond in an economical face fastened solution. It's perfect for new and retrofit projects less than 40 feet (three stories) high. Since it can withstand extreme temperatures and humidity, there are no geographic limitations on where Reynobond Face Fastened Solution can be used. And it's 100% recyclable.



## Reynobond Architectural Finishes – Variety and Durability.

### **Colorweld® 500 – High-performance color that lasts.**

Reynobond Aluminum Composite Material is protected and colored with enhanced, high-performance Colorweld® 500 coatings, the premier architectural coatings for metal. These finishes feature 70% Kynar 500®/Hylar 5000® polyvinylidene fluoride (PVDF) resins with Fluoropolymer technology, coil coated to ensure the highest color uniformity and quality. They provide excellent flexibility and film adhesion for forming and offer superior resistance to humidity, impact, salt spray, pollution and abrasion. With a 30-year finish warranty, Colorweld 500 coatings exhibit outstanding color and gloss retention and improved hardness and durability.



### **Reynobond Design Line – Nature. Now available in aluminum.**

Now you can enjoy the aesthetic appeal of wood, mineral, granite, stone and natural patina with the durability, flexibility and strength of Reynobond in our nature-inspired Design Line finishes. These striking advanced polymer finishes create endless design possibilities, for both interior and exterior applications. All Design Line coatings are exterior grade and are backed by a 20-year finish warranty.



### **Anodized Reynobond – Beauty that's much more than skin deep.**

Discover a harder, smoother surface with superior resistance to abrasion and corrosion with our Anodized Reynobond. This environmentally friendly product features an inorganic anodic coating that fully integrates with the aluminum for total bonding and is unaffected by ultraviolet rays. Anodized Reynobond is available in a variety of standard and custom colors.



# General Technical Data

## Reynobond® ACM Technical Overview

Property	Units	RB120PE-3 mm	RB160PE-4 mm	RB240PE-6 mm	RB160FR-4 mm	Reynobond® with KEVLAR®
<b>Thickness</b>	Inches mm	0.118 3.0	0.157 4.0	0.236 6.0	0.157 4.0	0.157 4.0
<b>Weight</b>	lb/ft² Kg/m²	0.94 4.59	1.12 5.47	1.51 7.37	1.53 7.48	1.10 5.37
<b>Min. Bond Strength ASTM D1781</b>	in-lb/in Nm/m	25 178	25 178	25 178	22.5 100	25 178
<b>Flatwise Shear ASTM D1002</b>	lb/in² Mpa	1,297 8.94	1,221 8.42	2,055 14.17	928 6.4	735 5.07
<b>Allowable Bending Stress (1)</b>	lb/in² Mpa	11,500 79.3	11,500 79.3	11,500 79.3	11,500 79.3	11,500 79.3
<b>Coefficient of Expansion ASTM E228</b>	in/in/F mm/mm/C	1.31x10 <sup>-5</sup> 2.36x10 <sup>-5</sup>	1.31x10 <sup>-5</sup> 2.36x10 <sup>-5</sup>	1.31x10 <sup>-5</sup> 2.36x10 <sup>-5</sup>	1.31x10 <sup>-5</sup> 2.36x10 <sup>-5</sup>	1.31x10 <sup>-5</sup> 2.36x10 <sup>-5</sup>
<b>Stiffness (EI)</b>	lb in²/in Mpa cm²/m	807 9.1x10 <sup>5</sup>	1,140 12.8x10 <sup>5</sup>	1,896 21.4x10 <sup>5</sup>	1,262 14.3x10 <sup>5</sup>	776 8.7x10 <sup>5</sup>
<b>Flexural Modulus Aged per ASTM C393 (2)</b>	lb/in² Mpa	8.3x10 <sup>6</sup> 57.2x10 <sup>3</sup>	6.0x10 <sup>6</sup> 41.4x10 <sup>3</sup>	4.0x10 <sup>6</sup> 27.6x10 <sup>3</sup>	6.7x10 <sup>6</sup> 46.2x10 <sup>3</sup>	4.08x10 <sup>6</sup> 28.2x10 <sup>3</sup>
<b>Moment of Inertia</b>	in⁴/in cm⁴/m	0.97x10 <sup>-4</sup> 0.159	1.89x10 <sup>-4</sup> 0.310	4.58x10 <sup>-4</sup> 0.751	1.89x10 <sup>-4</sup> 0.310	1.89x10 <sup>-4</sup> 0.310
<b>Section Modulus</b>	in³/in cm³/m	1.65x10 <sup>-5</sup> 1.065	2.41x10 <sup>-5</sup> 1.555	3.88x10 <sup>-5</sup> 2.503	2.41x10 <sup>-5</sup> 1.555	2.41x10 <sup>-5</sup> 1.555
<b>Tensile Yield ASTM D638</b>	lb/in² Mpa	8,300 57.23	6,405 44.16	5,314 36.64	6,367 43.90	15,700 108.25
<b>Flatwise Tensile ASTM C297</b>	lb/in² Mpa	1,483 10.22	1,371 9.45	1,099 7.58	961 6.62	513 3.53

(1) Allowable stress may be increased by 33% for wind load.

(2) Reynobond with KEVLAR® flex modulus fabric side up.

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## Paint Finish Quick Specification Reference

	CW 500/CW 500XL	DURAGLOSS® 5000	DURAGLOSS® 3000	CORAFLO®	FLUOROBRITE™	COLORWELD® 100
<b>Warranty</b>	30 yrs.	15 yrs.	10 yrs.	20 yrs.	5 yrs.	5 yrs.
<b>Resin Type</b>	70% PVDF	Modified Polyester	Modified Polyester	FEVE	FEVE	Polyester
<b>UV Performance</b>	*****	****	***	***	**	*
<b>Gloss Range</b>	20% – 35%	25% – 35%	20% – 80%	20% – 35%	20% – 80%	20% – 80%
<b>Colors</b>	Opagues Metallics	Opagues Metallics	Opagues Metallics Bright Colors	Opagues Metallics	Bright Colors	Opagues Metallics Bright Colors
<b>Economics</b>	\$\$\$\$	\$\$\$	\$	\$\$\$\$\$	\$\$\$\$\$	\$

## Product Availability

	Thickness	Standard Widths**	Standard Lengths*
<b>RB120PE-3 mm</b>	3 mm (0.118")	Consult for program widths including: 1000 mm (39.37") 1220 mm (48") 1270 mm (50") 1295 mm (51") 1524 mm (60") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")
<b>RB160PE-4 mm</b>	4 mm (0.157")	1270 mm (50") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")
<b>RB240PE-6 mm</b>	6 mm (0.236")	1270 mm (50") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")
<b>RB160FR-4 mm</b>	4 mm (0.157")	1270 mm (50") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")
<b>Reynobond with KEVLAR®</b>	4 mm (0.157")	1270 mm (50") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")

\*Consult for standard lengths. \*\*Consult for color & finish availability.

## Building Code Recognition

Southwest Research Institute Design Listing	No. 01.25000.02.197
IBC 2009	MEA 75-91-M, MEA 390-99-M
ICC-ES AC25 Report	Pending
State of Wisconsin Approval	No. 990033-I
Miami-Dade N.O.A.*	No. 09-0625.01, No. 10-1118.05, No. 11-1102.01
Florida Product Approval	FL10220 Validated
Canadian Fire Test	CAN S101
Canadian Fire Test	CAN S102
Canadian Fire Test	CAN S134

Chicago • Canada • United Kingdom • Singapore  
Australia • New Zealand • Malaysia • France  
Germany • China • Hong Kong • Poland • Israel

\*The Miami-Dade County Building Code stipulates that panel systems withstand the impact of a 9-pound, 2x4 timber traveling at 50 feet per second.

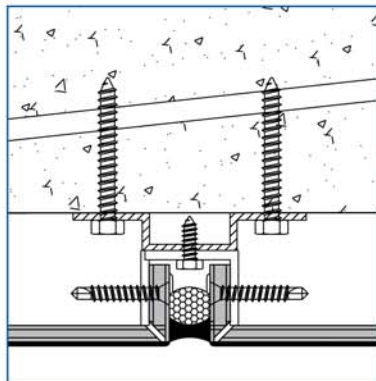
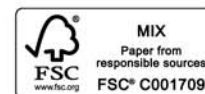
## Safety/Class A Rating Per ASTM E84

	Flame Spread	Smoke Developed
<b>Reynobond PE without Joint</b>	PASS* CLASS A	PASS* CLASS A
<b>Reynobond PE with Joint</b>	PASS* CLASS A	PASS* CLASS A
<b>Reynobond FR with Joint</b>	PASS* CLASS A	PASS* CLASS A
<b>Reynobond with KEVLAR®</b>	PASS* CLASS A	PASS* CLASS A

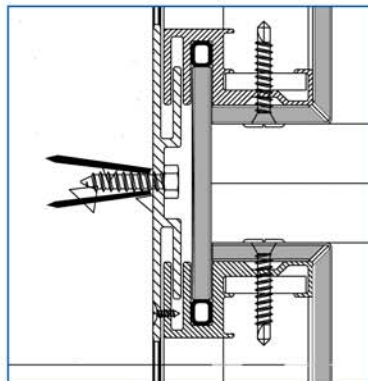
\*Flame spread ≤ 25, smoke developed ≤ 450.

For a complete technical overview of all Reynobond products, visit [reynobond.com](http://reynobond.com).

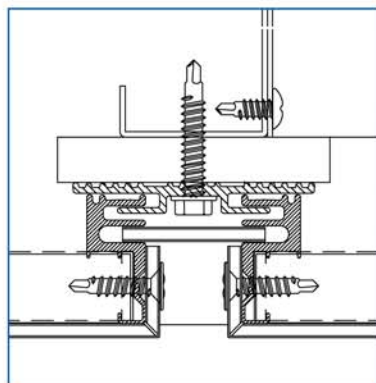
# Common Installation Methods



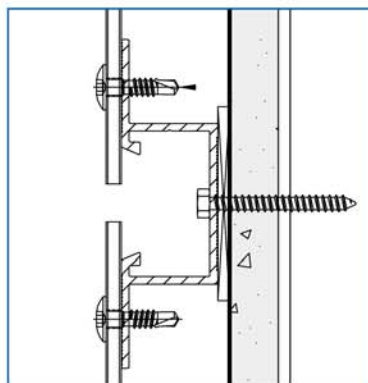
**Wet-Seal System**



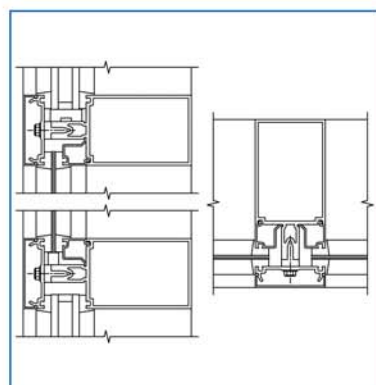
**Dry-Seal Installation System**



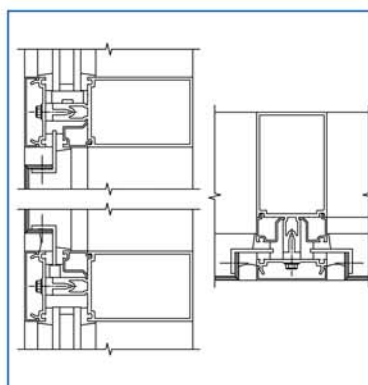
**Rainscreen**



**Face Fastened Solution**



**Curtain Wall Glazed-In Panel**



**Curtain Wall Flush Panel**

## Alcoa Architectural Products

50 Industrial Boulevard  
Eastman, GA 31023-4129  
Tel. 800 841 7774  
[reynobond.com](http://reynobond.com)



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12AAP3407 November 2012 ver. 2.0 20000



# StoneLite™

04 42 00/STO  
BuyLine 6763

INNOVATION IN NATURAL STONE CLADDING





## Exterior Cladding – Superior Design From The Outside-In

### Increase Design Options, Decrease Construction Time

For exterior cladding projects, **StoneLite™** offers a wide range of advantages over dimensional stone:

- Increased Design Flexibility
- Construction Speed
- Overall Project Cost-Effectiveness

The lightweight **StoneLite™** panels are easy to handle, so an entire building elevation can be laid out in advance and arranged for blending color and character of the natural stone prior to fabrication and installation.

### Designed To Be Stronger

With more than 37 years of proven performance on building exteriors around the world, **StoneLite™** preserves the beauty of natural stone while eliminating its fragile, brittle and variable properties.

**StoneLite™** panels are proven through independent laboratory testing:

- **Impact Resistance** – Resisting large missile impact and 1,342 repetitions of simulated dynamic hurricane loading.
- **Flexural Strength** – Ideal for seismic zones, **StoneLite™** has been tested and proven in application for flexural strength – even following rigid acid freeze-thaw and UV radiation exposure.

### ▲ University Square West Windsor, New Jersey

New York based RexCorp Realty has clad the exteriors and interiors of their buildings with **StoneLite™** panels since 1997. University Square, located in West Windsor, NJ, defines the next generation of Class-A office properties. The combination of polished and sandblasted Rosa Porrino granite panels were factory pre-panneled by Stone Panels, Inc. for increased construction speed.

“We have specified **StoneLite™** natural stone panels and worked with the company for the past 10 years. **StoneLite™** provides us with the aesthetic beauty of authentic natural stone and, at the same time, offers us a significant benefit in speed of construction on our projects. They are responsive to our needs and stand behind their work.”

John Olesuk, VP Construction  
RexCorp Realty

### ◀ Bank of Elgin Elgin, Illinois

**StoneLite™** panels can be economically fabricated to form complex natural stone shapes such as the massive limestone cornices for the Bank of Elgin. These **StoneLite™** cornices were factory assembled and shipped to the job site for a simple cost saving installation.

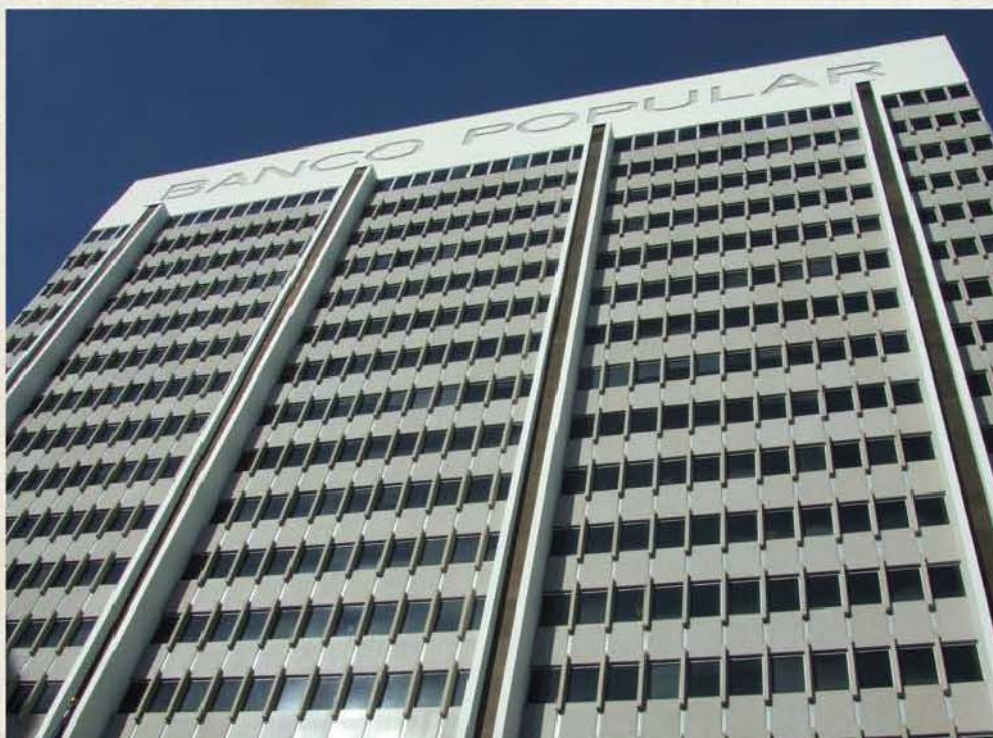
Mayes Architects



### Banco Popular ▶ San Juan, Puerto Rico

High strength **StoneLite™** granite panels were specified by CDC Curtain Wall Design & Consulting for the re-clad of this 20-story building because **StoneLite™** was capable of meeting the 189 lb. per sq. ft. wind load and hurricane large missile impact requirements.

Sierra Cardona Ferrer





## StoneLite™ – Your Solution For Stone Interiors

StoneLite™ panels are an exceptional cladding solution for lobby walls, ceilings and reception areas.

- **Easy, Fast Installation** – The impact resistant lightweight stone is easy to handle and does not require heavy lifting equipment. StoneLite™ panels are installed using simple carpentry tools and are easily field cut with a portable saw having a dry-cut diamond blade.
- **Design Flexibility** – Choose from a wide range of authentic natural stones and large-sized panels.
- **Increase Building Revenue** – The added value of maintenance-free authentic natural stone enhances property aesthetics and elevates occupancy demand.
- **Reduced Occupant Disruption** – StoneLite™ can be installed in an occupied building with minimal disruption to its occupants.

### ◀ Gallup University Omaha, Nebraska

The warm tone of limestone from the Savoy region of France helped create a dramatic statement on both the interior and exterior of this Atrium feature wall. The 2'-8" high x 4'-4" wide modules set in a coursed pattern lends a traditional element to this modern 3-story facility on the banks of the North Platte River.

Gensler

### ▶ U.S. Courthouse & Federal Building Sacramento, California

The combination of natural StoneLite™ panels, state-of-the-art computer aided design and

CNC equipment made possible the creation of this rotunda. 10,000 varying sized oblique and trapezium shapes were produced to exacting specifications and then attached to the ever-changing sloping walls within this elliptic radius room.

Nacht & Lewis Architects



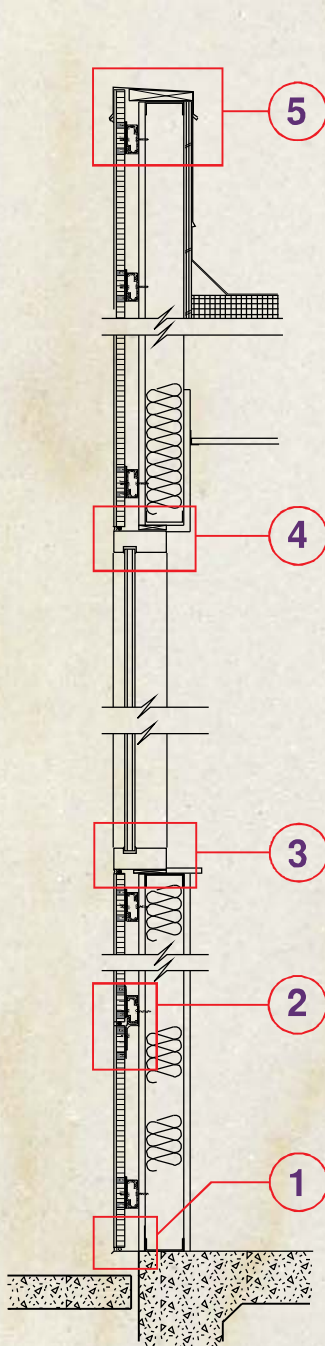


## TYPICAL DETAILS

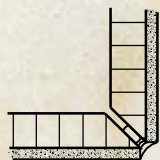
Additional Details are available on our website - [www.stonepanels.com](http://www.stonepanels.com)

04 42 00/STO

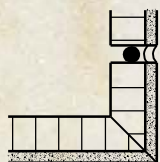
BuyLine 6763



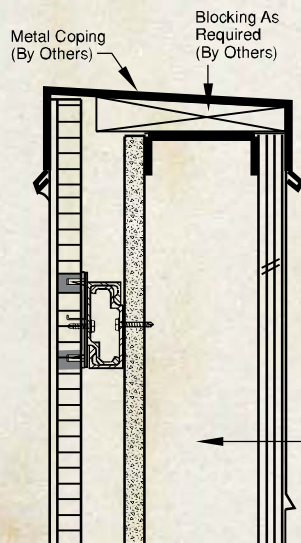
Wall Section



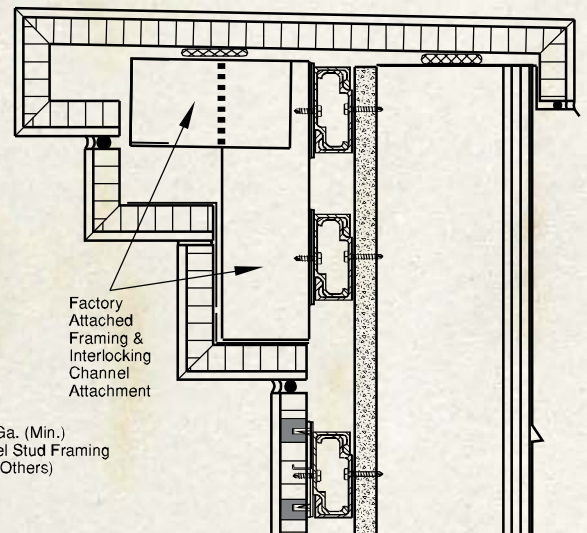
Quirk Miter Corner



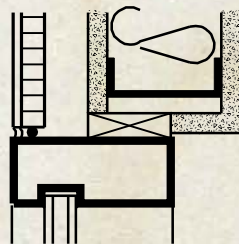
Finished Return & Caulk Joint



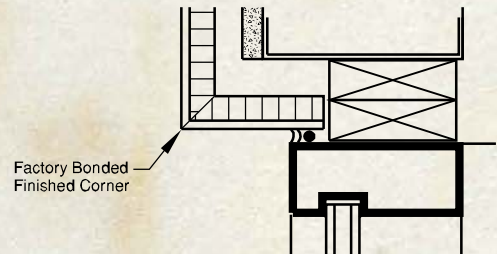
5A Metal Coping Detail



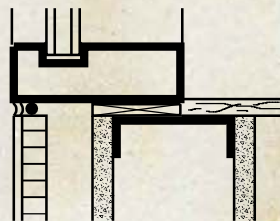
5B Stone Panel Cornice



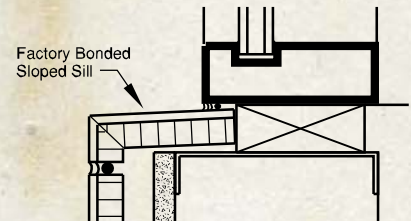
4A Window Head - Flush



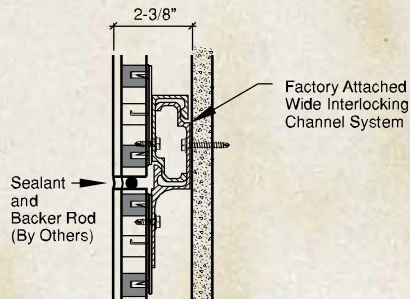
4B Window Head - Recessed



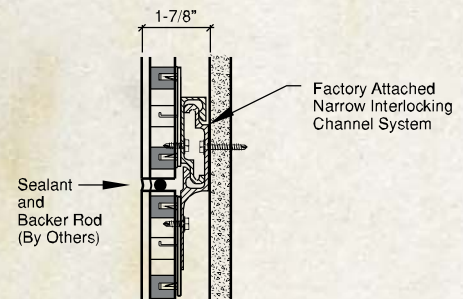
3A Window Sill - Flush



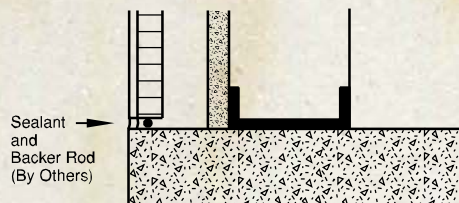
3B Window Sill - Recessed



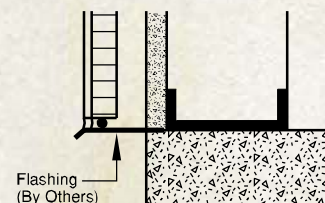
2A Wide Interlocking Channel System



2B Narrow Interlocking Channel System



1A Base Detail



1B Base Detail





# StoneLite™

## PRODUCT DATA

Average Panel Weight:  
3.3-lbs./sq. ft. (16-kg/sq. m.)

Standard Panel Thickness:  
15/16" (24 mm)  
& 9/16" (14 mm)  
Other thicknesses available

Standard Panel Size:  
4'-0" x 8'-0" (1.2 m. x 2.4 m.)

Maximum Panel Size:  
5'-0" x 10'-0" (1.5 m. x 3.0 m.)  
Limited availability

Tolerance for Thickness, Length,  
Width & Squareness:  
± 1/16" (1.6 mm)

## EVALUATION REPORTS/ CODE ACCEPTANCE

ICC Research Report PFC 4397

City of Los Angeles  
Report RR 24922

City of San Francisco  
Code Ruling  
BC-105-3

City of New York MEA 373-87- M

Miami-Dade County, Florida  
NOA No. 02-1104.11

British Board of Agrément  
Certificate Number 07/4466

French Avis Technique C.S.T.B.  
No. 2/06-1210

## SPECIFICATIONS

Guide Specification Sections:

04 22 00 Natural Stone Honeycomb  
Reinforced Wall Cladding System &

07 22 00 Natural Stone Honeycomb  
Reinforced Wall Panel System

## INSTALLATION

StoneLite™ panels may be attached  
using mechanical anchors and  
clips, or attached to approved  
substrates using adhesive.

## TESTING

Our StoneLite™ panels meet rigid  
performance criteria verified by  
independent laboratory testing.

- Acid Freeze-Thaw: Minimal strength loss following 100 cycles in 4pH sulfuric acid +170°F to -10°F (+77°C to -23°C).
- UBC 17-6 Multi-Story Fire Evaluation: All criteria achieved.
- ASTM E - 84 Fire Test: Flame Spread Index = 5, Smoke Developed = 5, Class A (NFPA Std.): Class I (UBC Std.).
- Resist 30 minute modified ASTM E-108 Fire Evaluation.
- Uniform (wind load) tested to over 400 lbs./sq. ft. (19 kN/sq. m.).
- Flatwise bond capacity exceeds 55,000-lbs./sq. ft. (2,600-kN/sq. m.) following accelerated aging.
- Withstood over 5,500 lbs. (2,500 kg) seismic racking shear load and over 2-1/2" (63 mm) lateral displacement without disengagement nor panel damage.
- ASTM and AAMA air, water and dynamic water penetration tests: All criteria achieved.
- Hurricane Loading: Passed large missile impact at 50 ft./second (15 m./s.) and 1342 repetitions of positive and negative wind loading.
- Acid Freeze-Thaw & UV Radiation: Averages only 6% strength loss following 200 cycles exposure.

## TECHNICAL CONSULTING

Contact your Regional  
Technical Consultant for  
product, details, pricing, testing  
and/or installation information.

# Stonepanels<sup>®</sup> inc.

100 S. Royal Lane • Coppell, TX 75019  
Phone: 469.635.5000 • Fax: 469.635.5555  
Toll Free: 1.800.328.6275  
www.stonepanels.com



# Restoration Cleaner

*carbon & pollution remover*

## OVERVIEW

Sure Klean® Restoration Cleaner is a concentrated compound formulated as a "carbon solubilizer." Used properly, it cleans brick, granite, sandstone, terra cotta, many exposed aggregate surfaces and other masonry except limestone, marble or concrete. This product has been safely and effectively used to clean historic structures throughout the United States and Canada.

Restoration Cleaner, when properly used, is safer and less expensive than sandblasting or steam cleaning. Application to masonry surfaces loosens and dissolves dirt, paint oxidation, carbon buildup and other atmospheric pollutants. A simple cold-water rinse removes unsightly stains.

## SPECIFICATIONS

For all PROSOCO product specifications visit [www.prosoco.com](http://www.prosoco.com) and click on "SpecBuilder" or "Solution Finder."

## ADVANTAGES

- Proven effective for cleaning dirty and heavily carboned buildings.
- Safer than sandblasting. Will not pit or damage the masonry when properly applied.

## Limitations

- Not suitable for cleaning of limestone, concrete or marble surfaces. See Sure Klean® Limestone Restorer or Sure Klean® 766 Limestone & Masonry Prewash literature for these applications.
- Not recommended for interior use. Contact PROSOCO's Customer Care (800-255-4255) for recommendations for the most appropriate Sure Klean® interior cleaning system.
- May etch window glass.

## REGULATORY COMPLIANCE

### VOC Compliance

Sure Klean® Restoration Cleaner is compliant with all national, state and district regulations.

## TYPICAL TECHNICAL DATA

FORM	Clear liquid
SPECIFIC GRAVITY	1.050
pH	2.2 @ 1:3 dilution
WT/GAL	8.75 lbs
ACTIVE CONTENT	Not applicable
TOTAL SOLIDS	Not applicable
VOC CONTENT	Not applicable
FLASH POINT	Not applicable
FREEZE POINT	No data
SHELF LIFE	3 years in tightly sealed, unopened container



# Restoration Cleaner

## PREPARATION

Protect people, vehicles, property, plants, metal, and all non masonry and acid-sensitive surfaces from contact with cleaner, rinse residue, fumes and wind drift. Protect/divert auto and foot traffic. Clean when traffic is at a minimum.

Restoration Cleaner is corrosive, etches glass and architectural aluminum and is harmful to wood, painted surfaces and foliage. Inspect glazed terra cotta and tile carefully. Where glaze has been partially weathered away or etched, cleaning may cause additional loss of glaze.

Clean masonry before installing windows, doors, finished flooring, metal fixtures, hardware, light fixtures, roofing materials and other non masonry items. If already installed, protect with Sure

Klean® Strippable Masking or polyethylene before application. All caulking and sealant materials should be in place and thoroughly cured before cleaning.

Maintain sufficient ventilation to avoid buildup of potentially damaging fumes. Avoid exposing building occupants to fumes. On occupied buildings, cover all windows, air intakes and exterior air conditioning vents. Shut down air handling equipment during cleaning and until surfaces are thoroughly dry. Fumes attack glass, metal and all other acid-sensitive surfaces.

## Surface and Air Temperatures

Cleaning when temperatures are below freezing or will be overnight may harm masonry. Best cleaning temperatures are 40°F (4°C) or above for air and masonry. If freezing conditions have existed, let the masonry thaw before cleaning.

## Equipment

Apply using low pressure spray (50 psi maximum), roller or densely filled (tampico) masonry washing brush. Do not apply with high pressure spray. This drives the chemicals deep into the surface, making rinse difficult. Discoloration may result.

Rinse with enough water and pressure to flush spent cleaner and dissolved soiling from the masonry surface and surface pores without damage. Inadequate rinsing leaves residues which may stain the cleaned surface.

## ALWAYS TEST

**ALWAYS TEST** a small area of each surface to confirm suitability and desired results before starting overall application. Test with the same equipment, recommended surface preparation and application procedures planned for general application.

Masonry-washing equipment generating 400–1000 psi with a water flow rate of 6–8 gallons per minute is the best water/pressure combination for rinsing porous masonry. Use a 15–45° fan spray tip. Heated water (150–180°F; 65–82°C) may improve cleaning efficiency. Use adjustable equipment for reducing water flow-rates and rinsing pressure as needed for sensitive surfaces.

Rinsing pressures greater than 1000 psi and fan spray tips smaller than 15° may permanently damage sensitive masonry. Water flow-rates less than 6 gallons per minute may reduce cleaning productivity and contribute to uneven cleaning results.

## Storage and Handling

Store in a cool, dry place with adequate ventilation. Always seal container after dispensing. Do not alter or mix with other chemicals. Published shelf life assumes upright storage of factory-sealed containers in a dry place. Maintain temperature of 45–100°F (7–38°C). Do not double stack pallets. Dispose of unused product and container in accordance with local, state and federal regulations.

Recommended for these substrates. Always test. Coverage is in sq.ft./m. per gallon of concentrate.			
Substrate	Type	Use?	Coverage
Architectural Concrete Block	Burnished	no	N/A
	Smooth	no	
	Split-faced	no	
	Ribbed	no	
Concrete	Brick	no	N/A
	Tile	no	
	Precast Panels	no	
	Pavers	no	
	Cast-in-place	no	
Fired Clay	Brick	yes	125–400 sq.ft. 12–37 sq.m.
	Tile	yes	
	Terra Cotta	yes	
	Pavers	yes	
		yes	
Marble, Travertine, Limestone	Polished	no	N/A
	Unpolished	no	N/A
Granite	Polished	no	N/A
	Unpolished	yes	200–500 sq.ft. 19–47 sq.m.
Sandstone	Unpolished	yes	125–400 sq.ft. 12–37 sq.m.
Slate	Unpolished	yes	200–500 sq.ft. 19–47 sq.m.
Always test to ensure desired results. Coverage estimates depend on surface texture and porosity.			



# Restoration Cleaner

## APPLICATION

Before use, read "Preparation" and "Safety Information."

**ALWAYS TEST** (minimum 4-ft x 4-ft area) each type of surface and stain for dilution and compatibility before beginning full-scale cleaning operations. Test using the following application procedures. Also test pressure-rinsing on older masonry. Let test area dry 3–7 days before evaluating.

## Dilution

Always pour water into empty bucket first, then carefully add concentrate. Handle in polypropylene or polyethylene buckets only. Acidic liquids and fumes attack metal.

### *Porous masonry.*

Use concentrate during initial testing. If concentrate cleans effectively, run tests with diluted solutions of up to three parts water to one part concentrate. Use the mildest effective solution based on test results.

### *Nonporous masonry (glazed brick & terra cotta):*

Dilute with one to three parts water to one part product concentrate, depending on test results. Sure Klean® Restoration Cleaner is an acidic product and may etch polished and glazed surfaces. Etching can be controlled by dilution.

## Application Instructions

1. After protecting all non masonry surfaces, thoroughly prewet the area to be cleaned with fresh water, working from the bottom to the top.
2. Apply the cleaning solution liberally using low pressure spray (50 psi), roller or densely filled (tampico) masonry washing brush.

3. Leave the cleaning solution on the surface for 3–5 minutes. Reapply. Light scrubbing improves cleaning results especially if high-pressure rinsing equipment isn't available. Keep people away from treated surfaces. Do not let the cleaning solution "dry in" to the masonry — bleaching may occur.
4. Water rinse with low-pressure, flood rinse to remove initial acidic residue with minimum risk of wind drift. Then rinse the treated area thoroughly with high-pressure spray. Rinse from the bottom to the top. Flush each section of the surface with a concentrated stream of water. Keep the wall below wet and rinsed free of cleaner and residues to avoid streaks.

On severely stained horizontal surfaces, under window sills, eaves, etc., "pretreating" with Sure Klean® 766 Limestone & Masonry Prewash may prove effective. Read and follow product procedures and recommendations. Pressure rinse, then "afterwash" with Sure Klean® Restoration Cleaner followed by water rinse.

## Cleanup

Clean tools and equipment using fresh water.

## Maintenance

A "breathable" water repellent makes the cleaned surface less likely to stain and keeps the surface clean longer. It also makes future cleaning operations faster and easier. For more information about water repellents for masonry, contact PROSOCO's Customer Care (800-255-4255) regarding Sure Klean® Weather Seal products.

## BEST PRACTICES

Restoration Cleaner is corrosive, etches glass and architectural aluminum and is harmful to wood, painted surfaces and foliage. Inspect glazed terra cotta and tile carefully. Where glaze has been partially weathered away or etched, cleaning may cause additional loss of glaze.

On severely stained horizontal surfaces, under window sills, eaves, etc., "x" with Sure Klean® 766 Limestone & Masonry Prewash may prove effective. Read and follow product procedures and recommendations.

When diluting, always pour water into empty bucket first, then carefully add product concentrate. Use the mildest effective solution based on test results.

Apply using low pressure spray, 50 psi maximum. Do not apply with high pressure spray. This drives the chemicals deep into the surface, making rinse difficult. Discoloration may result.

A "breathable" water repellent makes the cleaned surface less likely to stain and keeps the surface clean longer. For more information about water repellents for masonry, contact PROSOCO's Customer Care at 800-255-4255.

Never go it alone. For problems or questions, contact your local PROSOCO distributor or field representative. Or call PROSOCO technical Customer Care toll-free at 800-255-4255.

# Restoration Cleaner

## **SAFETY INFORMATION**

Sure Klean® Restoration Cleaner is a concentrated, acidic cleaner designed and labeled for professional use. This product may damage glass and a variety of common construction materials and has safety issues common to corrosive materials. Use appropriate safety equipment and job site controls during handling and application. Read the full label and MSDS for precautionary instructions before use.

### **First Aid**

**Ingestion:** If conscious, give large amounts of milk or water and call a physician, emergency room or poison control center immediately. Do not induce vomiting.

**Eye Contact:** Rinse eyes and under lids thoroughly for 15 minutes. Get immediate medical assistance.

**Skin Contact:** Remove contaminated clothing and rinse thoroughly for 15 minutes. Immerse exposed area in 0.13% Zephiran Chloride or apply 2.5% Calcium Gluconate gel if available. Get medical attention. Launder contaminated clothing before reuse.

**Inhalation:** Remove to fresh air. Give artificial respiration if not breathing. Get immediate medical attention.

**24-Hour Emergency Information:**  
INFOTRAC at 800-535-5053

## **WARRANTY**

The information and recommendations made are based on our own research and the research of others, and are believed to be accurate. However, no guarantee of their accuracy is made because we cannot cover every possible application of our products, nor anticipate every variation encountered in masonry surfaces, job conditions and methods used. The purchasers shall make their own tests to determine the suitability of such products for a particular purpose.

PROSOCO, Inc. warrants this product to be free from defects. **Where permitted by law, PROSOCO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of merchantability or fitness for particular purpose.** The purchaser shall be responsible to make his own tests to determine the suitability of this product for his particular purpose. PROSOCO's liability shall be limited in all events to supplying sufficient product to re-treat the specific areas to which defective product has been applied. Acceptance and use of this product

absolves PROSOCO from any other liability, from whatever source, including liability for incidental, consequential or resultant damages whether due to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of PROSOCO, its distributors or dealers.

## **CUSTOMER CARE**

Factory personnel are available for product, environment and job-safety assistance with no obligation. Call 800-255-4255 and ask for Customer Care - technical support.

Factory-trained representatives are established in principal cities throughout the continental United States. Call Customer Care at 800-255-4255, or visit our web site at [www.prosoco.com](http://www.prosoco.com), for the name of the Sure Klean® representative in your area.



PROSOCO®

# Sure Klean®

CLEANING & PROTECTIVE TREATMENTS

## 942 Limestone & Marble Cleaner

Sure Klean® 942 Limestone & Marble Cleaner is a ready-to-use non-acidic cleaning gel. Designed for removing moderate-to-severe atmospheric staining, this low-odor gel cleaner is appropriate for use on exterior or interior masonry surfaces. Safe for use on most polished or unpolished marble and limestone surfaces, 942 Limestone & Marble Cleaner removes surface and subsurface staining, restoring surfaces to their original appearance.

Sure Klean® 942 Limestone & Marble Cleaner dissolves damaging gypsum (calcium sulfate dihydrate) and related atmospheric staining, enabling removal in a safe, controlled manner with a simple water rinse. Special detergents and chelating agents in this easy-to-use product improve the cleaning characteristics of the gel.

When applied to soiled masonry surfaces, 942 Limestone & Marble Cleaner solubilizes oil, dirt, harmful salts and other deep-seated stains. Following a 2 to 24-hour dwell period, the solubilized staining matters are carefully removed with the gel and the treated surfaces flushed with fresh water to restore their natural appearance. No abrasive action is required. Sure Klean® 942 Limestone & Marble Cleaner's gel consistency is suitable for brush or spray application.

### SAFETY INFORMATION

Always read full label and SDS for precautionary instructions before use. Use appropriate safety equipment and job site controls during application and handling.

**24-Hour Emergency Information:**  
**INFOTRAC at 800-535-5053**

### ADVANTAGES

- Thoroughly cleans without danger of bleaching.
- Restores the color and surface texture of most polished and unpolished stonework.

- A safe, low-odor, non-acidic cleaning system suitable for interior or exterior applications.
- Will not damage most flooring materials and adjoining surfaces.
- Gel consistency prevents dripping and spilling. Material "clings" to vertical surfaces.

### Limitations

- May damage highly polished limestone or marble surfaces. Always test.
- Not for use in subfreezing temperatures. Gel will freeze.
- Surface and air temperatures should be at least 50° F (10° C). Cold temperatures will adversely affect the product's cleaning properties.

### REGULATORY COMPLIANCE

#### VOC Compliance

Sure Klean® 942 Limestone & Marble Cleaner is compliant with all national, state and district VOC regulations.

### TYPICAL TECHNICAL DATA

FORM	Clear amber gel Slight ammonia odor
SPECIFIC GRAVITY	1.040
pH	8.3
WT/GAL	8.65 lbs
ACTIVE CONTENT	not applicable
TOTAL SOLIDS	not applicable
VOC CONTENT	not applicable
FLASH POINT	>200° F (>93° C)
FREEZE POINT	25° F (-4° C) ASTM D 1177
SHELF LIFE	2 years in tightly sealed, unopened container

# Product Data Sheet

## Sure Klean® 942 Limestone & Marble Cleaner

### PREPARATION

Protect people, vehicles, property and all non masonry surfaces from product, splash, residue, fumes and wind drift. Protect plants and painted surfaces with polyethylene or other proven protective material. Protect/divert auto and foot traffic.

### Surface and Air Temperatures

Best cleaning results are obtained when air and masonry surface temperatures are 40° F (4° C) or above. Cleaning when temperatures are below freezing or will be overnight may harm masonry. If freezing conditions have existed, let masonry thaw.

### Equipment

Apply with a soft-bristled brush or airless sprayer.  
Rinse with a sponge or pressure-rinsing equipment.

Recommended for these substrates. Always test. Coverage is in sq.ft./m. per gallon of concentrate.			
Substrate	Type	Use?	Coverage
Architectural Concrete Block	Burnished	yes	75–125 sq.ft. 7–12 sq.m.
	Smooth	yes	
	Split-faced	yes	
	Ribbed	yes	
Concrete	Brick	yes	75–150 sq.ft. 7–14 sq.m.
	Tile	yes	
	Precast Panels	yes	
	Pavers	yes	
	Cast-in-place	yes	
Fired Clay	Brick	yes	75–150 sq.ft. 7–14 sq.m.
	Tile	yes	
	Terra Cotta (unglazed)	yes	
	Pavers	yes	
Marble, Travertine, Limestone	Polished	yes	100–200 sq.ft. 9–19 sq.m.
	Unpolished	yes	75–150 sq.ft. 7–14 sq.m.
Granite	Polished	yes	100–200 sq.ft. 9–19 sq.m.
	Unpolished	yes	100–175 sq.ft. 9–16 sq.m.
Sandstone	Unpolished	yes	75–150 sq.ft. 7–14 sq.m.
Slate	Unpolished	yes	75–175 sq.ft. 7–16 sq.m.
Always test to ensure desired results. Coverage estimates depend on surface texture and porosity.			

### Storage and Handling

Store in a cool, dry place. Always seal container after dispensing. Do not alter or mix with other chemicals. Published shelf life assumes upright storage of factory-sealed containers in a dry place. Maintain temperature of 45–100° F (7–38° C). Keep from freezing. Do not double stack pallets. Dispose of in accordance with local, state and federal regulations.

### APPLICATION

Read “Preparation” and the Safety Data Sheet before use.

**ALWAYS TEST** a small area of each surface to confirm suitability and desired results before beginning overall application. Test each type of masonry and each type of stain. Test with the same equipment, recommended surface preparation and application procedures planned for general application. Let test area dry 3–7 days before inspection and approval. Make the test panel available for comparison throughout the cleaning project.

### Dilution

Apply as packaged. Do not dilute or alter.

Stir or mix well before use.

### Application Instructions

1. Apply a thick, uniform coating of 942 Limestone & Marble Cleaner to the surface using a brush or airless spray equipment.
2. Let the cleaner stay on the surface for 2–24 hours. *For long dwell periods*, it may be necessary to cover treated areas with polyethylene to prevent premature drying. **NOTE:** The appropriate dwell period for safe, effective cleaning should be determined through on-site testing, before full-scale cleaning operations.
3. Remove the gel and as much residue from the surface as possible. Rinse the surface thoroughly with fresh water using a sponge, soft cloth or low-pressure/low-volume water rinsing equipment.
4. Repeat application where necessary.

### Cleanup

Clean tools and equipment using fresh water.

### Maintenance

The freshly cleaned surface may be polished or sealed using appropriate products. No special procedure or treatment is necessary.

# Product Data Sheet

## Sure Klean® 942 Limestone & Marble Cleaner

### WARRANTY

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this product absolves PROSOCO from any other liability, from whatever source, including liability for incidental, consequential or resultant damages whether due to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of PROSOCO, its distributors or dealers.

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### BEST PRACTICES

Best cleaning results are obtained when air and masonry surface temperatures are 40° F (4° C) or above. If freezing conditions have existed, let masonry thaw.

Apply 942 Limestone & Marble Cleaner to the surface using a brush or airless spray equipment. Apply a thick uniform coating.

The appropriate dwell period for safe, effective cleaning should be determined through on-site testing, before full-scale cleaning operations. For long dwell periods, it may be necessary to cover treated areas with polyethylene to prevent premature drying.

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