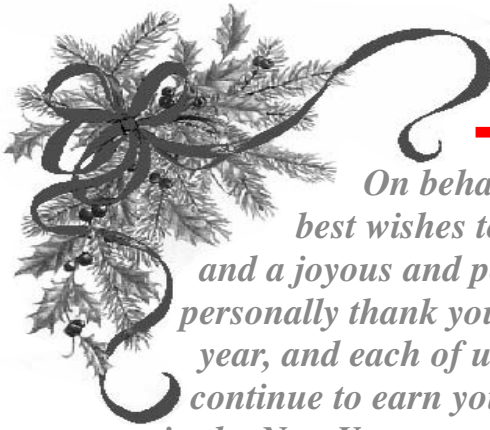




UP-DATE
4th. Qtr. 2006

- ◆ Sealants & Caulks ◆ Firestopping ◆ Concrete Treatments, Repair Systems & Grouts ◆ Adhesives
- ◆ Waterproofing, Dampproofing (above & below grade) ◆ Anchors, Fasteners ◆ Tapes & Tape Sealants
- ◆ Fluid Sealing Materials ◆ Trade Tools, Equipment & Accessories ◆ Specialty Rubber Products

- ◆ Water Repellents & Coatings
- ◆ Corrosion Inhibitors ◆ Glass & Glazing Accessories
- ◆ Plastic Tooling Systems ◆ Specialty Fluids & Lubricants



On behalf of all of us at Atlas Supply, I want to send our best wishes to you and yours for a Merry Christmas and a joyous and peaceful holiday season. I also want to personally thank you for the opportunity to serve you this year, and each of us looks forward to working hard to continue to earn your trust and help with your success in the New Year.

*Sincerely,
John Ittes - President*



SILICONE in CONSTRUCTION

PROJECT

Dow Corning® brand silicone sealants and elastomeric coatings stopped water leaks and revitalized the exterior of the 800-room Rosen Plaza Hotel in Orlando, Florida.

PRODUCTS

- Dow Corning® 123 Silicone Seal
- Dow Corning® 790 Silicone Building Sealant
- Dow Corning® 795 Silicone Building Sealant

Silicone Coatings Help Orlando Hotels Stand Out

Millions of people know Orlando, Florida's International Drive. Its Orange County Convention Center draws visitors from across the globe. Its restaurants, shops and attractions are crowded with tourists every day of the year. And its many hotels provide the nights rest for families spending their days at Orlando's theme parks.

To the tourist, International Drive is the gateway to vacation fun. To the hotel owner, it's ten miles of competition. Many factors determine the success of an International Drive hotel, including the quality of the accommodations, guest services, the caliber of its restaurants and bars, and the building's aesthetic appearance.

Concerns about aesthetics

In the year 2000, concerns about aesthetics came to the forefront at the award-winning, 14-story, 800-room Rosen Plaza Hotel adjacent to the Convention Center. These concerns were coupled with annoyance with recurring water leaks.

"the building had experienced leaks around guestroom windows since it was built in 1991," reported Daniel Gutierrez, Central Engineer for Rosen Hotels & Resorts, which owns and operates six hotels in the Orlando area with nearly 5,000 total rooms. "the builder tried to fix the problem, but their repairs never lasted."

When Rosen Hotels & Resorts re-named the Clarion Plaza as the Rosen Plaza in the summer of 2000, the



After the Rosen Plaza project was completed, the exterior of the nearby 1334-room Rosen Centre Hotel was restored with many of the same Dow Corning products

(continued on Page-2)

(continued from Front Page)

management team decided it was time to fix the leaking problems. They also committed to renovating the hotel's stucco façade to match interior improvements and help equate the new Rosen name with exceptional quality.

Putting together a team and a solution

Working with the Maitland, Florida, architectural firm, Helman Hurley Charvat Peacock, building envelope consultant R.J. Kenney & Associates of Plainville, Massachusetts, Southern Rehab of Madison, North Carolina, and Welbro Building corporation of Orlando the Rosen Hotels & Resorts team arrived at a solution.

Proposed was a comprehensive exterior renovation plan. Exterior Insulation finish System (EIFS) banding would be attached as an aesthetic feature around the building's windows, adding new dimension to the façade. Silicone sealants were specified to seal the new EIFS banding and weatherseal the windows to address the leaking. The finishing touch would be a silicone exterior coating to cover the old acrylic coating and provide an added measure of protection. The sun, heat, humidity and the heavy seasonal rains in Orlando can lead to premature failure of organic-based sealants and acrylic coatings. Silicones are simply better suited for Central Florida and perform better and longer.

Renovating with silicones

The Rosen Plaza renovation began in 2001. The windows were resealed and the EIFS banding was installed using three different products: *Dow Corning*[®] 795 Silicone Building Sealant, *Dow Corning*[®] 790 Silicone Building Sealant and *Dow Corning*[®] 123 Silicone Seal.

Dow Corning 795 and 790 Silicone Sealants are two to the industry's most widely used weathersealing products, having been used on thousands of buildings since they were introduced in the 1970's.

Dow Corning 123 Silicone Seal is a pre-formed silicone strip, extruded into a variety of widths, colors and textures, that can be bonded to a wide range of substrates with *Dow Corning* 795 Sealant to form a long-lasting, flexible and uniform weatherseal. It can often be applied over failed sealants, spanning the joint, so installation is generally easier and faster than with other wet sealant options.

With the EIFS banding and weathersealing accomplished, the entire exterior of the Rosen Plaza was cleaned in preparation for coating with *Dow Corning*[®] AllGuard Silicone Elastomeric Coating. AllGuard Coating is a one-part, water-based elastomer, generally applied without a primer. It cures to a lightweight, flexible membrane that easily handles thermal expansion and contraction, even on EIFS panels, and can bridge hairline cracks and withstand hurricane-force, wind-driven rain without penetration. While the membrane seals out rain, it allows moisture vapor inside the substrate to escape, minimizing the blistering and delamination that can occur with non-breathable coatings. Because it is 100 percent silicone, AllGuard Coating resists sunlight, ozone, rain, snow, temperature extremes, mold and mildew.

A successful finish and a new project

"The project went very smoothly," said Rosen Hotels & Resorts' Daniel Gutierrez. "The weathersealing work was inspected and approved, but more to the point, the leaks have stopped." Just as gratifying is the building's appearance. "It looks 100 percent better," said Gutierrez. "Everyone is very excited about our new look."

In fact, everyone was so pleased that, when the Rosen Plaza project was finished, attention turned to the 24-story, 1334-room Rosen Centre Hotel on the north side of the convention Center.

Built in 1995, this stucco structure had major leaks in ground floor areas, like the lobby. Part of the problem was the failure of the polyurethane sealants on the one-inch-wide, U-shaped reglet joints at each elevation, which let rainwater seep inside the building's skin. In addition to some cracks in the exterior skin, its pre-colored finish was faded and at the end of its useful life.

Once again, a silicone solution was proposed and, in the fall of 2001, work began on the Rosen Centre. *Dow Corning* 790 Silicone Building Sealant was used to fill and seal cracks in the stucco. *Dow Corning* 795 Silicone Building Sealant was used to replace the failed sealants on the reglet joints. Finally, *Dow Corning* AllGuard Coating—in a custom buff color, plus beige and light cocoa accent colors—was applied over the entire exterior, giving the Rosen Centre a revitalized grandeur and creating a very satisfied customer. □

WATER REPELLENTS



Differentiating water-based and solvent-based formulations...

Hydrozo[®] offers water-based and solvent-based formulations of high quality commercial grade penetrating water repellents. Solvent-based formulas offer the advantage of being able to be applied at temperatures down to 20°F on frost/ice free surfaces and typically achieve better penetration than their water-based equivalents (solvents have a lower surface tension than water and more easily wet out surfaces).

Solvent-based formulations, however, are also more volatile and are at a disadvantage in hot windy conditions whereby the solvents evaporate perhaps too quickly—limiting sealer penetration and effectiveness. Water is less volatile and is more stable in hotter, windier conditions. It should be noted however, that not applying these products during hot, windy conditions is the best course of action. Lastly, water-based sealers have a milder odor and have a lower Volatile Organic Content in comparison to equivalent solvent-based formulas. In any event, always be sure to refer to the individual Hydrozo[®] product data guide for specifics concerning its use. □



NEW FROM S I K A

Sikadur® Crack Fix

Low-viscosity, high-strength epoxy sealing system

Description Sikadur Crack Fix is a 2-component, 100% solids, moisture-tolerant, low-viscosity, high-strength, multi-purpose, epoxy resin adhesive. It conforms to the current ASTM D-881 and AASHTO M-235 specifications

Where to Use

- Gravity-feed of cracks in horizontal concrete and masonry.
- Low pressure injection of cracks in structural concrete, masonry, wood, etc.
- Grouting bolts, dowels, pins, etc.

Advantages

- Formulation identical to popular, high strength adhesive to Sikadur 35, Hi-Mod LV.
- 5x stronger than concrete.
- Convenient easy to use, single tube cartridge—fits standard caulk guns.
- Deep, penetrating and tenacious bonding of cracks in structural concrete.
- No mess—self-mixing.

Coverage 1 cartridge yields approximately 10.7-11.0 cu. in. (175-180 ml) of usable epoxy resin.

Packaging Carton contains 12 single caulk tube-style cartridges; each cartridge packaged with 2 static mixers and 2 flow restrictors.

Limitations

- Minimum substrate and ambient temperature 40°F (4°C). Maximum substrate temperature is 95°F (35°C).
- Minimum age of concrete must be 21-28 days, depending on curing and drying conditions.
- Do not apply over wet, glistening surface.
- Not for injection of cracks subjected to osmotic or hydrostatic pressure during application.
- Do not inject cracks greater than 1/4 in. (6 mm).

Typical Data (Material and curing conditions @ 73°F (23°C) and 50% R.H.)

Shelf Life	2 years in original, unopened containers.		
Storage Conditions	Store dry at 40°-95°F (4°-35°C). Condition material to 60°-75°F (5°-24°C) before using.		
Color	Clear, amber.		
Mixing Ratio	Component A: Component B = 2:1 by volume.		
Viscosity (Mixed)	Approximately 375 cps.		
Pot Life	Approximately 25 minutes. (60 gram mass)		
Tack Free Time (3-5 mils)	40°F (4°C)	73°F (23°C)	90°F (32°C)
	14-16 hrs.	3-3.5 hrs.	1.5-2 hrs.

Sikaflex® AT-Connection

The universal construction sealant for perimeter and connection joints

Description Sikaflex AT-Connection is a 1-part, moisture elastic sealant based on Silane Terminated Polymers. Ideal for connection and perimeter joints between porous and non-porous substrates. Sikaflex AT-Connection is odorless and solvent-free, very suitable for both internal and external use.

Where to Use

- Sikaflex AT Connection meets the requirements for all kinds of connection joints, window and door perimeter joints, balcony parapets joints, façade and metal cladding joints and many other construction and movement joints.

Advantages

- Movement capability +/- 25%.
- Silicone-free and over-paintable.
- Good adhesion on porous and non-porous substrates.
- Primerless adhesion on many substrates.
- Good UV resistance and color stability, non-yellowing.
- Odorless and solvent-free.
- Very good workability, (low extrusion force, excellent smoothability).
- High mechanical properties

Packaging 10.1 300 ml. cartridges, 12 pc/box.

Typical Data (Material and curing conditions @ 73°F (23°C) and 50% R.H.)

Shelf Life	9 months
Storage Conditions	Store in undamaged original sealed containers in dry conditions and protected from direct sunlight at temperatures between 50°F-77°F (10°-25°C)
Color	White
Chemical Base	1-part Silane Terminated Polymers (PU-Hybrid technology, moisture curing)
Skimming Time	~ 60 minutes [74°F (23°C) / 50% R.H.]
Curing Rate	>2 mm/24 hours [74°F (23°C) / 50% R.H.]
Movement Capability	+/- 25%
Joint Dimensions	Min. width = 1/4" (10 mm) max. width = 1-1/4" (35 mm)
Shore A Hardness	~ 25 after 28 days.
Elongation at Break	~ 450% [74°F (23°C) / 50% R.H.] (DIN 53504)
Elastic Recovery	>70% [74°F (23°C) / 50% R.H.]

BACKER ROD AND ITS USES...

A backer rod is the typical backer material for most weatherseal joints. The role of a backer rod is to allow a sealant to be installed and tooled to a proper joint profile. Once the sealant cures, the backer material must not restrict the movement of the sealant or cause 3-sided adhesion. To provide sufficient backpressure during sealant installation, the backer rod should be sized ~25% larger than the joint opening. Sizing differs among backer rod types; refer to the manufacturer's recommendations. Generally, three common backer rod types are used:

- Open-cell polyurethane
- Closed-cell polyethylene
- Non-gassing polyolefin

Each backer rod type has demonstrated successful performance with both urethane and silicone sealants. When selecting a backer rod, consider the following:

1. Open-cell polyurethane backer rod allows the sealant to cure through the backer rod, which is beneficial when fast sealant cure is desired.
2. Open-cell polyurethane backer rod can absorb water, which may have a detrimental effect in certain joint types. Here's where Closed-cell polyethylene and non-gassing polyolefin backer rod would be considered.
3. Closed-cell polyethylene backer rod may outgas if punctured during installation, requiring it to be left for 20 minutes before application of the sealant.
4. Other back-up materials such as expanding foam tapes or glazing

gaskets should be reviewed or tested for compatibility prior to use.

5. When a backer rod cannot be positioned in a joint opening, a Teflon or polyethylene tape should be used to prevent three-sided adhesion.

There are some important exceptions to selecting backer rod for use with Dow Corning silicone sealants:

1. For double weatherseal joints, open-cell polyurethane backer rod must be used unless the interior seal is allowed 7 days cure before installing the exterior seal.
2. Open-cell polyurethane backer rod is recommended for use with Dow Corning® 790 Silicone Building Sealant against painted or metal surfaces to promote cure from both sides of the joint.
3. Because EIFS manufacturers do not permit the use of open-cell polyurethane backer rod with their systems, use either Dow Corning® 791 Silicone Weatherproofing Sealant or Dow Corning® 795 Silicone Building Sealant when EIFS is adjacent to non-porous or metal surfaces.
4. Open-cell polyurethane backer rod should not be used adjacent to EIFS.
5. In some horizontal joints where water can collect, open-cell polyurethane backer rod should not be used.

After the sealant has attained a full cure, the backer rod serves no further purpose other than, perhaps, offering some insulating properties in the expansion joint. Although the role of the backer rod may seem minor, it is an important element with sealant applications to ensure that seals in expansion joints perform well, and do not become the prematurely weak link in the structure □

Inside this issue:

- ◆ Silicone Coatings Help Orlando Hotels Stand Out
- ◆ Hydrozo—Water-Based vs Solvent-Based Formulas
- ◆ Two New Products From Sika
- ◆ Backer Rod And Its Uses

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