




Atlas Supply



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UP-DATE

1st. Qtr. 2003

◆ Sealants & Caulks ◆ Firestopping ◆ Concrete Treatments, Repair Systems & Grouts
 ◆ Tapes & Tape Sealants ◆ Waterproofing, Dampproofing (above & below grade) ◆ Adhesives
 ◆ Trade Tools, Equipment & Accessories ◆ Specialty Rubber Products ◆ Plastic Tooling Systems

◆ Water Repellents & Coatings ◆ Corrosion Inhibitors
 ◆ Glass & Glazing Accessories ◆ Anchors, Fasteners & Drills
 ◆ Specialty Fluids & Lubricants ◆ Fluid Sealing Materials



Trouble at the Villa of Buckhead

In the spring of 2000, the Villa of Buckhead, Atlanta, Georgia, was a luxury high-rise condominium that no longer looked or acted the part. The joint sealants protecting the EIFS cladding on the 20-story structure had failed, resulting in severe water intrusion and tenant complaints. The exterior coating had faded and suffered from delamination, efflorescence and streaking. Even the 3-story parking deck leaked badly. A year later, the Villa was transformed.

Dow Corning® brand weatherproofing sealants stopped the leaks in the EIFS cladding. Dow Corning® Parking Structure Sealants were used to reseal the concrete joints in the parking deck. And Dow Corning® AllGuard Silicone Elastomeric Coating, in new and vibrant custom colors, completed the silicone makeover, restoring the Villa of Buckhead to its rightful position as one of Atlanta's most desirable addresses.

Dow Corning® AllGuard Silicone Elastomeric Coating cures to a flexible membrane that accommodates movement and can bridge hairline cracks up to 1/16 inch (1.6 mm). It resists environmental degradation far better than acrylic alternatives, and will not crack, chalk, peel or blister when properly applied.



NEW AT ATLAS

GUNTHER MIRROR MASTICS

We're please to announce the addition of the *Gunther Mirror Mastics* complete line of mirror installation and maintenance products, including mirror clips and J-bar, to our Fenestration and Glazing Product Group.



- **Gunther PRO** Formulated to achieve maximum build and adhesion between wall and mirror.
- **Gunther ULTRA/BOND®** Provides a fast permanent bond between mirror and drywall
- **Gunther EXTRA/BUILD®** Ideal for large mirrored walls.
- **Gunther Premier®** Ideal for high traffic areas, gyms, dance studios, etc.
- **Gunther PRIME-N-SEAL™** Primer and sealer to enhance adhesion.
- **Gunther Seal-Kwik™** Protects mirror edges against black edge.

In addition to Gunther, we've added a complete line of environmental window and door seal profiles and accessories from *Schlegel* and gaskets, weatherstrips, foam and sponge seals from *Lamatek*. These new lines are industry leaders that further compliment our existing fenestration and glazing family of high quality products. □

Drain-leak-severe Yet,

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attention; the resulting maintenance costs of weakened or leaking walls or floor slabs far outweigh the initial cost of installing an effective drainage system.

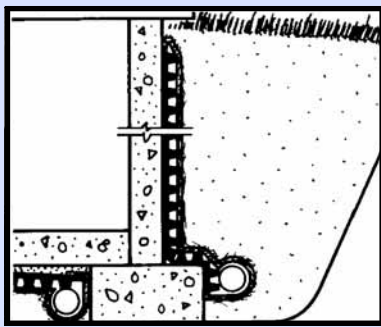
Recognizing the importance of effective drainage, Mirafi has conducted extensive research into cost-effective drainage systems. In addition, Mirafi has gained considerable field experience in numerous subsurface drainage applications throughout the United States and Canada. The result of this research and experience is Miradrain, a line of prefabricated drainage composites engineered to replace costly, conventional aggregate drains and increase jobsite productivity. (Continued on Page-3)



rainage plays a critical role in the design and construction of subterranean walls. Without proper age, ground water seepage may cause structural age and hydrostatic pressure which can result in structural damage. Effective drainage is essential. The costly and time-consuming installation of conventional aggregate drainage systems often compels builders and designers to compromise on drainage. In many cases, drainage systems are not given proper attention; the resulting maintenance costs of weakened or leaking walls or floor slabs far outweigh the initial cost of installing an effective drainage system.

Welcome aboard, ..
"Rocky"

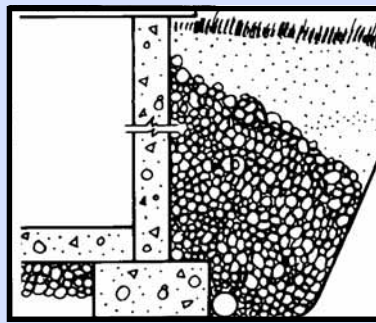
We're pleased to announce that **Rocky Quinn** has joined our field sales team. Rocky comes to us with 20 years of experience in commercial and industrial concrete accessory and material sales. Rocky will be headquartered out of our Seattle office where he will be concentrating on our civil/infrastructure markets.



Advantages of the Miradrain System

Miradrain's predictable and reliable performance is the result of careful engineering and product design.

- Uniform product quality ensures consistent in-place performance.
- Multi-directional core channels provide sufficient flow capacity for most drainage applications.
- Compressive strengths are engineered to withstand a wide range of installation.
- Interlocking and overlapping assembly ensures continuous flow channels between adjacent panels.
- Filter fabric is bonded to the molded core dimples to prevent the fabric and soil from being pushed into the core or otherwise blocking the water flow channels during backfilling.
- Miradrain enhances waterproofing by conveying ground water away from the waterproofing system.
- Miradrain reduces hydrostatic pressure against subterranean structures.



Disadvantages of Aggregate System

- Aggregate is expensive to purchase, transport and place. Costs associated with aggregate acquisition often means the difference between making money on a job or losing money.
- Placement of aggregate requires the use of expensive heavy equipment to transport it from its on-site stockpiled location to its planned in-place location.
- Utilization of aggregate requires importing space consuming materials to the already crowded jobsite. Additionally, the on-site soils which might otherwise be used for backfilling (where aggregate is taking up space) must be exported from the site at a substantial cost. Transporting aggregate drain rock and exporting native soils are expensive, labor intensive, and time consuming.
- Utilization of aggregate systems often results in a significant waste factor of material over the original design.



Battery Powered e-Drive Dispensing Tools offer performance, portability, more control...and they're a lot easier to use!

Albion Engineering Company is proud to introduce a new line of revolutionary tools designed to meet the increasing demands of its customers.



1000 Series
CARTRIDGE
STYLE
Shown with
Composite
Unibody Carriage
and Batter-Pack

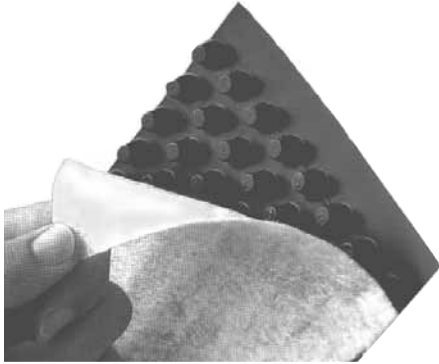
ALBION'S NEW e-Drive System

- **Ergonomic** - Reduces trigger-hand fatigue
- **Continuous Output** - Just a slight squeeze produces a smooth non-stop flow.
- **Safety** - Pre-set pressure release.
- **Dripless** - Automatic reverse relieves pressure.
- **Portability** - No cords...no compressor...no air-lines
- **Variable Speeds** - Accommodates multiple applications.
- **Easy Changeover** - Kits available for easy conversion to Cartridge, Bulk or Sausage dispensing.



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Miradrain 6000 and 6200 effectively reduce hydrostatic pressure against below-grade structures and aid in dewatering saturated soil by collecting and conveying ground water to a drainpipe for discharge.



The Miradrain concept consists of a light-weight, 3-dimensional, high-impact polymeric core and a Mirafi filter fabric. The Mirafi filter fabric is bonded to the dimples of the polymeric core. This bonding secures the fabric to the core and prevents the backfill from pushing the fabric into the flow channels. The filter fabric allows water to pass freely into the molded drain core where gravity draws the water through the flow channels to the discharge system. The Mirafi filter fabric also prevents soil particles from entering and clogging the core structure and discharge pipe, and significantly increases the effectiveness and service life of the drain system.

Miradrain 6000 and 6200 offer a drain core with flow channels on one side. Its single-sided configuration allows the flat core side to fit directly against wall surfaces, providing compatibility with waterproofing systems. Miradrain with filter fabric bonded on one side provides optimum drainage of soils adjacent to foundation walls, retaining walls, under floor slabs, bridge abutments, and tunnels. In these applications, Miradrain is easily applied as a continuous drainage blanket or a series of intermittent chimney drains.

Miradrain 6000 and 6200 are available in 4' x 50' panels, conveniently packaged into rolls. They are also available in panels 4' x 8' and 4' x 25'. Both the Miradrain 6000 and 6200 have a nominal one inch flange along one longitudinal panel edge. This allows for convenient overlapping of rolls/panels, providing a fast yet effective shingling effect for ease of installation. □



EIFS Joint Failure Overview

Adhesive Failure of Sealant

Adhesive failure is a loss of bond or adhesion of the sealant to a substrate. This failure may occur for three primary reasons: Improper use of primer, failure to use a primer or improper surface preparation. If field adhesion testing had been performed at installation, the results should have dictated surface preparation requirements. Most sealants require the use of a primer. If testing indicates that a specific primer should be used, failure to use that primer or improper use of the primer may cause adhesive failure.

Adhesive failure may also be the result of an improperly prepared substrate. The substrate must always be clean, dry and frost-free prior to sealant installation. Adhesion may be reduced if the EIFS coating is not fully dry. An improperly prepared substrate is a common source of adhesive failure of sealant in a joint.

Cohesive Failure of Sealant

Cohesive failure occurs when a sealant tears or splits within itself as the result of joint movement. Cohesive failure is usually the result of the sealant no longer being able to accommodate the expansion and contraction of the joint. A sealant is expected to have a certain movement capability as determined by the sealant manufacturer. Sealants are either designated by categories of ± 50 percent or $+100/-50$ percent initial movement capability. However, some sealants will stiffen and show a loss in movement capability over time. As a result, joint movement may cause cohesive failure of a stiffened sealant.

Joint movement on a percentage basis is also affected by the size of the joint. For example, 1/4" (6-mm) movement on a 1/2" (13-mm) wide joint will be twice as much on a percentage basis as a 1/4" (6-mm) movement on a 1" (25-mm) wide joint. Therefore, narrower joints are more prone to cause failure of the sealant.

Cohesive failure may be the result of the sealant joint profile. The ideal joint profile might be viewed as the compromise between two undesirable extremes. Lesser sealant depth allows for greater

movement capability of the sealant, but because some sealants may degrade on the surface, the joint is susceptible to cohesive failure. Thicker sealant depth ensures compensation for weathering of the sealant surface but reduces sealant movement capability and increases the forces exerted on the joint and the potential for joint failure.

Delamination of the EIFS Coating

Excessive sealant depth will reduce movement capability of the sealant, increasing the potential for substrate failure. Delamination occurs when the sealant overstresses the coating. This can happen at any time, but is particularly prone to occur when the EIFS coating is softened by prolonged exposure to moisture or water. Delamination of the EIFS coating can often be attributed to the incorrect use of open-cell polyurethane backer rod. The absorptive nature of open cell polyurethane backer rod allows moisture to continuously contact the EIFS coating causing softening of the EIFS coating and increasing the potential for delamination during joint extension. EIFS requires the use of closed-cell polyethylene or non-gassing polyolefin backer rods to perform successfully.

Delamination of the EIFS coating can often be attributed to the incorrect use of open-cell polyurethane backer rod.

Until recently, EIFS manufacturers specified that their acrylic finish coat be applied into the joint. This coating is particularly vulnerable to softening when wet, and as a result, finish coat delamination is a common source of EIFS joint failure. EIFS manufacturers now require that the finish coat be stopped at the face of the joint and that the sealant be applied to the more moisture-stable basecoat or an acrylic paint color primer on the basecoat. Both the basecoat and color primer are more stable in a wet environment and are less susceptible to delamination when stressed by a sealant during joint extension.

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(Continued from Page-3)

The other significant factor contributing to EIFS coating delamination is the modulus or stiffness of the sealant. As previously discussed, some sealants stiffen with age. A sealant may initially be low modulus but might become noticeably less flexible after weathering.

Some organic sealants also have the inherent property on increasing 2 to 3 fold in sealant modulus in cold temperatures. This is a particular disadvantage with EIFS because in cold temperatures, a joint has its greatest extension. An organic sealant becomes a stiff, high modulus sealant in cold temperatures is a probable cause of most finish coat delamination and joint failure in EIFS.

Silicone Weatherproofing Sealants

Dow Corning[®] 790 Silicone Building Sealant is the premium expansion joint sealant for EIFS. With ultra-low modulus, high movement capability of +100/-50 percent, *Dow Corning* 790 Silicone Building Sealant can perform in

joints where other sealants would fail. This sealant is intended for EIFS-to-EIFS joints and requires the use of a *Dow Corning*[®] brand primer for all EIFS applications. Consult your Atlas Supply representative for specific EIFS systems tested and approved. *Dow Corning* 790 Silicone Building Sealant is available in 11 standard colors and pre-matched custom colors for EIFS.

Dow Corning[®] 791 Silicone Weatherproofing Sealant is a low-cost, high-performance sealant intended for EIFS-to-metal application and expansion joints with certain EIFS systems. This sealant features ±50 percent movement capability and primerless adhesion to most EIFS manufacturers' systems. *Dow Corning* 791 Silicone Weatherproofing Sealant is available in seven standard colors.

Dow Corning 795 Silicone Building sealant is a high-performance sealant intended for use at EIFS perimeters and certain EIFS expansion joints. The sealant features excellent primerless adhesion to most EIFS systems. *Dow Corning* 795

Silicone Building Sealant is available in 11 standard colors and pre-matched custom colors for EIFS.

Prefabricated Silicone Seal

Dow Corning[®] 1-2-3 Silicone Seal is the key product in the *Dow Corning* EIFS Restoration System. This prefabricated silicone strip, when used in conjunction with *Dow Corning* 795 Silicone Building Sealant as an adhesive and *Dow Corning* AllGuard Silicone Elastomeric Coating, provides a low-cost, long-term waterproofing system for EIFS buildings. The ultra-low modulus *Dow Corning* 1-2-3 Silicone Seal, which features movement capability of +200/-75 percent, produces minimal stress on an EIFS finish coat (3 psi [0.021 Mpa] at 25 percent elongation). *Dow Corning* 1-2-3 Silicone Seal can be textured and custom designs can be provided to your specifications.



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Inside this issue:

- ◆ Trouble at the Villa of Buckhead
- ◆ New at Atlas - Gunther Mirror Mastics
- ◆ The Importance of Effective Drainage
- ◆ Welcome Aboard "Rocky"
- ◆ Albion's New e-DRIVE System
- ◆ EIFS Joint Failure Overview

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The difference between a job done RIGHT and a job done AGAIN...