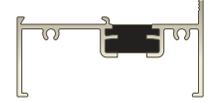


## Pour and debridge technology

Energy-saving structural thermal barriers for use in aluminum windows, doors, skylights, curtain wall and storefront.



Azon Saves Energy

Azon provides turnkey solutions to the extruder or window manufacturer with complete machinery, thermal barrier chemicals, quality control and service program.

The three-step pour and debridge process results in an energy-saving window frame with the advantage of long-term durability that is warranted from structural deterioration.

## How the three-step process works

### 1. Prepare

An aluminum profile is designed and extruded with a strategically placed cavity to limit the bridge of metal that acts as a conductor of hot or cold temperatures on the exposed surface. The cavity surface is conditioned utilizing either the **Azo-Brader™** or the **Lancer™** machinery devised to produce a mechanical lock prior to the application of the liquid polyurethane polymer into the channel.

### 2. Pour

The Azon **Fillameter™** with the Tornado III™ dynamic mixer, dispenses liquid two-component polyurethane polymers into the thermal barrier channel. Within minutes, the thermal core solidifies into a very strong, low conductance structural polymer.

### 3. Debridge

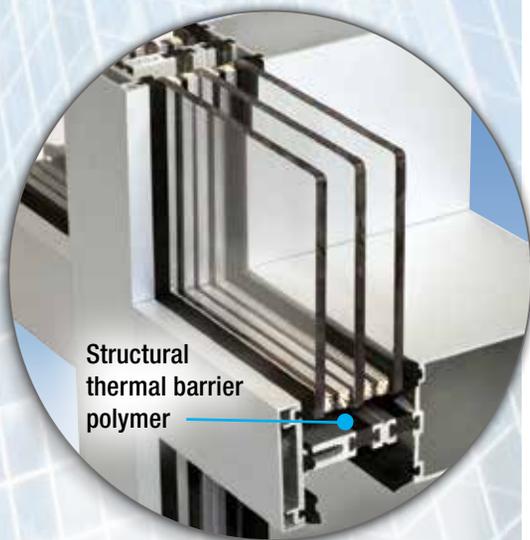
The third and final step in the thermal barrier process is the removal of the metal bridge from the bottom of the channel with the Azon **Bridgemill™**, creating an aluminum-polymer composite with high shear strength capable of withstanding strains and forces in extreme weathering conditions.



## AZO/Tec®

Interdisciplinary team aiding manufacturers with the technical design of structural and energy-efficient fenestration systems by providing a range of design functions and thermal simulation studies.

For more information about thermal barriers, contact the **AZO/Tec®** technical services department [azotec@azonusa.com](mailto:azotec@azonusa.com).



Structural thermal barrier polymer

## High performance thermal barrier

Daylighting systems produced with Azon structural thermal barrier technologies—the **MLP™** and **dual cavity**—for aluminum windows and high performance glazing components for insulating glass, will yield a fenestration system capable of upholding the highest efficiency and sustainability standards.

Photo: The Series HP3253 High Performance Curtain Wall System is a trade name of U.S. Aluminum® part of the C.R. Laurence family of companies

AT-A-GLANCE

# Performance Products



## Industrial Grouts

Since its founding in 1977, Azon has emerged as a world recognized company with international operations on three continents, supplying chemicals and intelligent technologies in most every corner of the globe.

The research and development of patented polyurethane chemistry has also allowed for expansion opportunities into the production of performance chemicals for numerous other industries.



## Azo!Grout™

### Concrete repair

Elastomeric or rigid solid materials for concrete crack, joint, or spall repair

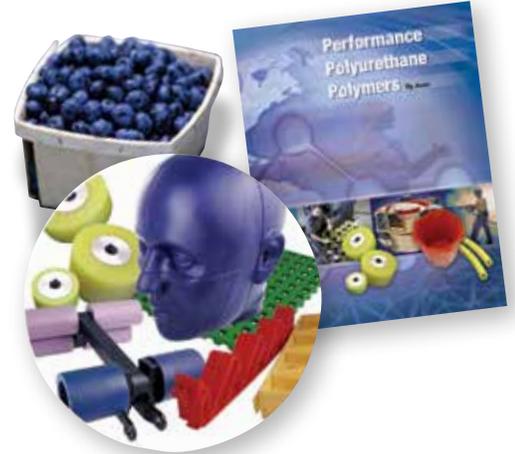
### Water control

Hydrophobic polyurethane materials to deflect water and hydrophilic-type urethanes to absorb water, creating a membrane or watertight seal

### Soil stabilization

Azo-Grout that encapsulates granules of soil to strengthen and stabilize, forming an impermeable barrier

## Performance Chemicals



The Azon performance polyurethane polymers have a broad range of application—from flexible foam—to solid cast elastomers used in recreation, food processing, automotive, mass finishing and construction.

With endless capabilities, our MDI-based products include a wide-range of abrasion-resistant polyurethane elastomers suitable for use in dynamic, high abrasion, food-grade handling and anti-static, anti-vibration applications.

Azon produces performance products used in recreation, construction, agriculture, manufacturing, grouting and mass finishing.

**Azon**  
643 W. Crosstown Parkway  
Kalamazoo, MI 49008-1910  
USA  
Tel: 269 385 5942  
Fax: 269 373 9295

**Azon UK Ltd.**  
Block C – Unit C14-15  
Duffryn Park, 1 Alder Avenue  
Dyffryn Business Park  
Ystrad Mynach  
HENGOED  
CF82 7TW  
UK  
Tel: +44 (0) 1443 814657

**Azon Korea Inc.**  
E1-Space  
19 Samseong 122 St.  
Gangnam, Seoul 06085  
Korea  
Tel: + 82 (0) 2 3449 2200  
Fax: + 82 (0) 2 3449 2229

**Azon Polyurethane (Shanghai) Co., Ltd.**  
Room 504, Building 29  
No. 58 Tonchuan Rd.  
Shanghai 200333  
PR China  
Tel: + 86 (0) 21 6212 2213  
Fax: + 86 (0) 21 6211 0004