Land and Housing Corporation

Complex aereal view

The Land and Housing Corporation engages in the construction, renovation and management of the land and housing properties in urban cities in South Korea and internationally.

Location: Jinju, Korea

Type: 65,000 sq. meters
Corporate headquarters and multi-use facility.

Architect:
DRDS - Seoul. Design collaboration with Mooyoung and Tomoon Architects.

Window system manufacturer:
Wonjin Aluminum - Wan Ju-goon/Jeon La Buk Prov.

Pour and debridge thermal barrier applicator:
Seolim Gigye - Anseong-si/Gyeonggi Prov.

Products used:
• Triple-glazed insulating glass, Low-e on #2 and #4 surfaces, argon gas fill, stainless spacer
• Aluminum curtain wall with dual cavity thermal barrier design and AZO-Brader™ mechanical lock

AZON Technology/Machinery:

Exterior side view

Land and Housing Corporation

DRDS, as an international design architect, is part of an alliance of global partners using collective abilities and resources to better serve global clients. The firm recently won the international competition for the Land and Housing Corporation headquarters located in Jinju, a city in South Gyeongsang Province.

DRDS was awarded the proposal of the US $320 million Land and Housing Corporation corporate headquarters based on the requirements: to create a sustainable mixed-use campus comprised of office, public service, exhibition and conference spaces, broadcasting studios, and cultural facilities including a sports complex.

The project implements numerous green and sustainable products and methods incorporated into all design aspects, including high performance building envelope materials.

The action plan

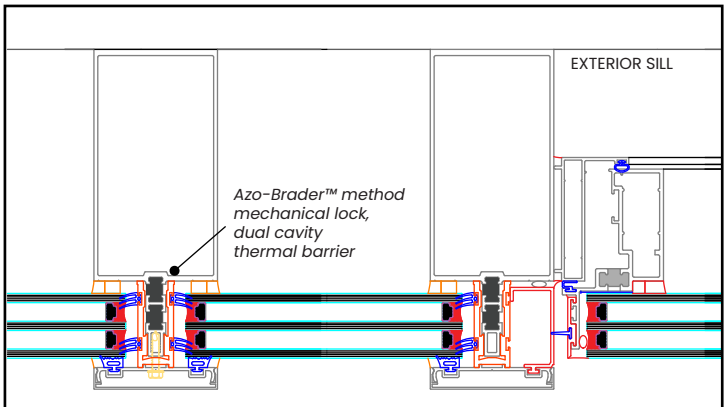
The DRDS firm specified the AZON technology to meet all of the criteria for saving energy and structural performance in the curtain wall facade in the award-winning project—the thermal barrier system with the lowest conductivity of any insulant material used for that purpose.

The AZO-Brader™ mechanical lock method of surface conditioning or abrading the thermal cavity improves adhesion between the polymer and aluminum composite. The dual cavity, double pour system, utilizes the AZON mechanical lock to provide the highest structural shear value in any curtain wall assembly—an ideal fenestration product for use in the monumental Korean master plan project.

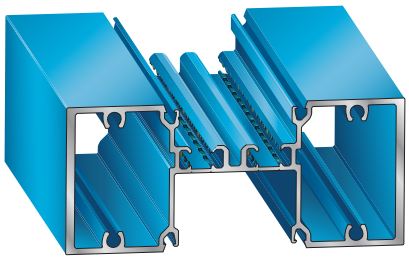
The dual cavity allows the lowest U-factors available at 0.98 W/m²K (0.17 Btu-in/hr-ft²-°F). The thermal barrier technology by AZON, allows for optimal performance to meet sustainable building requirements—including the **Passive House** standards planned for Korea in 2016.

Grade	U-Factor W/m²·K
1	<1.0
2	1.0<U≤1.4
3	1.4<U≤2.1
4**	2.1<U≤2.8
5**	2.8<U≤3.4

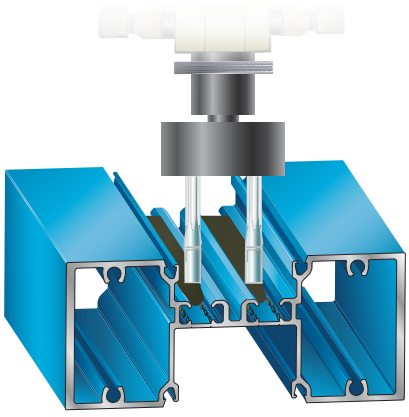
Korean U-factor sticker for compliance in 2016. **Grade 4 and 5 is no longer allowed due to the adoption of **Passive House** standards in Korea.



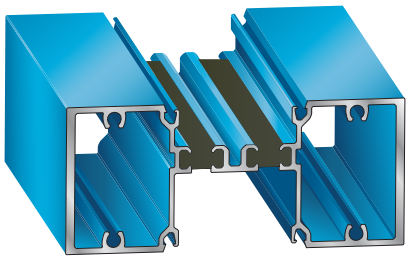
Dual cavity design
AZO-Brader™ mechanical lock by AZON



AZO-Brader™
Dual cavity mechanical lock



Fillameter™
Dual cavity thermal barrier pour



Bridgemill™
Dual cavity debridge

Thermal barrier process
by AZON Machinery

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