Dow Performance Silicones

Liverpool, UK

DOWSIL™

Case Study: John Lennon International Airport

City and Country
Liverpool, UK

Product*
- DOWSIL™ 993 Structural Glazing Sealant

Key Participants
- **Architect**
  Leach Rhodes Walker
- **System**
  Kawneer
- **Fabricator**
  M J Eagle Contracts Ltd
- **Envelope Contractor**
  SIAC Construction (UK) Ltd

*Prior to February 2018, products listed were branded as Dow Corning.

The Project
- A striking building-high glass façade, part of the £30 million development of Britain's fastest growing regional airport, Liverpool John Lennon Airport
- The façade's ability to perform under blast conditions was a prime consideration
- 1.8 m high panels, some up to 2.25 metres wide, bonded to the aluminium sections using DOWSIL™ 993 Structural Glazing Sealant
- DOWSIL™ 993 Structural Glazing Sealant has been developed and tested to the draft requirements of the European Standard for *Explosion Resistance of Windows, Doors and Curtain Walls*

The Project

The £30 million development of Britain's fastest growing regional airport, Liverpool John Lennon Airport, will enable the facility to handle up to three million passengers a year. The new terminal building features an impressive building-high glass façade on the north land side elevation.

The Challenge

Public safety and security was the prime consideration, making the north façade's ability to perform under blast conditions a key requirement. These important safety priorities should not impinge on the strong aesthetic impact, which the glazed façade was designed to create. All part of making the new terminal a suitable introduction to Liverpool.

The Vision

To make John Lennon International Airport an impressive gateway to this world-famous city. The new terminal development, designed by Manchester architect Leach Rhodes Walker, has tripled the previous terminal size to 24,000 square metres and provides check-in and baggage handling facilities. The new check-in hall's most striking feature is a ten metre high structurally

50+ YEARS PROVEN PERFORMANCE

glazed façade running the entire length of the north side of the building designed to improve natural light in the full depth of the building.

The Team

SIAC Construction (UK) Ltd, the contractors responsible for the external envelope of the new terminal building, used blast-enhanced curtain walling from Kawneer with application of the DOWSIL™ 993 Structural Glazing Sealant carried out on site by MJ Eagle Contracts. The team from Eagles bonded the 1.8m high panels, some of which were up to 2.25 metres wide, to the aluminium sections using DOWSIL™ 993 Structural Glazing Sealant.

The Products

To meet the exacting requirements of European standards for structural glazing and to marry architectural design with security and safety, the team specified blast resistant DOWSIL™ 993 Structural Glazing Sealant.

DOWSIL™ 993 Structural Glazing Sealant

A two part, neutral curing silicone sealant specifically developed for the structural bonding of glass and metal including coated, enamelled, and reflective glass, DOWSIL™ 993 Structural Glazing Sealant has excellent weathering properties and high resistance to ultra-violet radiation, heat, and humidity once cured.

DOWSIL™ 993 Structural Glazing Sealant has been developed and tested to the draft requirements of the European Standard for *Explosion Resistance of Windows, Doors and Curtain Walls*, making it specially suited for use in structural glazing within explosion-resistant windows.

Contact Us

Dow is collaborating with industry professionals around the world to develop solutions to improve the energy efficiency of buildings for a more comfortable environment. Learn more about Dow's full range of High Performance Building solutions by visiting us online at **consumer.dow.com/construction**.

Dow has sales offices, manufacturing sites and science and technology laboratories around the globe. Find local contact information at **consumer.dow.com/ContactUs**.

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