DOW CORNING

Case Study:

John Lennon International Airport, Liverpool, UK

City: *Liverpool*
Country: *UK*
Product: *Dow Corning® 993*
Architect: *Leach Rhodes Walker*
System: *Kawneer*
Fabricator: *M J Eagle Contracts Ltd*
Envelope Contractor: *SIAC Construction (UK) Ltd*

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**
- **1.8m high panels, some up to 2.25 metres wide, bonded to the aluminium sections using Dow Corning 993**
- **Dow Corning 993 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 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 Dow Corning 993 Structural Silicone 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 Dow Corning 993.

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 993 Structural Glazing Sealant from Dow Corning.

Dow Corning 993
Silicone 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, 993 has excellent weathering properties and high resistance to ultra-violet radiation, heat, and humidity once cured.

Dow Corning 993 Structural Silicone 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 Dow Corning...
Dow Corning has sales offices, manufacturing sites, as well as science and technology laboratories around the globe. Telephone numbers of locations near you are available on the world wide web at www.dowcorning.com, or by calling one of our primary locations listed below.

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