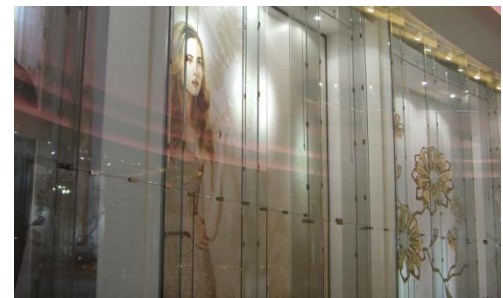


Westfield (glass shop front facades)

London, England, shopping mall, project number 1608



Bauherr	Shepard Bush, London
Main Contractor	Westfield Shoppingtowns Ltd.
Architect	Gabellini Sheppard Associates
Engineer	Eckersley o'Callaghan
Installation Period	2006 - 2008
Scope of work	4.000 m ² Glasfassade

Beschreibung

A new shopping experience beyond compare has been created in the heart of London; a floor area of 350 000 m² and a volume of investment exceeding £1 billion on one of Europe's largest building sites.

More than 270 shops, 40 restaurants, 14 large cinemas and a wellness and fitness zone have been combined under one roof by Gabellini Sheppard Associates LLP from New York. The other eye-catcher besides the spectacular roof over the shopping centre is the complex glazing to the shop windows. The all-glass shopfronts, a total area of 4000 m², have been assembled in a form that resembles overlapping scales, with open joints, held together by just a minimum number of individual clamping plates. And the result? Unsurpassed transparency. The structural stability necessary is ensured by vertical glass fins behind the window panes, made from three plies of 10 or 12 mm laminated float glass bonded together with SG interlayers. With heights of up to 8.50m and a width of just 25cm, the aspect ratio of these fins can reach 1:34, i.e. much greater than the normal ratio of 1:10. The risk of breakage of the glass fins was very high, especially during erection. They were therefore erected with the help of custom-made lifting apparatus that also stiffened the glass while holding it via suction cups. The glass fins are fitted to the rear of the shop windows, offset inwards from the edges of the panes. The two fixing plates could not be clamped, they were glued instead. Metal fittings on the fins were attached during the laminating of the panes in the autoclave.

Munich University and sedak together developed a two-part adhesive for the full-bond glass joints which satisfies the structural requirements.