

Ove Arup: avant-garde architectural engineering with laminated glass

Ove Arup & Partners, founded in 1947 and based in London, is today one of the world's largest and most prestigious consultant engineering firms. With more than 60 permanent offices in over 50 countries and over 5,000 employees – including more than 1,500 structural engineers – it has won a plethora of architectural awards including several DuPont Benedictus Awards for innovation in laminated glass. Founded in 1947, Ove Arup today is at the front rank of architectural technology. Maintaining a close connection with avant-garde architects, the firm has pioneered a host of advanced structural solutions for projects the world over. For this article, Laminated Glass News interviewed leading specialist from Ove Arup's façade Engineering Group in London, Sydney and New York.

Matt King, Associate, Façade Engineering Group, Ove Arup New York



Samsung Headquarters, Korea

“We used laminated glass fins extensively on the Samsung Headquarters in Seoul, Korea, completed with architects KPF. We wanted to develop a system where the fins carried gravity loads from the glazing down to the ground, rather than hanging the system from above, so we had to

consider the consequences of failure of a fin from nickel sulphide inclusions or accidental damage”.

“Traditionally, fins would be made of monolithic glass because this suits the friction clamps typically used to connect fin elements together, but this type of glass also leaves fins prone to failure. We needed a solution that was more robust and so we worked together with contractors Eckelt and Gartner to develop a laminated option”. “The fin build-up is a triple laminate of 10 mm heat strengthened, 12 mm tempered, and 10 mm heat strengthened glass. In the case of accidental damage to one of the panes, the other two will carry the gravity load on the fin.”

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Samsung's headquarters, Korea

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