

Case Study

Service: Non Destructive Integrity Test of Architectural Fin

Location: Premier Inn Hotel, Corsham Street, London

Client: Ardmore Group

Swantest were employed by Ardmore Group to design and conduct a bespoke test for evaluating the integrity and stability of an aluminium architectural fin under wind loading. The fins are positioned to the left side of each window in the hotel, and are fixed to the external brickwork.

Knowing the surface area of each fin, and using a specifically calculated safety factored wind load for this area, we conducted the tests using our bespoke testing rig.

Any distress or deflection of the fin, visible fixings or surrounding area was to be recorded and investigated.

Two major prerequisite by the client were that 1) the test would not cause any permanent damage or alterations on the current façade or surroundings, and 2) the procedure would be as fast as possible with minimal obstructions –

While keeping maximum safety in mind we ensured that there was no hindrance to the flow of customers and employees in and out of the Hotel, while also proving that our non-destructive testing methods are fast, versatile & effective whatever the situation or location.

We were able to produce a same day report confirming the integrity of the architectural fins; giving our client the confirmation & peace of mind to progress with installation.

Key to images:

1. 3D sketch of the architectural fin
2. Testing rig clamped in position
3. Test in progress with dial gauges to record deflections

