

## Testing of Building Envelope

# Impact Testing of Cladding Systems

Cladding panels on the outside of a building may be subject to impacts from a wide variety of sources; accidental human impact, maintenance and cleaning (cleaning cradles), wind blown debris and vandalism (stone throwing).

To ensure that cladding panels are not at undue risk of failure from typical impacts they should be tested for both hard and soft body impact resistance in accordance with the relevant British Standard.

A hard body test involves dropping a 0.5 or 1 kg steel ball onto a cladding panel, whilst the soft body test swings a 50 kg leather bag filled with glass beads against the panel. The drop height defines the energy of the impact and can be adjusted to simulate different impact types.

Sandberg has apparatus for carrying out hard and soft body tests. The tests are undertaken in accordance with the methods of BS 8200:1985 Code of practice for design of non-loadbearing external vertical enclosures of buildings.

It is recommended that the soft body test is carried out on all facades, but particularly those incorporating panels of stone or other brittle materials, where failure from an accidental impact of a cleaning cradle could lead to fragments falling from a significant height.

Sandberg also provides a range of other testing, consultancy, site inspection and failure investigation on cladding system types ranging from traditional masonry to modern glass facades.



*Soft body impact test*



*1 kg hard body impactor*

To discuss your needs please contact  
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