

Test samples for stick curtain walling

Introduction

- 1 Stick curtain walling systems generally allow for a number of variations in the way they are assembled. When carrying out weathertightness tests, manufacturers generally want a single test specimen to represent all possible uses of the system.
- 2 This Technical Note provides guidance on the design of test specimens to enable a test specimen to be applied to a wide range of applications. However, it may not be possible to properly quantify the performance of every system variation in a single test specimen.
- 3 The guidance provided in this Technical Note will also assist those assessing whether the data from previous tests provide sufficient evidence that a proposed application of the system will provide the required performance.

CWCT Standard

- 4 The CWCT *Standard for systemised building envelopes* gives the following requirement in Clause 1.5.5 Use of previous tests:
 - *'The system is to be used with spans and support conditions and supporting structural frames similar to those originally tested.'*
- 5 The accompanying explanatory note gives the following guidance:
 - *'The results of previous tests are likely to be invalid unless:*
 - *The detailed design of the project envelope, including the method of jointing, joint sealing and glazing is identical to the construction of the envelope specimen on which the tests were carried out;*
 - *The curvature and degree of end rotation of the mullion and transom members will be no greater than those in the curtain wall specimen on which the tests were carried out;*
 - *The vertical deflections of transoms are no greater where this may impair drainage, reduce glass clearance or glass cover.'*
- 6 The construction of a proposed wall will rarely be 'identical' to that of an existing test sample. The test evidence needs to be evaluated by a competent person taking account of the likely effect of any differences on performance and the consequences that could arise if the performance criteria are not satisfied.

BS EN 13830

- 7 BS EN 13830:2003 provides little guidance on test specimens. BS EN 13830:2015+A1:2020 gives some guidance on test specimens in Annex D which is normative. A normative annex is essential for the application of the Standard as distinct from an informative annex which is provided for general guidance.