From: David Ewing
Sent: 18 December 2014 18:01
To: ivor.meredith@kingspan.com; Dan Ball (dan.ball@kingspan.com)
Cc: Cathal Brennan; Barry Turner
Subject: K15
Attachments: EW165A Kingspan Insulation.docx

Hi Ivor / Dan
I have tried to phone today but thought I should just clarify some of the issues for you that we have around recertification for K15 and other thermoset materials above 18m.
LABC have been contacted by NHBC in connection with the wording used in the earlier Registered Detail certificate following the reissue of the BBA certificate 08/4582 in December last year. There was concern that the certificate implied a global approval to the use of K15 above 18m and that the revised BBA certificate had been amended to read suitability for use on non-combustible substrates only ie to masonry or concrete structures.
This was subsequently amended and reworded pending the results of your BS 8414 testing carried out by BRE.
This documentation has since been provided by you and the specific test criteria demonstrated compliance with BRE 135 in relation to the criteria cited in A2.2 External Fire Spread and A2.3 Internal Fire Spread. However the test data and photographs showed that there was considerable breakdown of the cladding system and appears to show continued burning for 19 minutes after the crib was extinguished. A2.4 Mechanical Performance states there is no performance criteria for mechanical failure and the nature of the performance should be considered as part of the overall risk assessment.
This is also covered in Approved Document B Volume 2 : B4 12.5 – 12.9 and mechanical failure is not covered.
The question of the adequacy of thermosetting materials was raised by the NHBC at the National Building Control Alliance meeting held on 8th December. The BCA is the representative body of building control service providers and LABC represent Local Authorities at this group. A draft amended guidance document to BCA Technical Guidance Note 18 http://www.buildingcontrolalliance.org/guidance/technical-guidance-notes/ was circulated that included the wording;
BR 135 recognises that, in most cases, a fully developed fire on one story will spread to the storey above it. Hence, it is accepted that two storeys may be burning to the same time prior to the fire service tackling the fire. However, BR135 is concerned about the rate of fire spread and seeks to limit this rate to enable the fire service to deal with a secondary ignition before it builds up to flashover, or (as a worst case) before it spreads to a third storey. Therefore, the rate at which the fire spread up he outside face of a building via combustible claddings needs to be considered with in the acceptable criteria of BR135. Note that (in most cases) a fire is likely to be limited to 'fully developed' status on one storey and 'pre-flashover' status on the second, higher storey. Therefore, for the purposes of BR135, it is considered that fire spread will not have occurred beyond this upper storey within the expected intervention time of the fire service.
From a Building Control point of view, the 'Mechanical Performance' criteria can only be judged against Requirements of B4. Note that external walls which do not transmit floor loads are not considered to be an 'element of structure' for B3 purposes (see AD B2 para B3.iii) and B5 only makes provision for the installation of access and facilities to assist the fire service in the protection of life. As B4 makes no reference to the need to protect people from falling debris from a fire higher up the building, it is considered that, except in circumstances which are specific to the building, the 'Mechanical Performance' criterion of BR 135 is unlikely to feature as part of the Building Control approval process. However, it should be given due consideration by the specifier under any other applicable legislation , insurance or warranty requirements.

This is currently under consideration by the group and I have sought updates from Barry Turner Director of Technical Policy at LABC and our representative at BCA. The issue is fundamentally a warranty issue rather than a building control matter, although there is clearly a duty of care required by building control. I have also suggested that we could include wording within the certification to read "It is important that the use of this product is agreed with Warranty providers prior to installation to ensure that its performance has been considered as part of the overall risk assessment of the finished building". I am however mindful that this may still create further issues for approval.

I am sorry this has taken time and overlapped with the certificate lapse, please be assured we are dealing with it as quickly as we can and I attach a draft of the revised certificate that I believe covers the situation. If you can let me know if you are prepared to accept the wording of this then at least we can move quickly once resolved.
Regards
David

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