

From: Ivor Meredith <ivor.meredith@kingspan exchange.com>
Sent: Monday, May 11, 2015 6:12 PM
To: Ivor Meredith <ivor.meredith@kingspan.com>
Subject: NHBC NHBC NHBC

It hasn't gone unnoticed

Should we assume that the builders note is in circulation, it's our understanding we agreed Kingspan would

To whom, and how widely circulated

BR 135 reviewand keep them honest

From: Tony Millichap
Sent: 20 April 2015 11:11
To: Ivor Meredith
Subject: FW: Kingspan Kooltherm K15, use in facades above 18m.

Hi Ivor,

Without 'marking our card' we do need to point out to NHBC that they released the builders note without running the final version passed us which they promised. We should ask what / who the circulation was.

Obviously let them know we will keep them abreast of any progress and that our test programme direction is being overseen by Tenos. Also keep them on the hook for support around regulatory matters particularly BR135 but also changes to the BCA document as agreed.

Confirm provisional dates for an Aluminium façade test.

Regards

Tony Millichap
Head of Technical
Mobile [REDACTED]

From: Graham Perrior [<mailto:GPerrior@NHBC.co.UK>]
Sent: 08 April 2015 08:26
To: Tony Millichap; Ian Davis (Operations Director)
Cc: Ivor Meredith; Richard Burnley; Steve Evans; Jo Caple; John Lewis; Dave White
Subject: RE: Kingspan Kooltherm K15, use in facades above 18m.

Dear Tony.

Thank you for your e-mail update 13th March 2015.

We have reviewed the additional information and summarise our findings below. Where appropriate we have included suggestions on how to move forward.

1. The following two reports above have been received from builders and have been successful in being able to demonstrate compliance with the performance criteria of BR135 as outlined in Option 3 of the BCA Guidance Note.

- An Exova fire test assessment on a brick clad cladding build-up – accepted by NHBC
 - A BWC assessment of a building with projecting concrete walkways at each level – accepted by NHBC
2. During a previous meeting it was mentioned that a BR135 Certificate exists for the Terracotta fire test. It would be most helpful if you could send a copy of this certificate?
 3. Perhaps you could also provide us with an update on the current position in respect of the reports from the March 2015 fire tests on Terracotta and CAREA?
 4. It would also help if you could provide an update on how the test programme is progressing? In this respect it would seem sensible from our perspective to test an aluminium faced system as a matter of priority, which may provide indicative performance results that could be useful in other scenarios.

I trust this is satisfactory and look forward to receiving further details.

In the interim please let me know if you require further information.

Regards

Graham Perrior

Standards & Technical Manager

Direct tel: [REDACTED] Direct fax [REDACTED]

Mobile: [REDACTED] email: gperrior@nhbc.co.uk

NHBC | NHBC House | Davy Avenue | Knowlhill | Milton Keynes | MK5 8FP

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From: Tony Millichap [<mailto:tony.millichap@kingspan.com>]

Sent: 13 March 2015 18:17

To: Ian Davis (Operations Director)

Cc: Ivor Meredith; Richard Burnley; Alistair Hodder; Steve Evans; Jo Caple; John Lewis; Dave White; Graham Perrior

Subject: RE: Kingspan Kooltherm K15, use in facades above 18m.

Hello Ian,

As promised under action point 1 please find attached an updated schedule of testing. We do hope the schedule shown may be further accelerated, ongoing discussions with BRE suggest this may be possible and we will keep you informed.

Under point 5 we have instigated a 'global specification' to be created based upon existing test data as that used for the Elephant Park assessment to cover masonry or concrete outer leafs (anticipate earliest receipt beginning of May).

Action point 6 has progressed in that we feel some resolution has been made around clarity of BS8414 test duration via the working group, we will renew pursuing this with BRE.

We trust the foregoing and enclosed is of assistance. Please do not hesitate to contact me with any queries.

Regards

Tony Millichap
Head of Technical
Mobile [REDACTED]

From: Ian Davis (Operations Director) [<mailto:IDavis@nhbc.co.uk>]
Sent: 05 March 2015 17:02
To: Tony Millichap
Cc: Ivor Meredith; Richard Burnley; Alistair Hodder; Steve Evans; Jo Caple; John Lewis; Dave White; Graham Perrior
Subject: RE: Kingspan Kooltherm K15, use in facades above 18m.

Tony,
Many thanks for meeting us today. There was some useful progress made. Attached is a short note recording the agreed actions. Let me know if you any amendments.
Regards
Ian

From: Tony Millichap [<mailto:tony.millichap@kingspan.com>]
Sent: 27 February 2015 08:21
To: Graham Perrior
Cc: Ian Davis (Operations Director); Ivor Meredith; Richard Burnley; Alistair Hodder; Steve Evans; Jo Caple
Subject: RE: Kingspan Kooltherm K15, use in facades above 18m.

Dear Graham,

Firstly we would like to confirm our preference for a meeting next Thursday 6th March, at your location in Milton Keynes at a time to suit yourselves to be confirmed. In attendance for Kingspan Insulation would be Mr Richard Burnley Managing Director, Mr Ivor Meredith Technical Projects Manager and myself.

Below I have provided further narrative to explain how the evidence listed was originated chronologically, an additional column in the list further explains the relevance with respect to the various routes to compliance we have encountered. Further I have attached a programme of ongoing and future testing, the rationale for which is also discussed below.

The original test result to **BS8414 Pt1 (Kooltherm K15 60mm, cement particle board)** was completed in 2005 and marked our commitment to support Kooltherm K15 as fit for the intended purpose, subsequently the result was incorporated within independent approvals (BBA and LABC) as aids to demonstrate compliance.

Further testing was commissioned to address queries raised via consultants on specific projects and resulted in a test to **BS8414 Pt2 (Kooltherm K15 85mm, high pressure laminate)** which represents a common combustible cladding format.

From this point on we have supported many varied approaches to compliance through various project teams resulting in the evidence referenced. Test result **BS8414 Pt2 (Kooltherm K15 80mm, terracotta cladding)** again aims to represents a broader section of the market.

Our forward test programme is predicated on trying to capture the widest spectrum of variables encountered through our experience. The primary factors being level of fire performance (combustibility) of a given cladding format and secondly thickness variation in Kooltherm K15. Other potential variables such as sheathing boards and secondary grids / methods of attachment and fire

barriers have remained constant where possible and form part of our specification advice.

Within the attached spreadsheet we have summarised the split of cladding formats encountered. This alongside analysis of Kooltherm K15 thicknesses specified has helped to shape the test programme.

Our ongoing involvement with ARUP among other consultants has included project specific assessments (First Street) but also looking into solutions around demonstrating wider relevance of testing evidence and sense checking the principles behind our forward test programme. We are committed alongside ARUP to supporting a PHD thesis resulting in a mathematical solution to anticipating performance given the various established data points.

Considering a wider context we are also involved in the consultation process around reviewing the standards involved. Colleagues within our wider business are also generating performance data against European standards such as DIN4102, SP105 and LePIR all of which will help inform future solutions and assist with influencing the development of a European standard which has begun.

I trust the foregoing is of some assistance ahead of our meeting and look forward to seeing you on the 6th March. Please do not hesitate to contact me with any queries.

Regards

Tony Millichap
Head of Technical
Mobile [REDACTED]

From: Graham Perrior [<mailto:GPerrior@NHBC.co.UK>]

Sent: 24 February 2015 16:50

To: Tony Millichap

Cc: Ian Davis (Operations Director); Ivor Meredith; Richard Burnley; Alistair Hodder; Steve Evans

Subject: RE: Kingspan Kooltherm K15, use in facades above 18m.

Dear Tony

Thank you for your e-mail dated 17th February 2015 and for the link to the Kingspan drop box which contains a considerable number of substantial documents.

I expect you are aware that, following Ian Davis' letter of 5th February 2015 to you and his letter of the same date to Gene Murtagh, we received a letter from Kingspan's solicitors concerning the information we intend to publish for builders. We have provided a draft of our communication to builders to Kingspan's solicitors. We have allowed time for a reply later this week before we publish it.

As stated in our response to Kingspan's solicitors we are keen to continue our discussions, with NHBC's objective being to understanding what evidence there is that can be published to support our mutual builder customers who chose to use K15 in situations outside of the scope of BBA certificate 08/4582. That evidence should demonstrate compliance with the Building Regulations and NHBC Standards, ideally in accordance with the guidance set out in BCA Guidance note 18 'Use of combustible cladding materials on residential buildings'.

The documents in the dropbox appear to be duplicates of documents you have already provided, and some are incomplete, which doesn't really help us to move forward.

Considering the amount of information provided, it would really help if Kingspan could:

- Provide a clear technical justification to explain the precise relevance of each document and how it helps demonstrate compliance with the Building Regulations and NHBC Standards, in particular in accordance with BCA Guidance note 18.

- Where documents or research work are incomplete, tell us when the work is likely to be completed and when Kingspan will be able to share it with us.
- Describe to us the full programme of work proposed or underway, including the work being carried out by Arup, and the timescales so that we have a full picture of what is being proposed and can constructively contribute to the programme.

As you know, to help move forward we are willing to meet with you to discuss this. But to make any meeting effective, we would need your detailed response to the above points a few days before we meet.

Therefore I look forward to receiving further information as soon as possible and it would be helpful if you could let me know when I can expect to receive it. If you can get back to me by the end of this week, then we have availability to meet on Tuesday 3rd March or Thursday 5th March.

I will give you a call at 12.00 midday tomorrow to check whether you have any queries on the above .

Best Regards

Graham Perrior

Standards & Technical Manager

Direct tel: [REDACTED] | Direct fax: [REDACTED]

Mobile: [REDACTED] | email: gperrior@nhbc.co.uk

NHBC | NHBC House | Davy Avenue | Knowlhill | Milton Keynes | MK5 8FP

www.nhbc.co.uk | Tel: [REDACTED] | Fax [REDACTED]

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From: Tony Millichap [<mailto:tony.millichap@kingspan.com>]

Sent: 17 February 2015 10:20

To: Graham Perrior

Cc: Ian Davis (Operations Director); Ivor Meredith; Richard Burnley

Subject: Kingspan Kooltherm K15, use in facades above 18m.

Dear Graham,

Further to our ongoing correspondence and as promised via our telephone conversation Friday 13th February, I have enclosed a consolidated summary of supporting evidence with respect to the use of Kooltherm K15 above 18m. Documents referenced can be accessed here – [Click here to view NHBC](#).

As discussed we would welcome the earliest opportunity to meet and progress solutions to ongoing concerns. Please do not hesitate to contact me in the event of any queries.

Regards

Tony Millichap

Head of Technical

Mobile [REDACTED]

Kingspan Insulation Limited

Pembridge, Leominster, Herefordshire, HR6 9LA, UK

tel: [REDACTED]

fax: [REDACTED]



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