Above 18m
Approved Document B (Fire Safety)

Section 12 (External Wall Construction)

Insulation Materials & Products

Section 12.7

"In a building with a storey 18m or more above ground level, any insulation product, filler material etc. used in the external wall construction should be of limited combustibility"
Section 12.5

"External walls should either meet the guidance given in paragraphs 12.6 to 12.9 or meet the performance criteria given in the BRE Report Fire performance of external thermal insulation for walls of multi storey buildings (BR 135) for cladding systems using full scale test data from BS 8414-1: 2002 or BS 8414-2:2005"
BS 8414 Test Series

- Developed in 1988
- In Response To Increasing Use Of Thermal Insulation In Refurb Programmes On Multi-Storey Buildings
- Garnock Court, Irvine Housing Block Fatal Fire, 1999
  - Fire Started On 5th Floor
  - Within Ten Minutes Was At 12th Floor
Overcladding Systems (Refurbishment Applications)

- existing structural wall
- breather membrane
- proprietary aluminium framework fixed to wall
- insulation
- air gap
- laminate board rainscreen
BS 8414-2:2005

- Cladding Systems Fixed To & Supported By A Structural Steel Frame (New Build)
Test Criteria (BR 135)
Market Opportunity

- The Most Asked For Development Our Sales Team Request On A Monthly/ Daily Basis!
- Huge Trend Towards Concrete & Steel Frame Buildings
- Rigid Board As Sheathing To The Metsec Frame Is Critical From A U-value Perspective
- A Large Proportion Of Kooltherm Sales
- All Specs Are Either Rockwool Duo Slab or K15
Kingspan K15

- Launched in 2006 for Rainscreen Applications
- Supported by testing to BS 8414-1:2002 onto masonry substrate
- LABC Approval
- Created a strong perception on fire-safe Kooltherm Board
- System used 6mm Non-Combustible cladding as façade
- Worth circa £10M per annum

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Market Research

- Everybody Uses K15 As There Is No Alternative
- Nobody Understands The Test Requirements (Architects Ask If It Can Be Used Above 18m, The Answer is YES)
- Building Control Have Hugely Differing Levels Of Understanding On The Subject
- Give Us A Board That Is An Alternative To Kingspan & We’ll Buy It!
Testing Part 1

- Cost - £25K

- System - 8mm Eternit Cladding
  - Lamatherm Fire Barriers
  - 100mm FR5000
  - Sheathing Board
  - Metsec Frame

- Result – Terminated After 25 Minutes, Flames Extending Test Facility
Mode Of Failure
Testing Part 2

- Cost - £25k

- System - 12mm Eternit Cladding
  - Lamatherm Fire Barriers With 6mm Magnesium Oxide
  - 100mm FR5000
  - Sheathing Board
  - Metsec Frame

- Result – Passed (Completed 60 Minutes Testing)
Result

- Typical Ventilated Rainscreen System
- Large Amount (100mm) Of Combustible Insulation In The Cavity
- Passed Comfortably
- First PIR Board To Pass BS 8414 Series
- Growing Scepticism Over Rigid Board Testing
Launch Action Plan (Considerations)

- Product Name & Differentiation (Coding, SKUs)
- Pricing (Same As FR or Premium ?)
- Building Control Acceptance & Proof
- Sales Team Training
- CTC Enquiries
- Projects Between Now & Launch

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