

## TICA calls for closer scrutiny of preinsulated pipe and duct products following concerns over reaction to fire

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The Thermal Insulation Contractors Association (TICA) is urging a fresh review of the pre-insulated pipe and duct market following the recent release of BS 5422:2023 and ahead of a raft of secondary legislation relating to the Building Safety Act.

TICA, together with the Building Engineering Services Association (BESA), first raised their concerns over the suitability of pre-insulated pipework and ductwork product, when utilised inside buildings, in July 2022.

Chris Ridge, TICA's Technical Policy Manager said "Twelve months after our initial communications it has become necessary for TICA to raise this issue again. BS 5422:2023 now defines Reaction to Fire in terms of the Euroclass system and states a minimum performance of Euroclass C-s3, d2 in dwelling applications and B-s3, d2 in non-dwelling applications. Many pre-insulated systems that are being marketed for use inside of buildings simply do not meet these criteria."

In addition, TICA is raising questions over the testing regimes employed by some manufacturers of preinsulated pipe and duct systems.

"We are seeing vastly differing reaction to fire results for products that appear to be of a similar nature," added Chris. "In some cases, the testing processes adopted by manufacturers of pre-insulated product appear to have diverged from the agreed testing methods commonly understood for traditional thermal insulation products.

"Ultimately, manufacturers are marketing a system by combining pipe and duct products with an



insulation product – this cannot negate the responsibility of testing the insulation element to the prescribed standards."

TICA has also highlighted the fact that some pre-insulated products are being marketed for applications where they simply cannot meet the required maximum heat loss requirements prescribed in BS 5422:2023 and Approved Document L Volumes 1 & 2.

Chris said: "Those responsible for specifying and installing pre-insulated systems should be prepared to ask some detailed questions first. Ultimately, this is not just a combination of products but a junction of trades.

"No-one would automatically assume that a thermal insulator is competent to install or specify pipework and ductwork – why, then, should we assume that a ductwork contractor or pipework contractor is competent to install or specify thermal insulation?"

BS 5422:2023 applies to thermal insulating materials for pipes, tanks, vessels, ductwork and equipment operating between- $40^{\circ}$ c and  $+700^{\circ}$ c. The first update in since 2009, it is the cornerstone of UK thermal insulation standards, setting out minimum levels of performance for different operating conditions.

TICA can provide further information, complete with a list of questions that can be put to manufacturers and distributors of pre-insulated products, upon request.