Irish Building Regulations Extract: 3.2.5.3 Fire resistance of timber floors in existing buildings

In an existing building it may be possible to increase the fire resistance of existing timber floors. The techniques generally adopted to upgrade the fire resistance of timber floors are as follows: (a) the addition of a fire-resisting layer, or layers, beneath the existing floor joists. There are many techniques and materials available for such purposes. In some cases it is also necessary to provide a protective layer on top of the existing floor-boards or between the floor joists. (b) Filling the voids between the existing floor surface and ceiling below, or between the floor joists, with a suitable material. There are a number of proprietary systems available which are based on this method. These are often more appropriate than the method outlined at (a) above in buildings of historic or architectural interest, where existing plasterwork is to be retained. Many of the techniques employed in upgrading timber floors involve the use of proprietary materials and systems. These must be capable of achieving the required performance in the situations for which they are adopted. Particular care and attention to detail in the execution of any such upgrading works is necessary to ensure the required performance. Table 14 of Building Research Establishment Report “Guidelines for the construction of fire-resisting structural elements (BR 128, 1988)” provides guidance in relation to the construction of fire resisting timber floors. Guidance on fire-resisting timber floors is also available from the Timber Research and Development Association (TRADA) and in the trade literature produced by manufacturers of fire protection materials and products. Guidance on upgrading the fire resistance of existing timber floors is provided in Building Research Digest number 208 "Increasing the fire resistance of existing timber floors (revised 1988)".

If you should require any additional information or assistance please do not hesitate to contact me.

Kind regards

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