Department for Communities and Local Government

13 July 2017

RECLADDING OF TALL BUILDINGS

The purpose of this Circular Letter is to:

- draw attention to the likely issues which will arise when building owners carry out recladding work on tall buildings (above 18m in height); and
- make building control bodies aware of the guidance which the Department has provided to building owners following the Grenfell Tower fire

This Circular does not give advice on the technical requirements in the Building Regulations as these are matters covered by Approved Documents.

Scope of this Circular Letter

The guidance in this Circular Letter applies to buildings and building work in England, and also to excepted energy buildings in Wales.[1]

Introduction

If building owners consider that they need to re-clad their building, for example following the results of the screening test, this is very likely to be building work as defined in regulations 3 and 23 of the Building Regulations 2010 and therefore subject to Building Regulations' requirements, in particular those relating to: structure (Schedule 1, Part A); fire safety (Part B); site preparation and resistance to contaminants and moisture (Part C); and conservation of fuel and power (Part L).

Materials and workmanship must also comply with Regulation 7.

This note flags common issues for building control bodies to consider when reviewing building regulation applications for cladding work.

The Department has provided advice for building owners on building safety matters which can be found at the links below:

[1] Excepted energy buildings are defined in the schedule to the Welsh Ministers (Transfer of Functions) (No.2) Order 2009 (S.I. 2009/3019)

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https://www.gov.uk/government/publications/safety-checks-following-the-grenfell-tower-fire-22-june-2017

https://www.gov.uk/government/publications/explanatory-note-on-safety-checks-and-testing

Replacing individual or sample panels

In assessing the safety of the cladding system it may be necessary to remove isolated panels either to reveal the construction build up or for testing purposes. In doing so, care should be taken not to create conditions which may worsen the integrity of the cladding system. This could include exposing insulation or other materials to rain which can affect structural integrity and water tightness, or leaving material exposed which could reduce fire performance.

Where sample panels are removed, they should be replaced immediately with a suitable material which ensures continued compliance with all the applicable Parts of Schedule 1 to the Building Regulations including Approved Document B guidance.

Structural safety

Replacement cladding may be heavier than the existing system and cladding panels, or insulation materials may have a lower resistance to fixings pulling through than the original panels. For example, replacement insulation may be heavier, particularly if it can absorb water (e.g. from rain during installation or rain penetration through the outer cladding). In addition, removal of the original panels may damage fixings, the fixing system or the building substrate.

If fixings or a fixing system is to be reused, the original design and suitability for the new application should be checked. This should also include an assessment of resistance to wind loads. It should not be assumed that the original specification of fixings was adequate as there is always a risk that the original system was not designed or installed correctly. Fixings should take account of the condition of the building substrate and performance in a fire.

Guidance on wall cladding is given in Section 3 of Approved Document A *Structure.* This references other industry guidance which building owners and building control bodies may find useful.

Fire safety

The requirements of Part B will apply in respect of recladding and guidance in paragraphs 12.5 to 12.9 of approved Document B applies. In particular;

- External surfaces should meet the performance set out in Diagram 40,
- Each element of the cladding system including any insulation product, filler material etc. should be of limited combustibility (as defined in table A7 – eg Class A2 to BS EN 13501-1).
- Cavity barriers should be provided to close the edges of cavities, around openings, and in line with every compartment floor and wall.

Or alternatively:

- Cladding systems (including any necessary compartmentation and cavity barriers) shown to meet the performance criteria in BR 135 using full scale test data from BS 8414 -1 or -2 as appropriate will be acceptable.

Where directly applicable BS8414 test data is not available and a proposal for cladding or re-cladding a building includes, as an alternative to compliance with 12.6-12.9 of AD B, an assessment of performance for a system this should be checked rigorously. Guidance in this respect is available in "Guide to Undertaking Assessments In Lieu Of Fire Test" published by the passive fire protection federation:

http://pfpf.org/pdf/publications/guide_to_uailoft.pdf

Further information is available in BRE report BR135 and in Building control Alliance (BCA) Guidance Note 18.

Moisture

The building structure, insulation and cladding should be designed and installed to minimize risks from moisture. This includes ensuring that alterations to the cladding system protect the structure and substructure from rain penetration, and particular attention should be paid to coping, flashing and drainage details to ensure that insulation material is not at risk of becoming wet and that structural materials are not at risk of rot or corrosion.

Consideration also needs to be given to the risk of interstitial condensation (condensation within the wall/cladding structure) which can result from a change in fabric performance where alternative materials (particularly insulation) are substituted. Guidance is given in Approved Document C, BRE Report 262 *Thermal insulation: avoiding risks* and BS 5250 *Code of practice for the control of condensation in buildings.*

Cladding and insulation can make a building more airtight and so reduce the amount of ventilation inside the building. This can potentially lead to condensation, mould growth and ill health. Additional ventilation may be needed and guidance on this is given in Approved Document F.

Conservation of heat and power

Where an external wall, roof or (ground) floor) is being renovated, Regulation 23 of the Building Regulations 2010 requires it to meet minimum energy efficiency standards where that is technically, functionally and economically feasible. ADL1B provides guidance and examples on what may be considered technically, functionally and economically feasible.

Building control process

Building control Bodies are reminded that depending on the nature and extent of works to be undertaken Fire and Rescue Services should be appropriately consulted.

Planning requirements

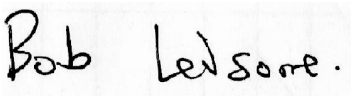
The replacement or alteration of cladding may require planning permission. The local planning authority will be able to advise on the need for planning permission associated with any work and should be contacted at the earliest opportunity.

Enquiries

Any enquiries on this Circular Letter should be addressed to:

towercaseworkteam@communities.gsi.gov.uk

Yours faithfully



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