Date: 11/07/05 Ref: 45/1/219

Note: The following letter was issued by our former department, the Office of the Deputy Prime Minister (ODPM). ODPM became Communities and Local Government on 5 May 2006 - all references in the text to ODPM now refer to Communities and Local Government.

Building Act 1984 - Section 16(10)(a)

Determination of compliance with Regulation 7 (Materials and workmanship") and Requirement H3 (Rainwater drainage) of the Building Regulations 2000 (as amended) in respect of the proposed box gutter on the flank wall adjoining the boundary, forming part of a two storey side extension

The proposed work

- 4. The proposed building work to which this determination relates is the provision of a two storey side extension to a two storey house. The extension will increase the width of the house by 2m towards the boundary with a neighbouring property. At ground floor, the extension will enlarge the kitchen and provide a new toilet/shower room and a utility room. On the first floor, one bedroom will be enlarged, along with the bathroom.
- 5. Your proposals formed the basis of a full plans application which was rejected by the Borough Council on 4 October 2004 on the grounds that insufficient information had been provided to ascertain compliance with the Building Regulations. The Borough Council had previously indicated that the proposed construction of a 'box gutter' on the flank wall of the extension adjoining the boundary was unsatisfactory. It is in respect of this question that you have applied to the Secretary of State for a determination.

The applicant's case

- 6. With reference to your *Detail Sheet R-3*, a copy of which you say you submitted to the Borough Council, you consider that your proposals provide a safe and adequate method of transmitting rain water from the roof of the extension to a suitable downpipe, using accepted and traditional materials.
- 7. You add that the proposed gutter detail was approved on at least two other occasions by the Borough Council, but you are nevertheless prepared to agree to any practical and necessary alterations regarding the use of materials.

The Borough Council's case

- 8. The Borough Council noted that the flank wall of the proposed extension was shown on your plans as positioned immediately adjoining the boundary line of the property and in such a situation the provision of a conventional facia, soffit and gutter system was not considered practical. The Borough Council was therefore concerned to establish the details of the arrangement for the collection and disposal of rainwater from the hip end roof of the extension to ensure compliance with Regulation 7 (Materials and workmanship) and Requirement H3 (Rainwater drainage) of the Building Regulations, including access for maintenance and repair and the materials used.
- 9. The Borough Council had advised you that the unspecified use of timber for the proposed gutter would be unacceptable in these circumstances and although your plans had referred to a "box gutter detail" the Council states that this detail was not deposited, prior to the rejection of your full plans application. However, having reviewed the detailed sheet submitted with your determination application, the Borough Council notes that the facia will be constructed from a PVC material of substantial thickness and not timber as appeared to be your original proposal. The Borough Council concludes, therefore, that provided agreement can be reached with regard to matters of expansion of the plastic material and the adequate fixing of the lead guttering lining, such a detail would demonstrate compliance with the Building Regulations.

The Secretary of State's consideration

- 10. The Secretary of State considers that he is being asked to determine whether the gutter proposals detailed in your *Detail Sheet R-3* are sufficient for the purpose of achieving compliance with Regulation 7 and Requirement H3 of the Building Regulations. He assumes that a box gutter is proposed in order that the gutter does not oversail the boundary with the neighbouring property and to be of sufficiently robust construction for maintenance purposes. The proposed box gutter would appear to be a gutter made on site with timber structure and lead sheet to provide a waterproof lining.
- 11. The Secretary of State notes that there are no dimensions on *Detail Sheet R-3* which in his view makes it difficult to determine if the proposed box gutter is of the correct capacity to satisfy Requirement H3, nor is it possible to be sure that the depth between the tilt fillet that provides the interface between the roof and the bottom of the gutter is sufficient to prevent water entering the roof structure at times of heavy rainfall. It is also not clear how many outlets are to be provided to the gutter. If the gutter were to block it could back up and enter the building or at least overflow and cause nuisance. The guidance in *paragraph 1.7*, *Requirement H3 in Approved Document H (Drainage and waste disposal)* recommends that where over spilling might be hazardous additional outlets or overflows should be provided.

- 12. In the Secretary of State's view, the key consideration is the actual construction of the box gutter itself. The gutter will be relatively inaccessible so under the terms of Regulation 7, the use of materials that may be short-lived will not be satisfactory. The lining material inside the built up timber gutter in your *Detail Sheet R-3* indicates that either felt or Code 5 lead might be used. To assure a service life of at least half the expected life of the roof covering only lead sheet detailed in accordance with *BS 6915 (Design and construction of lead sheet roof and wall coverings. Code of practice)* would be acceptable. Alternatively, roofing grade synthetic rubber sheet with appropriate detailing could be used.
- 13. The Secretary of State also notes that you have not specified the type of timber forming the basis of the box gutter or the framework to it. Due to the proximity with water this timber should be durable and either have a preservative treatment or be from a type of wood that is naturally resistant to decay. If board material such as plywood is intended the board type from BS EN 313 (Plywood; classification) or 314 (Plywood; test methods) should be stated. The board should be waterproof with a non-degrading adhesive.
- 14. The facia is shown on *Detail Sheet R-3* as being 18mm plastic. If a material such as PVC is used this should be satisfactory. However, no fixing detail is given for fastening the clips for the leadwork to the facia. Some form of backing board is required between the facia and the fillet inside the box gutter to give some form to the front edge of the box gutter. The PVC facia is a decorative item and not suitable for supporting the gutter lining.
- 15. The Secretary of State has therefore concluded that you have not provided sufficient information on the types of materials to be used for the box gutter or how they are to be installed to meet the durability requirements of Regulation 7, and that you have not demonstrated that adequate provision has been made for rainwater to be carried from the roof of the building, as required by Requirement H3. However, subject to the provision of the above further details and specification your proposals have the potential to achieve compliance with Regulation 7 and Requirement H3.

The determination

- 16. The Secretary of State has given careful consideration to the particular circumstances of this case and the arguments presented by both parties.
- 17. As indicated above, on the basis of your proposals as submitted for determination, the Secretary of State has concluded and hereby determines that your proposed box gutter on the flank wall of your proposed two storey extension, adjoining the boundary, does not comply with Requirement 7 (Materials and workmanship) and Requirement H3 (Rainwater drainage) of Schedule 1 to the Building Regulations 2002 (as amended).