Local Government and Communities Directorate Building Standards Division

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Mr A McAulay Team Leader Building Standards Headquarters Montrose House Montrose Crescent Hamilton

Our ref: BSD2015/02 - A 18 February 2015

Dear Mr McAulay,

LOCAL AUTHORITY BUILDING STANDARDS SCOTLAND (LABSS) REQUEST FOR AN OPINION ON COMPLIANCE WITH BUILDING STANDARDS

STAS Application – Keepmoat Homes – Roxburgh, Fyvie & Stirling House Types

I refer to the recent request for an opinion by the Building Standards Division on meeting standard 2.9, for the Roxburgh House type and standard 4.2 for the Fyvie and Stirling House types. The request relates to the LABSS Scottish Type Approval Scheme (STAS) application from Keepmoat Homes.

Standard 2.9, Escape, Roxburgh House Type

Having carefully considered all the information submitted, it is the opinion of the Building Standards Division that the proposals do meet the requirements of Standard 2.9 in respect of protecting the route of escape from the 2nd storey.

Standard 4.2, Access within buildings, Fyvie and Stirling House Types

Having carefully considered the information submitted, it is the opinion of the Building Standards Division that the proposals do meet the requirements of Standard 4.2 in respect of providing safe and convenient means of access within the houses.

Further details of the opinion on standards 2.9 and 4.2 are contained within annex A and B respectively.

Yours sincerely

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Annex A

Standard 2.9, Escape, Roxburgh House Type

Specific standards and provision of the Technical Handbook on which a view is sought

Standard 2.9 requires that "Every building must be designed and constructed in such a way that in the event of an outbreak of fire within the building, the occupants, once alerted to the outbreak of the fire, are provided with the opportunity to escape from the building, before being affected by fire or smoke."

Technical Context

The subject of the opinion relates to a 3 storey house. The ground and 1^{st} storeys are served by a stair contained within a protected enclosure. The stair serving the sole bedroom on the 2^{nd} storey is wholly contained within the bedroom itself. Access to the stair serving the 2^{nd} storey bedroom is from the protected enclosure at the first storey.

The guidance provided in clause 2.9.5 of the technical handbook for a storey at a height of more than 4.5m identifies that a dwelling should have;

- 1 route of escape,
- early warning,
- escape windows, and
- a protected enclosure, or suppression and enhanced early warning

The provision of the protected enclosure is to provide additional protection to occupants on upper storeys of a dwelling, providing a protected route of escape to a place of safety. The main concern being that, the non-provision of a protected enclosure could lead to the route of escape within the dwelling being compromised by fire and smoke.

The Opinion of the Building Standards Division

Within the Roxburgh house type the following measures have been proposed to compensate for the variations from the guidance:

- the 2nd storey bedroom (and access stair) is fire separated from the remainder of the dwelling on the 1st storey by walls having short fire resistance duration together with a self-closing fire door
- additional smoke detection is to be provided to the top and bottom of the landing of the stair providing access to the 2nd storey bedroom
- an escape window is to be provided at the bottom landing of the stair serving the 2nd storey.

In this proposal, the provision of a single upper bedroom is not viewed to increase the level of risk from fire and smoke to the occupants of the dwelling. The limited travel distance and increased awareness provided by the fire detection and warning system should reduce the time until a fire will be detected and improve the time to escape reducing the level of risk to the occupants.



Annex B

Standard 4.2, Access within buildings, Fyvie and Stirling House Types

Specific standards and provision of the Technical Handbook on which an opinion is sought

Standard 4.2 requires that: "Every building must be designed and constructed in such a way that:....

d) in dwellings, safe and convenient means of access is provided throughout the dwelling .."

Technical Context

Both house types consist of two-storey properties, with stairs providing access from the ground to the upper storey levels. The subject of the opinion is the location of both the parking and transfer space provision for a future stair lift in the Fyvie and Stirling house types.

The Domestic Technical Handbook guidance provided in Clause 4.2.8 sets out that any stair giving access to a principal living level or to accommodation greater than may be accessed via a 600mm wide stair should:

- have an area of wall not less than 700 mm in length, or an equivalent space, adjacent to the bottom riser of a stair and clear of any obstruction, fitting or doorway, to allow for parking of a stair lift at rest position. This space should be not less than 400 mm in depth and
- have a similar area of not less than 200 mm in length, on the same side of the flight, at landing level adjacent to the top nosing of the stair, to assist in transfer at the upper level, allowing for the projection of a stair lift track

In this case, the alternative proposals are to locate the recommended 700mm x 400mm area for stair lift parking on the upper floor circulation areas, clear of any obstruction, fitting or doorway. It is also proposed to create a transfer space for the stair lift adjacent to the bottom riser of the stair by the use of a hinged extending stair lift rail.

The Opinion of the Building Standards Division

The intent of guidance Clause 4.2.9 is to provide a suitable space for parking a future stair lift, with the seat in a folded position, clear of a stair. Irrespective of whether a stair lift is parked adjacent to the top or bottom of a stair, a clear unobstructed space having dimensions of 700mm x 400mm is required to facilitate parking.

The guidance also intends that a suitable space (200mm x 400mm) is provided to enable transfer to and from the stair lift. This space is generally provided adjacent to the top nosing of a stair. However, the proposals indicate a larger transfer area adjacent to the bottom riser of the stairs, which will accommodate a hinged rail extension and allow lifts to terminate clear of the stairs to enable passenger transfer.

It is considered that the alternative proposals submitted indicate adequate space to accommodate both the parking of the lift at the top of the stair and also the required transfer space at the bottom.

