BCA Technical Guidance Note 12	Rev 0 Dec 2011

Cavity Separating Wall Guidance for Part L 2010

Purpose

BCA technical guidance notes are for the benefit of it's members and the construction industry to provide information, promote good practice and encourage consistency of interpretation for the benefit of our clients. They are advisory in nature, and in all cases the responsibility for determining compliance with the Building Regulations remains with the building control body concerned.
This guidance note is based upon information available at the time of issue and may be subject to change. The Approved Documents should be consulted for full details in any particular case.

Introduction

The revision of Part L1A 2010 introduced the requirement for the potential for heat loss through party walls to be included in the SAP rating and compliance calculation and set a maximum allowable U-value for the Party Wall of 0.20 W/m2K.

Key Issues

Currently Part L1A only specifies three possible values for the effective U-value where no specific, independent scientific field evidence is provided to support a solution –

- Zero – Fully filled cavity party wall with effective edge sealing or a solid wall with no cavity.
- 0.20 W/m2K – Clear cavity wall with effective edge sealing
- 0.50 W/m2K – no party wall solution in place

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In the absence of any other supporting information, the following criteria can be used to demonstrate compliance with the requirements of Approved Document L1A. In isolation effective edge sealing would allow a U-value of 0.2W/m2k to be used. Where it is used in conjunction with a fully filled cavity separating wall a U-value of zero would be allowable.

Effective edge sealing

Edge sealing is required to restrict air movement through the party wall cavity to the external environment or other cavities in the construction, and vice versa.

In order for the edge sealing to be judged as effective one would expect the edge seal material to:

- Be impermeable to moisture and the passage of air
- Create an effective seal with both leaves of the party wall.
- Have continuous runs of material with no gaps and where there are joints in the material for them to be effectively sealed.
- Be in line with the thermal envelope in all abutting building elements.
- Should be flexible
- Should not increase the fire load within the cavity

Any joints in the material must give confidence of their durability by:

- Being mechanically fixed.
- Providing independent evidence of adhesion and compatibility between the materials being joined where adhesive tapes and mastics are used to form the joint.

Fully Filled Cavity Separating Wall

BCA have previously agreed a definition for what is acceptable as a fully filled cavity separating wall.

A “fully filled” cavity separating wall (or party wall) means a cavity wall which has been insulated such that no continuous air path communicates between the top and bottom of the wall, nor are there any uninterrupted air paths between flanking elements at either end of the wall, whether or not such junctions are edge-sealed, nor between any intervening structural junctions or service penetrations in the separating wall.

The insulation should be designed such that, after installation, it will be in contact with both sides of the cavity, although providing that:

- any resultant voids do not interconnect; and
- any such voids are not so extensive as to provide an air path between external wall cavities and/or floor, roof and intermediate floor cavities,

then the wall may be regarded as fully filled for these purposes.

The purpose of the requirement is to prevent air movement between structural cavities (thermal bypass) rather than to create a uniform barrier to the passage of heat transfer from one side of the wall to the other. Thus, imperfections, such as areas of unfilled blown fibre (or indeed dense/compact areas of fill) are unimportant for such purpose, as are unintended gaps between insulation bats (or between batts and imperfect wall surfaces) PROVIDING THAT such imperfections do not create an uninterrupted air path between separating wall junctions with roofs, floors, external walls and/or any other opening or service penetration in the separating wall.