

**Cavity separating
walls for part L**

12

**Issue 02.00
October 2019**

**Energy:
Dwellings**



Building Control Alliance

Purpose | BCA Technical Guidance Note 12

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.

Status | BCA Technical Guidance Note 12[illegible]

Notes on issue status:

A minor amendment is issued as an incremental point on the original and is in the form of 12.01.01, where the first number is the TGN number, the second is the issue and the third is the minor revision to the issue.

A major rework or change in guidance is given a new issue number, this would be in the form of 12.02.00 for a full re-issue.

Minor revisions are issued retaining the main issue number with a sequential revision number, this would be for updating standards or correction of errors. This would be in the form of 12.01.**01** for the first minor revision to the first issue

Always ensure you are using the most recent Guidance Note, these can be referenced at the BCA website:

Conventions used within this document:

- Websites and links are shown in dark **blue underlined bold text**.
- Standards and referenced documents are shown in **bold text**.
- Defined terms within the glossary are shown in **light blue bold text**.
- Section and diagram references are shown in **purple text**.



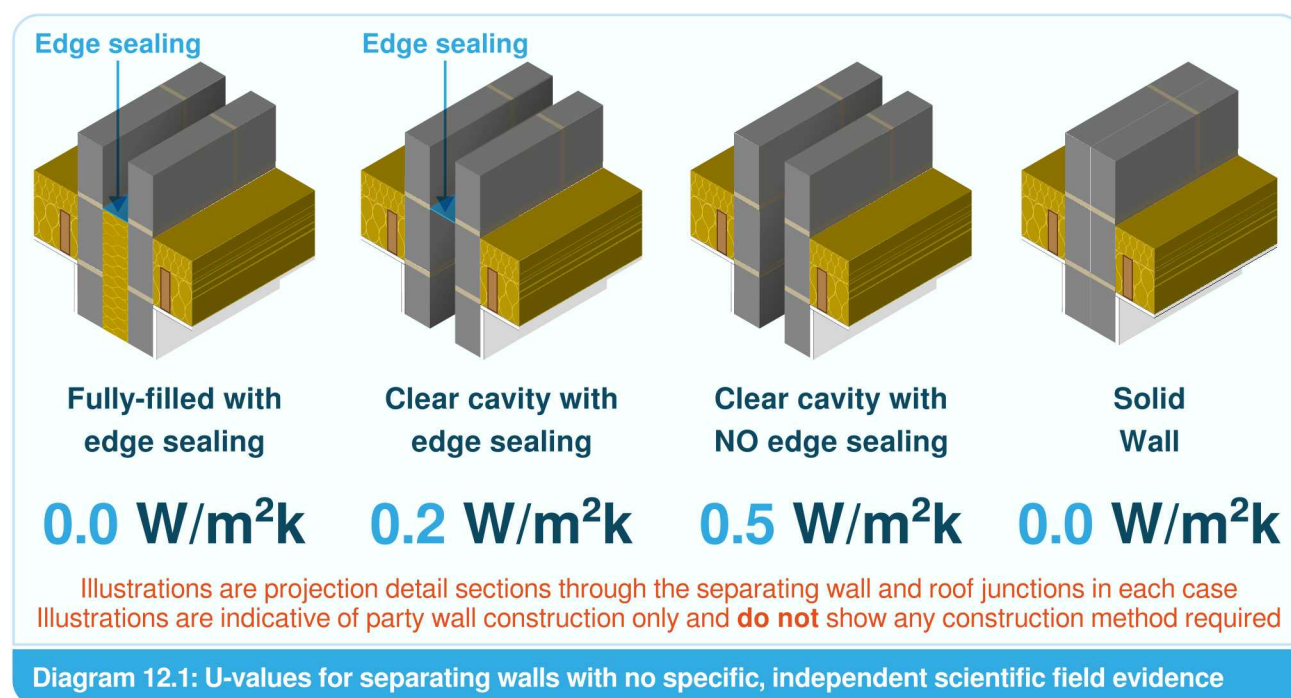
Introduction | BCA Technical Guidance Note 12

The revision of **ADL1A** in 2010 introduced the requirement for the potential for heat loss through **party walls** to be included in the **SAP rating** and compliance calculation, setting a maximum allowable **U-value** for the **Party Wall** of $0.20 \text{ W/m}^2\text{K}$. This guidance has continued and exists within the current Approved Document which refers to this BCA guidance note.

Key Issues | BCA Technical Guidance Note 12

Currently **ADL1A** only specifies three possible values for the effective **U-value** where no specific, independent scientific field evidence is provided to support a solution listed below and illustrated in **diagram 12.1** –

- $0 \text{ m}^2/\text{K}$ – Fully filled cavity **party wall** with effective edge sealing or a solid wall with no cavity.
- $0.20 \text{ W/m}^2\text{K}$ – Clear cavity wall with effective edge sealing
- $0.50 \text{ W/m}^2\text{K}$ – no **party wall** solution in place



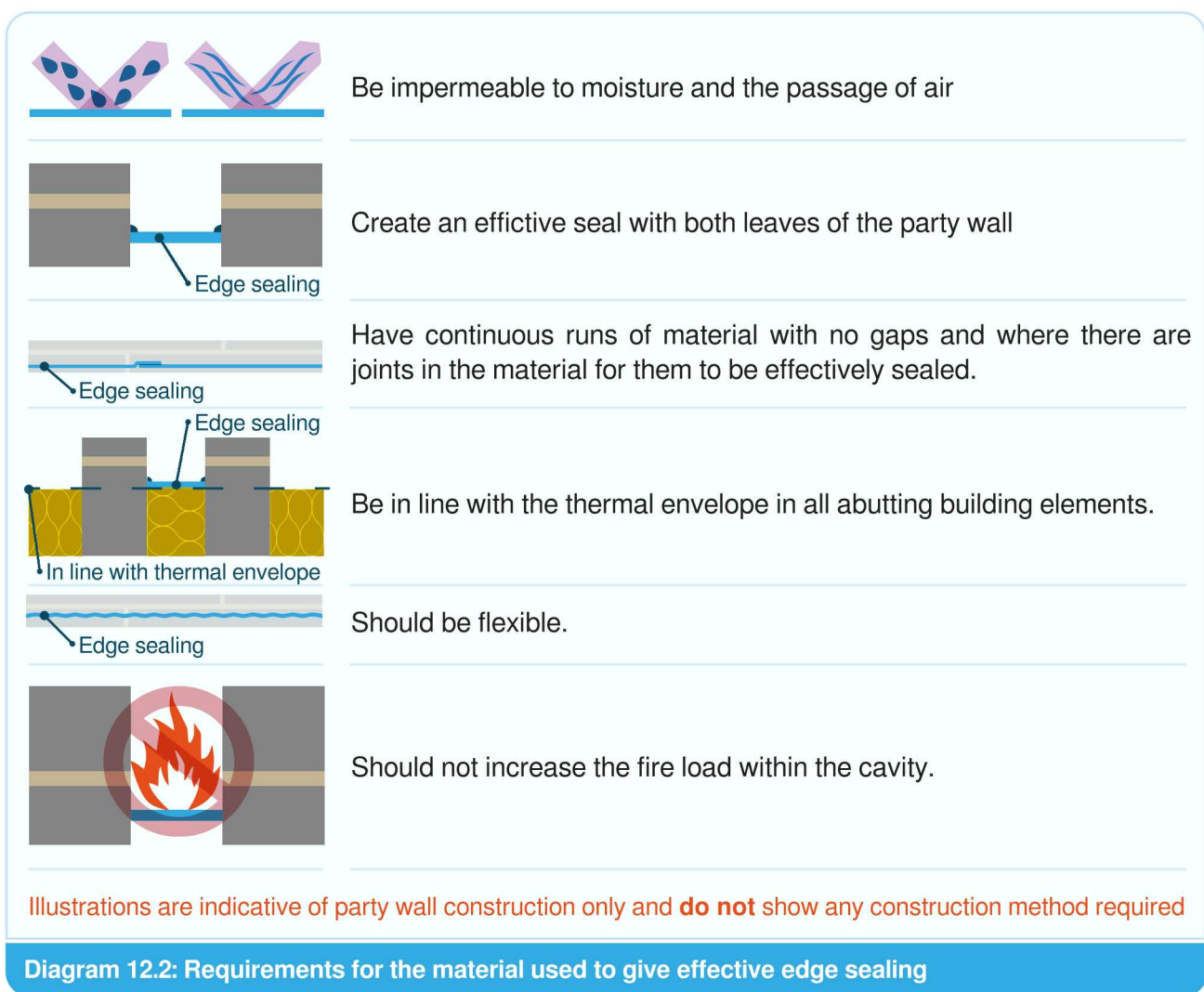
Guidance | BCA Technical Guidance Note 12

In the absence of any other supporting information, the following criteria can be used to demonstrate compliance with the requirements of **ADL1A**. In isolation, effective edge sealing would allow a **U-value** of 0.2W/m²k to be used and if it is used in conjunction with a fully filled cavity **separating wall** a **U-value** of 0 W/m²K 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, the material would need to be in accordance with the criteria given in **diagram 12.2** below.



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. There are to be no 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**.

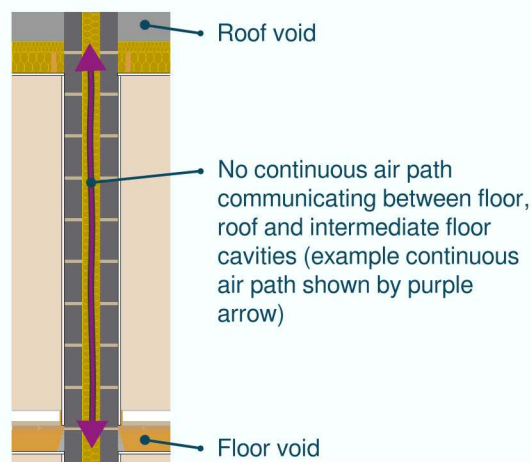
The insulation should be designed such that, after installation, it will be in contact with both sides of the cavity, although providing that:

- 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,

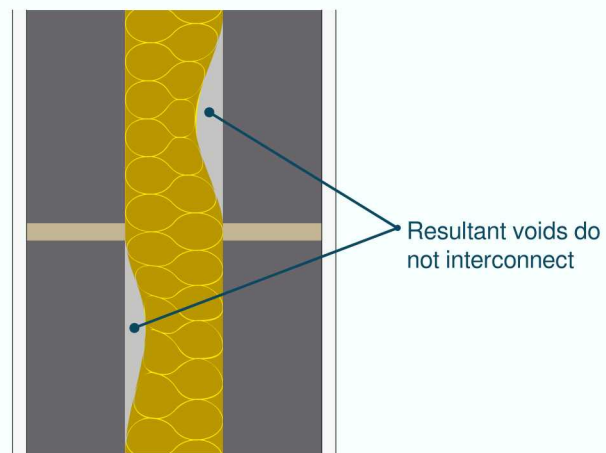
then the wall may be regarded as fully filled for these purposes as illustrated within **diagram 12.3**.



Plan view through separating wall



Section through separating wall



Section detail through separating wall

Illustrations are indicative of party wall construction only and **do not** show any construction method required

Diagram 12.3: Requirements for the material used to give effective edge sealing

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**.

Glossary of Terms | BCA Technical Guidance Note 12

Party wall

In terms of this guidance document relates to a wall common to two adjoining dwellings, also referred to as **separating wall**.

SAP rating

Standard Assessment Procedure (SAP) rating: methodology to assess and compare the energy and environmental performance of dwellings. Its purpose is to provide accurate and reliable assessments of dwelling energy performances.

Separating wall

In terms of this guidance document relates to a wall common to two adjoining dwellings, also referred to as **party wall**.

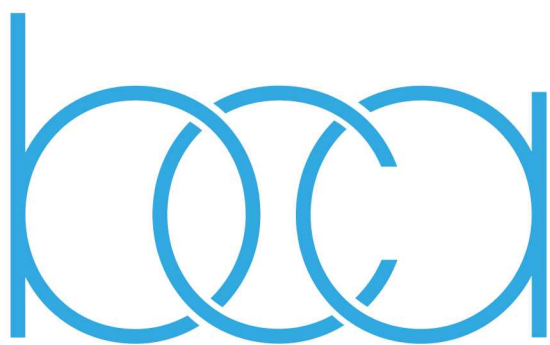
U-value

U-values measure how effective a material is an insulator. The lower the value, the better a material is.

References | BCA Technical Guidance Note 12

ADL1A

HM Government (2016) Approved Document L Volume 1A – New dwellings: 2013 Edition incorporating 2016 Amendments. Newcastle-upon-Tyne: NBS. Also Available from www.gov.uk.



Building Control Alliance

The Building Control Alliance is a unique industry group made up of representatives from clients, stakeholders and all the organisations directly involved in building control in England and Wales.

It includes the organisations supporting the many thousands of building control professionals –

- Chartered Institute of Building
- Chartered Association of Building Engineers
- Royal Institution of Chartered Surveyors

and the professional associations promoting public and private sector building control –

- Local Authority Building Control
- Association of Consultant Approved Inspectors.



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