Building Sealing Activities (Various); (Residential and Small Energy Consuming Customers Only)	Activity No.
	BS2

1. ACTIVITY SPECIFIC DEFINITIONS

Habitable Room means any space that can be occupied within a building. This does not include any attached garages, sheds or the like in class 1 or 2 buildings or storage spaces or similar within commercial buildings that are not space conditioned.

Permanent fireplace or chimney sealing device means a sealing device that is not capable of removal from the chimney or fireplace without the use of tools. For the purposes of this activity permanent fireplace or chimney sealing device includes devices that are designed to be used in operable fireplaces.

Removable fireplace or chimney sealing device means a sealing device that is capable of removal from the chimney or fireplace without the use of tools. For the purposes of this activity removable fireplace or chimney sealing device includes chimney balloons.

2. ACTIVITY DESCRIPTION (SUMMARY)

Installation of products designed to restrict or prevent air flow through doors, windows, chimneys/open fireplaces, exhaust fans or wall vents

3. ACTIVITY ELIGIBILITY REQUIREMENTS

(1) General: Any individual activity listed below or combination of activities may be undertaken at a premises in circumstances where the particular sealing activity has not previously been undertaken. However, the installation of any of the noted building sealing activities must not be otherwise required by law, for example as condition of a development approval under the *Development Act 1993* or the *Planning, Development and Infrastructure Act 2016.*

(2) Doors: Doors to be draught proofed must be on external walls of habitable rooms and present with gaps between the door and frame and/or threshold that permit the infiltration of air into or out of the premises. All eligible doors at a premises must be draught proofed, where practical.

(3) Windows: Windows to be draught proofed must be on external walls of habitable rooms and present with gaps between the sash and frame that permit the infiltration of air into or out of the dwelling. All eligible windows at a premises must be draught proofed, where practical.

(4) Chimneys/Fireplaces: The fireplace must be in a habitable room, be an open fireplace that is unsealed and not have a pre-existing chimney sealing device. All eligible chimneys/fireplaces at a premises must be draught proofed, where practical.

(5) Exhaust Fans: Exhaust fans to be draught proofed must be located in a habitable room and not fitted with a self-closing sealing device. Note: for this activity either a self-closing damper can be fitted to an existing exhaust fan or alternatively the entire fan assembly can be replaced with a new fan assembly that includes an integral self-closing damper. All eligible exhaust fans at a premises must be draught proofed, where practical.

(6) Wall Vents: Wall vents to be draught proofed must be located in external walls of habitable rooms and have an open area not less than 50 cm^2 open to the outside air. External wall openings to underfloor spaces must not be sealed. All eligible wall vents at a premises must be draught proofed, where practical.

4. INSTALLED PRODUCT REQUIREMENTS

The installed product must meet the following requirements

Doors and Windows

- The equipment to be applied must be a retail door bottom sealing product or door/window perimeter weather stripping product or a combination of the two as required.
- The product's sealing surface must be made of a durable compressible material such as foam, polypropylene pile, flexible plastic, rubber compressible strip, and fibrous seal or similar
- The product must not impair the proper operation of the door or window.
- The product, once applied, must effectively restrict the airflow into or out of the dwelling around the perimeter of the door or window as applicable.
- The product must be fit for the purpose for which it is intended to be used.

Chimneys/Fireplaces

- All fireplace or chimney sealing devices must be durable, fit for purpose and capable of effectively sealing the flue or chimney of an open fireplace.
- Permanent fireplace or chimney sealing devices designed to be used in an operable fireplace must be of a sufficiently durable construction such that the operation of the device is not adversely affected by the heat of a fire and, when open, does not adversely affect the operation of the fireplace, in particular the chimney/flue's capacity to "draw" smoke out of the firebox.
- Removable fireplace or chimney sealing devices that require inflation must be supplied with a pump.
- Permanent fireplace or chimney sealing devices must come with a minimum 5 year product warranty.
- Removable fireplace or chimney sealing devices must come with a minimum 1 year product warranty.

Exhaust Fans

The installed product must:

- Be either a ceiling or wall exhaust fan that is fitted with a self-closing damper, flap or other sealing product that can be closed to seal the exhaust of a fan and is suitable for installation in the location in which it is to be installed, or a product that is a self-closing damper, flap, filter or other sealing product that can be closed to seal the exhaust of a fan and is suitable for installation on the exhaust fan on which it is to be installed.
- The product must come with a minimum 2 year product warranty.

Wall Vents

- The product must be a robust non shrinking permanent sealing material compatible with the surrounding wall construction and colour matched to the surrounding surface finish.

General Requirements (all forms of sealing device)

- All products must be fit for purpose

- All products must comply with any product safety or other product performance requirements in a relevant code of practice or other relevant legislation applying to the activity.

MINIMUM INSTALLATION REQUIREMENTS

(1) All products must be installed in accordance with manufacturer's instructions.

(2) Works must be carried out in accordance with the NCC Section J3 and any applicable Australian Standards.

(3) No building sealing activity must occur in rooms that have an existing flue-less gas space heater or a connection that could be used for a flue-less gas space heater.

(4) Any product installed must be tested to ensure it is correctly installed, is operating correctly, and does not interfere with the normal operation of the door, window, fire place or fan to which it is fixed.

(5) The person undertaking this activity must satisfy the REPS Code mandatory safety training requirements and, if undertaking work in a ceiling space, must hold a construction industry 'White Card'. Registered Plumbers, Gas Fitters, Electricians and Building Work Supervisors are exempt from this requirement.

(6) Any complete replacement of an exhaust fan assembly can only be carried out by a licensed electrical worker under the supervision of a licensed electrical contractor.

(7) Any work that involves installation of a product over a ceiling exhaust fan/heating combination unit must be completed by a licensed electrical worker under the supervision of a licensed electrical contractor.

(8) Any work that requires modification to electrical wiring must be completed by a licensed electrical worker under the supervision of a licensed electrical contractor.

(9) The activity must be completed and certified in accordance with any relevant code or codes of practice and other relevant legislation applying to the activity, including any licensing, registration, statutory approval, activity certification, health, safety, environmental or waste disposal requirements.

(10) The undertaking of the activity shall not compromise the condensation management of the building. Reference should be made to the provisions in the Australian Building Codes Board publication "Condensation in buildings – Information handbook".

Chimneys/Fireplaces (additional requirements)

- All fireplace or chimney sealing devices must be installed in accordance with the manufacturer's instructions.
- If the permanent fireplace or chimney sealing device is not designed to be used in an operable fireplace, the fireplace must be sealed such that access to the combustion chamber is also permanently sealed, or if the firebox is not to be sealed, then the fuel burning device must be clearly tagged as having been sealed.
- If the permanent fireplace or chimney sealing device is designed to be used in an operable fireplace, it must be installed in a manner that ensures that the safe operation of the fireplace is not compromised.
- For each removable fireplace or chimney sealing device installed, two photographs (date and location stamped) must be taken: one showing the device in its position, and the other showing an appropriate warning, that is visible to a person seeking to use the fireplace, that the device must be removed prior to operating the chimney.

Wall vents (additional requirements)

- Where a wall vent connects an inside space to the outside via a wall cavity, only the inside face of the wall vent shall be sealed. The wall cavity must remain connected via the opening in the external wall to the outside air.
- Where a wall vent or vents are the only source of ventilation to a room (i.e. no windows or external doors) they shall not be sealed.

6. NORMALISED REPS GIGAJOULES

The normalised REPS gigajoules achieved from undertaking this activity is equal to:

- For Door sealing:

  Normalised REPS Gigajoules = Productivity Factor (as per table below) x Number of doors sealed

- For Window sealing:

  Normalised REPS Gigajoules = Productivity Factor (as per table below) x Lineal metres of window perimeter sealed

- For fireplace or chimney sealing:

  Normalised REPS Gigajoules = Productivity Factor (as per table below) x Number of chimneys/fireplaces sealed

- For exhaust fan sealing:

  Normalised REPS Gigajoules = Productivity Factor (as per table below) x Number of exhaust fans sealed

- For wall vent sealing:

  Normalised REPS Gigajoules = Productivity Factor (as per table below) x Number of wall vents sealed

Productivity factors NCC Zones 4 & 5

Activity	**Productivity Factor**
Door Sealing (adhesive fix)	**0.447**
Door Sealing (mechanical fix)	**0.890**
Window Sealing (adhesive fix)	**0.055**
Window Sealing (mechanical fix)	**0.110**
Fireplace or chimney Sealing (permanent)	**13.346**
Fireplace or chimney Sealing (removable)	**6.706**
Exhaust fan sealing	**0.360**
Wall vent sealing	**0.377**

Productivity factors NCC Zone 6

Activity	**Productivity Factor**
Door Sealing (adhesive fix)	**0.560**
Door Sealing (mechanical fix)	**1.113**
Window Sealing (adhesive fix)	**0.067**
Window Sealing (mechanical fix)	**0.133**
Fireplace or chimney Sealing (permanent)	**15.947**
Fireplace or chimney Sealing (removable)	**8.028**
Exhaust fan sealing	**0.442**
Wall vent sealing	**0.462**