



## Wall wraps on external frame

NCC2022 Housing Provisions Standard – Part 10.8 Condensation Management

How to comply with **section 10.8.1**

**The National Construction Code 2022 Housing Provisions Standard has amendments. This document highlights how to comply and mitigate the risk of condensation when building a home.**

To assist in reducing condensation risk in homes, the National Construction Code prescribes a number of measures to reduce the build-up of internal moisture. Key to these measures is the mandatory requirement to use vapour permeable wall wrap when wrapping a residential building in climate zones 4 to 8.

This applies to residential detached Class 1 and is covered in the Housing Provisions standards, and for Class 2 and 4 buildings the NCC2022 Volume 1. Compliance with the requirement can be achieved with installation of Bradford vapour permeable wall wrap in accordance with the recommendations in this brochure.

## NCC2022 Housing Provision Standards References

NCC changes to Vol. 1 F8D3 and the Housing Provisions Section 10.8.1 state that if a wall wrap is installed onto an external wall frame (whether metal or timber framing), climate zones 4 & 5 now require the use of a vapour permeable membrane. This is in addition to the existing requirement for the use of vapour permeable membrane in climate zones 6, 7 & 8.

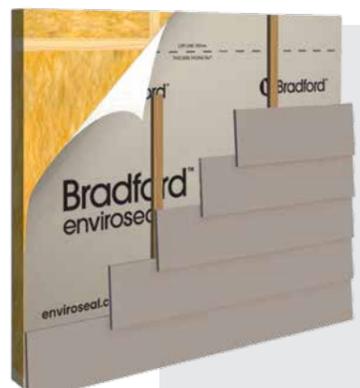
For the purpose of this publication section 10.8.1 has not been reproduced in full, please refer to the NCC for the complete requirements concerning wall wrap requirements.

## Section Interpretation

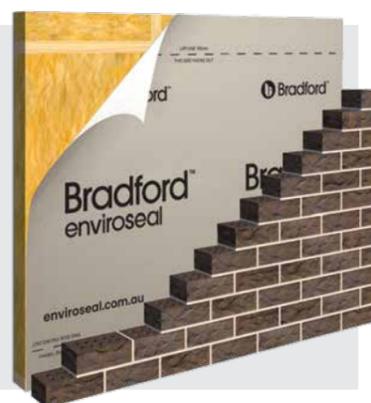
### 10.8.1 External wall construction

The use of a vapour permeable membrane is required to be installed in residential buildings with a wall wrap in climate zones 4-8. Note these requirements cannot be offset via NatHERS.

Application type: Lightweight cladding



Application type: Brick Veneer



## Section Interpretation

### Summary of compliance solutions

Climate Zones	1	2 & 3	4 to 5	6 to 7	8
<b>Product Recommendation</b>	<b>Vapour Barrier Class 1 or 2</b>	<b>Vapour Barrier or Vapour Permeable</b>	<b>Vapour Permeable Class 3 or 4</b>	<b>Vapour Permeable Class 4</b>	<b>Vapour Permeable Class 4</b>
<b>Application: Brick Veneer</b>					
Enviroseal RW Plus	✗	✓	✓	✓	✓
Enviroseal Aero	✗	✓	✓	✓	✓
Thermoseal Breather Class 4	✗	✓	✓	✓	✗
Thermoseal Wall Wrap	✓	✓	✗	✗	✗
<b>Application: Lightweight Clad*</b>					
Enviroseal RW Plus	✗	✓	✓	✓	✓
Enviroseal Aero	✗	✓	✓	✓	✓
Thermoseal Breather Class 4	✗	✗	✗	✗	✗
Thermoseal Wall Wrap	✓	✓	✗	✗	✗

\*Always check cladding manufacturer's guidance to confirm compatibility.

**Condensation Risk Consideration:** As there are many factors which can influence condensation risk it is highly recommended that designers undertake a hygrothermal analysis of the building design to further reduce condensation risk.

## Benefits of using Bradford Insulation Products to Comply with NCC2022 Housing Provisions Standard

**+** We offer a range of products to suit all climate zones that comply with section 10.8.1.

**+** We offer a range of BAL 12-FZ compliant wall wrap solutions.

# Bradford Product Solutions

## Enviroseal RW Plus

Bradford Enviroseal RW Plus is a Class 4 vapour permeable membrane that allows moisture to escape the inside of the home. This reduces the risk of condensation build-up and mould growth. Suitable for brick veneer and lightweight clad\* applications, with extended external UV exposure period of up to 12 weeks.



## Enviroseal Aero

Bradford Enviroseal Aero is a Class 4 vapour permeable membrane that allows moisture to escape the inside of the home. This reduces the risk of condensation build-up and mould growth. Suitable for brick veneer and lightweight clad applications.



## Thermoseal Breather Class 4

Bradford Thermoseal Breather is a Class 4 vapour permeable membrane that allows moisture to escape the inside of the home. Suitable for application in brick veneer walls with a drained cavity and can be used in climate zones 2-7.



## Thermoseal Wall Wrap

Bradford Thermoseal Wall Wrap is a Class 2 vapour barrier that minimises the risk of water-related weather damage. Suitable for application in brick veneer walls with a drained cavity or or lightweight clad applications\* and can be used in climate zones 1-3 where a vapour barrier is specified.



\*where compatibility is confirmed by the cladding manufacturer.

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