



Sarking Requirements for Non-Combustible Construction NCC 2019

THE NCC 2019 REQUIREMENT FOR SARKING-TYPE MATERIALS IN
NON-COMBUSTIBLE CONSTRUCTION FOR CLASS 2 - 9 BUILDINGS.



WHAT IS THE REQUIREMENT?

On the 1st of May 2019, all Construction Certificates approved in accordance with the NCC 2019, will have new exclusions for sarking-type materials.

Clause C1.9 (e) (vi) will state that sarking-type materials which do not exceed 1mm in thickness and have a Flammability Index not greater than 5, may be used where a non-combustible material is required in Type A and B construction.

C1.9 Non-combustible building elements

- (a) In a building *required* to be of Type A or B construction, the following building elements and their components must be *non-combustible*:
- (i) *External walls* and *common walls*, including all components incorporated in them including the facade covering, framing and insulation.
- (e) The following materials may be used wherever a *non-combustible* material is *required*:
- (i) Plasterboard.
 - (ii) Perforated gypsum lath with a normal paper finish.
 - (iii) Fibrous-plaster sheet.
 - (iv) Fibre-reinforced cement sheeting.
 - (v) Pre-finished metal sheeting having a *combustible* surface finish not exceeding 1 mm thickness and where the *Spread-of-Flame Index* of the product is not greater than 0.
 - (vi) *Sarking-type materials* that do not exceed 1 mm in thickness and have a *Flammability Index* not greater than 5.

HOW TO CHOOSE THE RIGHT SARKING FOR TYPE A/B CONSTRUCTION

All Bradford wall wraps and roof sarkings comply to clause C1.9 (e), however, choosing the right sarking can greatly improve weatherproofing and minimise the risk of condensation in commercial buildings.

It is important to understand that the water barrier properties of a sarking and the climate zone of construction should be considered before choosing any product.

General Considerations

- It is recommended that any sarking be classified as a Water Barrier in accordance with AS/NZS 4200.1, to provide protection against wind driven rain and water ingress. If a sarking material is perforated or considered a Non-Water Barrier in accordance with AS4200.1, it may not be able to provide weather protection.
- For cooler climate zones, a vapour permeable sarking can greatly improve weather resistance and lower the risk of condensation by allowing internally generated water vapour to escape the building.
- For hot, humid climate zones, a vapour barrier sarking can greatly improve weather resistance and lower the risk of condensation by preventing external water vapour from entering the building.

The range of suitable sarking products offered by CSR Bradford are detailed over the following pages. A summary table can also be found on the back page of this brochure.

ENVIROSEAL RW OR ENVIROSEAL CW

Enviroseal RW or Enviroseal CW provide high water hold out and are highly vapour permeable sarkings manufactured from spunbond and vapour permeable film. For cooler climates, they are able to reduce the risk of condensation by allowing internally generated moisture to escape from the thermally insulated building envelope.

Climate Consideration

These products are classified as a Class 4 (Low) Vapour Permeable in accordance with AS/NZS 4200.1 and is recommended for cooler climate zones where higher insulation values are used. They are not suitable for use in tropical climate zones.

Application

Enviroseal RW and CW are compatible behind all types of cladding, including Brick Veneer, Hebel®, James Hardie™, Cemintel®, Weathertex, Timber, Foam, FC Sheet and sheet metal. Additionally, wherever lightweight cladding is used, a battened drainage cavity is also recommended.

ENVIROSEAL RW | Residential & Small-Scale Commercial Jobs

- Nominal Thickness < 1mm
- Flammability Index ≤ 5

CODE	DESCRIPTION	WIDTH (mm)	LENGTH (m)	m ² PER ROLL
167641	ENVIROSEAL RW	1500	30	45
118153	ENVIROSEAL RW	1500	50	75
165532	ENVIROSEAL RW-IT	1500	50	75
138628	ENVIROSEAL RW	2750	25	68.75
155884	ENVIROSEAL RW	3000	25	75

*Note: RW-IT is a product variant that includes integrated tape.



PRODUCT INFORMATION

ENVIROSEAL CW | Large-Scale Commercial Jobs

- Nominal Thickness < 1mm
- Flammability Index ≤ 5

CODE	DESCRIPTION	WIDTH (mm)	LENGTH (m)	m ² PER ROLL
114175	ENVIROSEAL CW	1500	50	75
134863	ENVIROSEAL CW-IT	1500	50	75

*Note: CW-IT is a product variant that includes integrated tape.



PRODUCT INFORMATION

THERMOSEAL WALL WRAP XP AND WALL WRAP PRIME XP

Wall Wrap XP and Wall Wrap Prime XP are both single sided reflective foil wall wraps with antiglare ink. These products can provide a R-value of 0.5 in the wall system when the antiglare surface is facing a 25mm unventilated air cavity. This can assist in achieving R_t 3.3 in conjunction with R2.5 insulation batts. Note: It is not possible to achieve R_t 3.3 in a 90mm stud without the use of a semi-reflective surface facing the 25mm air-gap.

Climate Consideration

Wall Wrap XP is classified as a Class 1 (High) Vapour Barrier in accordance with AS/NZS 4200.1 and is recommended for use in tropical climate zones. Wall Wrap Prime XP is classified as a Class 2 (Medium) Vapour Barrier in accordance with AS/NZS 4200.1 and is recommended for hot to humid climates where lower insulation values are used.

Application

Wall Wrap XP and Wall Wrap XP Prime are compatible behind Brick Veneer and is only suitable behind Lightweight Cladding in tropical climate zones. It is not suitable for use behind Lightweight Clad in any other climate zone.

THERMOSEAL WALL WRAP XP

CLASS 1 VAPOUR BARRIER

- Nominal Thickness < 1mm
- Flammability Index ≤ 5

CODE	DESCRIPTION	WIDTH (mm)	LENGTH (m)	m ² PER ROLL
125825	WALL WRAP XP	1350	30	40.5
124652	WALL WRAP XP	1350	60	81
181126	WALL WRAP XP	1500	30	45
181127	WALL WRAP XP	1500	60	90

THERMOSEAL WALL WRAP PRIME XP

CLASS 2 VAPOUR BARRIER / LIGHTWEIGHT & EASY TO INSTALL

- Nominal Thickness < 1mm
- Flammability Index ≤ 5

CODE	DESCRIPTION	WIDTH (mm)	LENGTH (m)	m ² PER ROLL
195123	WALL WRAP PRIME XP	1350	30	40.5
195124	WALL WRAP PRIME XP	1350	60	81

PRODUCT INFORMATION

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THERMOSEAL FIRESPEC

Firespec is made from a white woven fibreglass cloth that has been laminated to a single layer of aluminium foil and is deemed non-combustible. Thermoseal Firespec is suitable for Type A and B non-combustible applications in accordance with NCC 2019 Volume 1, Clause C1.9 (e) (vii) and Volume 2 Clause 3.7.1.1 (g).

Supporting Documents for Suitability

AS1530 Part 1/2/3 test reports and CSIRO report FCO-3235

Climate Consideration

This product is classified as a Class 2 (Medium) Vapour Barrier in accordance with AS/NZS 4200.1 and is recommended for applications in warmer climates where lower insulation values are used and the risk of condensation entrapment within the building frame is lower.

Application

FireSpec is compatible behind Brick Veneer.

PRODUCT INFORMATION

THERMOSEAL FIRESPEC

- Nominal Thickness < 1mm
- Flammability Index ≤ 5

CODE	DESCRIPTION	WIDTH (mm)	LENGTH (m)	m ² PER ROLL
164674	THERMOSEAL FIRESPEC	1500	30	45

CSR BRADFORD COMPLIANT SOLUTIONS SUMMARY

The below table is a summary of all suitable sarking products for use in non-combustible construction. Keep in mind each sarking may be recommended for specific climate zones.

	THERMOSEAL FIRESPEC	THERMOSEAL WALL WRAP XP	THERMOSEAL WALL WRAP PRIME XP	ENVIROSEAL RW & CW
VAPOUR CONTROL CLASSIFICATION	CLASS 2 (MEDIUM) VAPOUR BARRIER	CLASS 1 (HIGH) VAPOUR BARRIER	CLASS 2 (MEDIUM) VAPOUR BARRIER	CLASS 4 (LOW) VAPOUR BARRIER
CLIMATE CONSIDERATION	RECOMMENDED FOR WARMER CLIMATES WHERE LOWER INSULATION VALUES ARE USED	RECOMMENDED FOR TROPICAL CLIMATE ZONES	RECOMMENDED FOR HOT TO HUMID CLIMATES WHERE LOWER INSULATION VALUES ARE USED	RECOMMENDED FOR COOLER CLIMATES WHERE HIGHER INSULATION VALUES ARE USED
WATER CONTROL CLASSIFICATION	WATER BARRIER (HIGH)			
DUTY CLASSIFICATION	EXTRA HEAVY DUTY	MEDIUM	MEDIUM	LIGHT*
NOMINAL THICKNESS	< 1mm			
FLAMMABILITY INDEX	≤ 5			

Technical Support

CSR Bradford offer a range of technical services for project or climate specific applications, as well as general product and project technical support.

For more information please contact CSR Bradford bradfordwebenq@csr.com.au

If further technical support is required, please contact a Bradford Technical Representative for more information on 1800 354 044.



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