

# Sarking to Roof and Walls

Sarking is sometimes used as a secondary defence against weather penetration past roof and wall cladding. Referred to as “wall wrap” for walls, the material is different from roof sarking in that it is manufactured with fine perforations to allow air to pass through allowing the material to “breathe” and prevent condensation forming between the cladding and the wall wrap material.

## Thermal Insulation

For both roof and walls, sarking or wall wrap can contribute to the total ‘R’ value requirement for energy efficiency. Manufacturer’s specifications for the particular product will provide the ‘R’ value that can be included in the required ‘added’ value. However, the ‘R’ value can only be claimed if there is a minimum 15 mm air space between the sarking or wrap material and the cladding. The normal position of sarking below the roof battens would provide the space but for walls this would require battens to be fixed to the studs after the wall wrap has been installed.

## Building in bush fire prone areas

The BCA and AS 3959 *Construction of buildings in bush fire prone areas* requires sarking and or wall wrap to be used for various situations

- Behind cladding on walls in all attack categories
- Under tiled roofs in all attack categories
- Under sheet roof cladding in the two most severe attack categories

NOTE: Sarking or wall wrap *required* to be used in bush fire prone areas must have a *Flammability Index* of not more than five.

## Roofs

Sarking can be mandatory or optional depending on a variety of criteria. Apart from requirements for bush fire prone areas, other criteria include wind speed, roof pitch, length of rafter and tile profile. Because manufacturers have different tile profiles, their specifications should be checked as soon as tile selection is made. Australian Standard 2050, *Installation of roof tiles* requires sarking where the wind classification is greater than N3 and sets out the following requirements in relation to roof pitch and rafter length -

Degrees of pitch	Max rafter length without sarking
18° to less than 20°	4 500
20° to less than 22°	5 500
22° or more	6 000

The Standard also requires sarking to be installed for a distance of 1800 either side of the point of discharge of a down pipe carrying water from a higher roof to a lower roof. In which case, the sarking has to extend down to the eaves gutter of the lower roof.

## Walls

Apart from requirements for bush fire prone areas or unless required by the manufacturer of a particular cladding system, there are no regulations that require wall wrap (sarking) to be used. Provided sheet joints and flashings around openings have been installed correctly the cladding should remain weatherproof. However the addition of a wall wrap will provide a greater degree of protection, particularly in exposed locations that could experience extreme weather conditions. Wall wrap will also act as a retainer for any mineral or glass fibre blanket insulation and protect it from moisture penetration that could severely affect its insulation properties.

The above is intended to provide general information in summary form. The contents do not constitute specific advice and should not be relied upon as such. Formal specific advice should be sought by members with respect to particular matters before taking action.

# information sheet