

# **Installation Guide**

# **SilverBarrier**

## **Woven-Fabric Double Reflective Radiant Barrier**

For Walls • Windows • RV Roofs • Attics • Basements

#### **Product Overview**

#### Description

SilverBarrier is a high-performance double-sided reflective radiant barrier insulation roll designed for superior heat control and energy efficiency. Constructed with durable aluminum foil laminated to a high-strength woven fabric, it effectively reflects radiant heat while providing structural reinforcement. Ideal for residential, commercial, and RV applications, it can be installed on roofs, walls, windows, and doors to reduce heat gain in summer and heat loss in winter.

#### Storage and Handling

SilverBarrier should be stored in its original packaging, protected from moisture, UV, and physical damage. Rolls may be stored vertically or horizontally on a clean, level surface. Care should be taken to avoid crushing or sharply bending the rolls, as this can damage the foil laminate.

## **Installation Requirements**

The membrane must maintain an air gap on at least one side to reflect heat effectively. Either reflective face may face the cavity. Direct contact with high-heat surfaces exceeding 80°C should be avoided. All seams and overlaps must be sealed with SilverBarrier Foil Tape to ensure thermal and air barrier continuity.

## **Tools and Fixings**

Installation requires a staple gun with stainless or galvanized staples, a utility knife, straightedge, SilverBarrier Foil Tape, mechanical fasteners for masonry or steel surfaces, and double-sided tape or adhesive for smooth substrates. Personal protective equipment is recommended when working overhead or handling reflective foil.

#### For roofs and attics

Cut panels to length and install along rafters or joists, stapling at maximum 300mm centers. Maintain a minimum 20mm air gap, overlap sheets 75–100mm, and seal with foil tape. Use counter-battens around service penetrations to prevent damage.



#### For walls or interior linings

Fix the membrane to timber framing using staples or tape, maintaining a cavity between the membrane and finished lining. Seal all seams and edges. When used with bulk insulation, the reflective side should face the air cavity.

## In metal buildings, workshops, or garages

Fix SilverBarrier to purlins or battens with mechanical fasteners and washers, spaced no more than 500mm apart. Support the membrane to prevent sagging and seal all joints.

#### For RVs, trailers, or vans

Cut panels to shape and secure with adhesive or tape. Seal all edges to minimize moisture ingress. The membrane can be layered with foam insulation for additional thermal performance, and ventilation must be maintained to prevent condensation.

#### For ducts, pipes, and water heaters

Wrap the membrane with light tension to avoid compression, overlap seams by at least 50mm, and seal with foil tape. Maintain clearance from high-heat surfaces.

#### **Penetrations and Detailing**

Seal all service penetrations with foil or flexible tape. Reinforce exposed edges at openings and use grommets or collars where required. Avoid clusters of fasteners that could puncture the membrane.

## **Precautions**

Personal Protection: Wear appropriate personal protective equipment (PPE), such as gloves and safety glasses, to prevent cuts from sharp membrane edges or installation tools.

Environmental Conditions: Avoid installation in wet, dusty, or extreme temperature conditions (too hot or too cold), as these may affect tape adhesion or membrane performance.

Handling Penetrations: For penetrations such as electrical conduits or lighting fixtures, properly prepare and seal the openings (e.g., with dedicated sealing tape or sealant) to maintain airtightness.

Fastening Methods: Avoid using nails or sharp fasteners that could damage the membrane. If screws or nails are used, consider using washers or pre-drilling, and seal all penetration points.

# **Maintenance & Warranty**



SilverBarrier do not need special maintenance after installed; Lifetime warranty from the day of installation if it is quality defects.

#### Remark:

Recommendations on methods, materials, and construction details are provided by Ark Synthetics based on current knowledge and experience. They serve as a general guide for designers, contractors, and manufacturers. Installation should also consider local conditions, project-specific requirements, and guidance from designers or other qualified professionals. For project assistance, contact: <a href="mailto:info@arksynthetics.com">info@arksynthetics.com</a>

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