

NEMPAL® 400 Premium Roof Flashing Tape

Self-Adhesive Butyl Flashing Tape

Description



NEMPAL® 400 Premium Roof Flashing Tape is a strong, cold-applied, self-adhesive flashing tape consisting of a long-lasting thick butyl rubber layer covered with an aluminium foil composite.

Butyl rubber in NEMPAL® 400 has a much longer shelf and service life compared with bitumen, another common flashing tape material available in the market. Butyl is more flexible and resilient in various application scenarios, such as very hot or very cold temperatures. Unlike bitumen, butyl does not contain VOCs (Volatile Organic Compounds), is non-toxic, and is less odorous.

The thick butyl rubber layer in NEMPAL® 400 provides superior waterproofing on uneven surfaces. Its thicker rubber layer adheres effectively and covers irregularities or laitance often found on surfaces like concrete. Unlike some thinner tape products available in the market (typically less than 1.0 mm in thickness), NEMPAL® 400 is not prone to voids in the rubber layer when bent to accommodate surface unevenness or sharp angles, which could lead to potential water leakage.

NEMPAL® 400 also features a superior aluminium foil composite as a protective layer for the butyl rubber underneath, shielding it from physical damage and weathering. This protective layer includes aluminium foil with a diamond-shaped texture, coated with an anti-corrosive layer on the exterior. Beneath the aluminium foil, PET film and non-woven fabric are embedded as additional layers to enhance the resiliency and mechanical strength of the protective layer.

NEMPAL® 400 forms a strong and durable waterproof seal with just hand pressure. Supplied in rolls for fast and clean application, it conforms easily to awkward contours. It is suitable for a wide range of applications, including flashing, roofing, and general water sealing. No special skills or tools are required for its application.

Technical Properties

Base Material	: Butyl
Appearance	: Light beige butyl rubber with aluminium foil composite
Thickness	: 1.4 mm
Density	: 1.6 cm ³
Peeling Force	: 3.0 N/cm
Tensile Strength (23°, 250mm/min)	: 1 Kpa
Elongation (23°, 250mm/min)	: 500%
Temperature Resistance (Service)	: -40 °C to +80 °C
Application Temperature (ambient)	: +5 °C to +45 °C

Applications*

The product bonds to most building materials including concrete, brick, masonry, slates, concrete roof tiles, wood, metal, terracotta tiles, glass, roofing felt, FRC sheets, and rigid plastics.

It can be used for applications in different scenarios below:

- Protection: flashing on flat and pitched roofs and covering, parapets and chimney stacks, pipe and tank insulations, glazing bars etc.
- Sealing & Waterproofing: glass & plastic windows frame, parapets, skylight structures, flues, concrete columns, extractor vents, coping & roof ridges, bituminous felt, capping bolts in roof sheets, Mobile Homes, RVs, Trailers, Trucks etc.
- Repair Work: existing flashing, metal and fiber cement sheet roofing, shingles, gutters and drainpipes, lead flashing, cracks in concrete, roofing felt joints on flat roofs etc.

** Users are responsible to carry out test prior to installation to confirm compatibility with actual substrates, work conditions, and service requirements.*

Features & Benefits

- Cost effective
- For new build or emergency repairs
- Quick and easy application
- Instant watertight seal
- Excellent adhesion to most substrates
- Self-adhesive - requires no separate glue
- Available in different sizes
- Outstanding durability
- Resistant to punctures and other damages.
- Thicker butyl rubber – better conforms to surface irregularities
- Durable protective layer – composite structure featuring anti-corrosive coated aluminium foil, PET film, and non-woven fabric

Directions for Use

1. All surfaces must be clean, dry, sound and free from oil, grease and dust. Remove all loose material by scraper or wire brush. Any moss or fungus should be removed using a fungicidal wash.
2. The application temperature should be between +5 °C to +45 °C.
3. Unroll the tape and cut to the required length.

4. Peel back approximately 5cm of release film and place the tape into position, press it using fingertip pressure.
5. Continue removing the release film whilst firmly placing the tape to avoid unnecessary creasing.
6. Use a seam roller to ensure intimate contact without air trap, especially on overlaps and at edges. Overlaps should be at least 25mm.

Limitations

- Do not apply to excessively damp surfaces.
- Do not apply if surface temperature is below +5°C.
- Not for regular contact with solvents and oils.
- Not intended to withstand foot & vehicular traffic.
- Will not accommodate joint movement.
- Not suitable for polycarbonate, acrylic glazing, or other plastic surfaces that have great thermal movements.
- In cold weather or storage conditions, adhesion may be reduced. Heat up Butyl layer of the tape with a hot air blower to improve adhesion, or store in warm (18°C+) conditions overnight before use.

Storage, Shelf Life, and Packaging

- Store properly in a dry and well-ventilated place with temperature above 10°C and below +30°C. Protect from freezing.
- Use within 24 months from date of production.

- Packaging:

Size / Pcs	Pcs / Carton (Inner)	Pcs / Carton (Outer)
W50mm x L5m x T1.4mm	6	36
W75mm x L5m x T1.4mm	4	24
W100mm x L5m x T1.4mm	3	18

Handling Precautions

Keep out of reach of children. For further health and safety information, please refer to the latest Safety Data Sheet.

Disclaimer

The information provided herein reflects our current best knowledge and is offered as guidance for our customers. However, it does not absolve users from thoroughly inspecting all supplies upon receipt. We reserve the right to update product properties as new developments or technical progress arise. Users should verify the recommendations in this TDS through preliminary trials, as certain conditions during processing are beyond our control. This document does not constitute a warranty, expressed or implied, regarding the fitness or suitability of the product for any specific purpose. The company assumes no responsibility for any loss or damage resulting from product use, as variations in processing, working conditions, or workmanship may occur beyond our control.

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