ALCOLIN CONTRACTORS TORCH-ON SR

Description

Alcolin Contractors Torch-ON SR is a Plastomeric waterproofing membrane manufactured in an advanced continuous calendaring process by saturating and coating a synthetic carrier with a waterproofing compound made of a special grade of bitumen, which is modified with APP polymers. While the APP polymers enhance the thermal, mechanical, and aging properties of the membrane compound, the mechanical characteristics of Alcolin Contractors Torch-ON SR are established by the non-woven continuous filament spun-bond Polyester or Glass-fiber mat which acts as the reinforcement that provides the membrane with its particular tensile strength, tear resistance, puncture resistance, and elongation properties.

Features & Benefits

- APP modified bitumen imparts waterproof properties.
- Good isotropic mechanical properties with its tear and puncture resistance.
- Good dimensional stability due to its reinforced composite.

Applications

- Waterproofing of flat roofs, terraces, boarded roofs, box gutters, retaining walls, foundation & cellar walls.

Adhesion

Concrete, galvanized steel, clay, or cement bricks.

Limitations

- Heat application is not recommended when applying onto heat sensitive materials i.e. polystyrene insulation and wood.
- Not suitable for loose lay application.
- Never apply directly onto concrete without the use of a bitumen primer.
- Flat roofs must have a minimum slope of 1.25% (1:80).

Safety instructions

Alcolin Contractors Torch-ON SR is non-toxic. Care should be taken during application as the product is applied with a gas torch. Consequently, there is a risk of burn injuries during application. It is advisable to wear safety glasses and flame proof clothes and gloves. In the event of a burn, cool affected area with copious amounts of water and seek medical attention if required. Refer to our Safety Data Sheets for further toxicological information and comprehensive handling instructions.

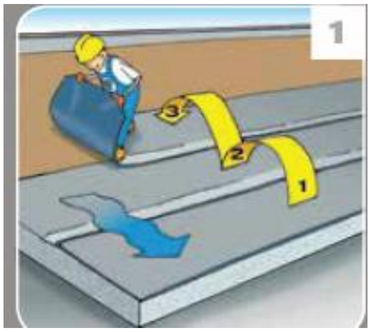
Surface preparation

- Ensure surfaces are clean, dry and free of loose materials, dust, grease, rust and other contaminants. Defects such as cracks should be repaired prior to application.
- The application surface must not have depressions where ponding of water can occur. To ensure regular run off of rainwater, we recommend a surface slope of 1.25% (1:80).
- Water drainage outlets should be a minimum of 110mm for every 90m^2 of surface area to allow for rainwater to be eliminated efficiently.
- Prepare masonry substrates, including verticals and details with a bituminous primer such as Alcolin Bitumen Primer prior to application. Allow the primer layer to dry before proceeding with any other operation.
- With prefabricated constructions, apply a suitable reinforcing strip along all joints. In the presence of construction joints, prefabricated panels or metal decks, suitable expansion joints are to be considered.

Additional application notes

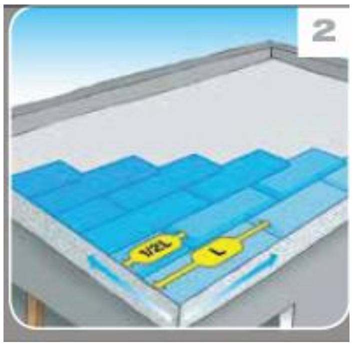
- The membranes must be applied to the substrate fully bonded. When in the proximity of the head laps, the membrane must be applied for at least 100cm, furthermore all details, perimeters, verticals, change of slope as well as projecting area, must be fully bonded.
- Operations should be well coordinated in such a manner that no damage is brought upon other construction elements or underground structures.
- In applications on vertical surfaces or very sloped substrates, apply suitable mechanical fixings to the head laps after which they will be sealed when torching the head laps.
- The minimum ambient application temperature is 5°C. Do not apply in adverse weather conditions i.e. high humidity, rain, etc.
- The membranes must be protected from direct sunlight with an Aluminium coating such as Alcolin Silver Coating or Alcolin Vinoseal to improve and extend the performance and life expectancy. The membrane must be allowed to age for 8 weeks before overcoating.
- The rolls should be kept in a warm or heated storage area during application, should the workability of the material deteriorate or become stiff and difficult to install during cold weather, they should be returned to the heated storage area and substituted with new rolls.
- Rolls that are temporarily stored on the roof before application should be kept upright, elevated on a pallet, and covered and protected from the weather.

Directions for use

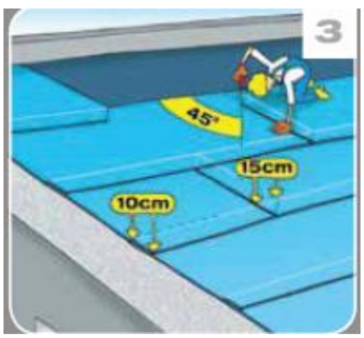


1. Use the following table as a guide to how many layers to use in your construction:

Flat roof waterproofing *(minimum 1.25% slope - 1:80)*	Single layer, protect with a bitumen aluminium paint such as Alcolin Silver Coating or stone ballast
Terrace application	Double layer under tiling
Boarded roof	Double layer, the 1st layer is mechanically applied, the 2nd is heat fused
Box gutter application	Single layer
Damp Proof Membrane	Sheeting: Single layer, application, below ground



2. Ensure surfaces are prepared as above. On masonry surfaces, apply a bituminous primer such as Alcolin Bitumen Primer. Apply primer on vertical sections as well.
3. Apply by torch application a 250mm gusset strip of membrane along all vertical up stands. Reinforce all corners by cutting out a 150mm diameter circle of membrane, form into a cone shape and torch into the corner.
4. To have all the overlaps with the slope, start application from the lowest point (see figure 1)
5. Position the membrane sheets staggered, avoiding creating any overlaps against the slope and the drains (see figure 2). Ensure that the 100mm side selvedge (area of no DR) is placed under the overlaps.



6. Cut the corners of membrane sheets that will be laid under the next sheet with a 45° angle (100mmx100mm) before laying the next sheet above it. The side joints must have an overlap of 10cm while the head joints an overlap of 150mm (see figure 3).
7. When applying a second layer of membrane, apply the sheets over the previous ones at approximately ¼ of its length and width (see figure 4).

8. Apply the bituminous membrane with a gas torch to the substrate. It is necessary to heat the entire surface of the membrane, making sure the bitumen forms a liquid mass in front of the roll to ensure it wets and bonds properly to the substrate.
9. The overlaps should be pressed down with a 15Kg roller. A slight bead of bitumen should flow out from the sides. If this is not observed, one will need to iron the overlaps to ensure complete welding.
10. Apply the vertical membrane sheets in the same manner as above, pressing it with a gloved hand until bitumen squeeze out is observed. Ensure a minimum overlap of 100mm with the horizontal sheets. The height of the vertically applied membrane should be at least 150mm higher than the finished surface.
11. Refer to Alcolin Method statements for further information.

Storage

Alcolin Contractors Torch-ON SR has a shelf life of at least 24 months if stored in a cool (below 25°C), dry and ventilated area away from heat sources. Rolls must be stored in an upright position. Do not stack them horizontally one on top of the other to avoid deformation.

Product data

Properties	Test	Unit	Test Method	Tolerance	SR
Dimensional Properties	Thickness	mm	EN-1849-1	± 5%	4
	Weight (Mass per unit area)	kg/m²	EN-1849-1	± 10%	-
	Determination Of Width	m	EN-1848-1	± 1%	1
	Determination Of Length	m	EN-1848-1	± 1%	10
	Straightness (Ortometry)	mm	EN-1848-1	-	± 10
Compound Properties	Softening point (R&B)	°C	ASTM D- 36	Min.	150
	Compound Elongation	%	UNI 8202/8	± 15%	-
Mechanical Properties	Tensile Strength - Longitudinal	N/50mm	EN-12311-1	± 20%	650
	Tensile Strength - Transverse	N/50mm	EN-12311-1	± 20%	400
	Elongation At Break - Longitudinal	%	EN-12311-1	±15 (Polyester only)	30
	Elongation At Break - Transverse	%	EN-12311-1	±15 (Polyester only)	35
	Tearing Strength - Longitudinal (Nail-Shank)	N	EN-12310-1	± 30%	225
	Tearing Strength - Transverse (Nail-Shank)	N	EN-12310-1	± 30%	250
	Resistance to Static Loading	kg	EN 12730 Method A	Min.	15
	Dynamic Puncturing (Impact Resistance)	mm	EN 12691 Method B	Min.	450
Thermal Properties	Flow resistance at elevated temperature	°C	EN-1110	Min.	100
	Flexibility at low temperature	°C	EN-1109	-	0 to ± 2
	Dimensional stability	%	EN-1107-1	Max.	±0.5
	Water impermeablility-watertightness at low pressure	60 Kpa	EN-1928 Method A	-	Passed
	Water impermeablility-watertightness at high pressure	Kpa	EN-1928 Method B	Min.	150
Miscellaneous Properties	Water Absorption	%	ASTM D-5147	Max.	< 1
	Vapour Permeability	μ	EN 1931	-	60000
	Fatigue resistance on cracks	200 cycles	UNI 8202/13	-	Passed
		500 cycles			-
	Shear Resistance Of joints – Longitudinal	N/50mm	EN-12317-1	± 20%	650
	Shear Resistance Of joints – Transverse	N/50mm	EN-12317-1	± 20%	400
	Thermal ageing in air (in oven 28 days at 70°C)	-	UNI 8202/26	-	Passed
	Ageing due to atmospheric agents (U.V Test weathering)	-	ASTM G 53 UNI 8202/29	-	-
	Fatigue resistance at joints	200 cycles	UNI 8202/32	-	Passed
		500 cycles		-	-
	Fire Classification – External Fire Performance	Class	EN 13501-5/ENV 1187	-	F Roof
	Reaction to fire	Class	EN 13501-1	-	E
	Adhesion Of Granules	%	EN-12039	Max.	≤30
	Adhesion to concrete (torch applied)	N/50mm	Pelage UEAtc	-	20
	Resistance to root penetration	-	EN-13948	-	NPD
Supply Data	Weight	kg/m²	-	-	3 to 6
	Thickness	mm	-	-	2 to 5
	Roll Length	M	-	-	10
	Roll Width	M	-	-	1
	Surface finish (E: Polyethylene film S: Sand SL: Slates GR: Granule)				
	Upper Surface Finish	-	-	-	S or E or SL or GR
	Lower Surface Finish	-	-	-	S or E

The above information is only offered, as a guide to the use of this product. Furthermore, users should satisfy themselves that it is suitable for their needs. Since we have no control over the conditions under which it is used, we cannot accept responsibility for problems caused by the use and/or application of this product.

Head Office: +27(0)21 555 7400
1 Beverley Close, Montague Gardens
PO Box 37008, Chempet, 7442
www.alcolin.com