BUILDING TRUST

PRODUCT DATA SHEET

Sarnafil® G 410-20 SA Feltback

POLYMERIC PVC MEMBRANE FOR ADHERED ROOF WATERPROOFING

DESCRIPTION

Sarnafil® G 410-20 SA Feltback is a multilayer lacquered,self-adhesive synthetic roof waterproofing sheet based on polyvinyl chloride (PVC) with a glass non-woven inlay and polypropylene fleece backing according to EN 13956.
Sarnafil® G 410-20 SA Feltback is a hot-air weldable roof membrane, formulated for direct exposure and designed for use in all global climatic conditions.

USES

Sarnafil® G 410-20 SA Feltback may only be used by experienced professionals.
- Roof waterproofing membrane for exposed flat roofs on smooth substrates

CHARACTERISTICS / ADVANTAGES

- Proven performance over decades
- Fast installation
- Lacquer coated surface
- Resistant to permanent UV exposure
- High dimensional stability from glass fleece inlay
- Resistant against impact load and hail
- High water vapour permeability
- Resistant most common environmental influences
- Hot air weldable
- No open flame equipment required
- Instant wind uplift resistance through the self-adhesive backing

PRODUCT INFORMATION

Chemical Base

Polyvinyl chloride (PVC)

Packaging

Sarnafil® G 410-20 SA Feltback rolls are wrapped individually in a yellow PE-foil.

Packing unit	Refer to price list
Roll length	15,00 m
Roll width	2,00 m
Roll weight	83,00 kg

Refer to current price list for packaging variations.

Appearance / Colour

Surface:	matt / lacquered
Colour	
Top surface	white light grey
Bottom surface	dark grey
Backing	PP fleece with self-adhesive film and PP liner

Shelf Life

18 months from date of production

Storage Conditions	Product must be stored in original unopened and undamaged sealed packaging in dry conditions and temperatures between +5 °C and +35 °C. Store in a horizontal position. Do not stack pallets of the rolls on top of each other, or under pallets of any other materials during transport or storage. Always refer to packaging.	
Product Declaration	EN 13956: Polymeric sheets for roof waterproofing	
Visible Defects	Pass	(EN 1850-2)
Length	15 m (-0 m / + 0.75 m)	(EN 1848-2)
Width	2 m (-0.01 m / +0.02 m)	(EN 1848-2)
Effective Thickness	2.0 mm (-5 % / +10 %)	(EN 1849-2)
Straightness	≤ 30 mm	(EN 1848-2)
Flatness	≤ 10 mm	(EN 1848-2)
Mass per Unit Area	3.26 kg/m² (-0.163 kg/m² / +0.326 kg/m²)	(EN 1849-2)

TECHNICAL INFORMATION

Resistance to Impact	hard substrate	≥ 800 mm	(EN 12691)
	soft substrate	≥ 1500 mm	
Hail Resistance	rigid substrate	≥ 17 m/s	(EN 13583)
	flexible substrate	≥ 25 m/s	
Resistance to Static Load	soft substrate	≥ 20 kg	(EN 12730)
	rigid substrate	≥ 20 kg	
Tensile Strength	longitudinal (md)[1)]	≥ 700 N/50 mm	(EN 12311-2)
	transversal (cmd)[2)]	≥ 700 N/50 mm	
	1) md = machine direction 2) cmd = cross machine direction		
Elongation	longitudinal (md)[1)]	≥ 25 %	(EN 12311-2)
	transversal (cmd)[2)]	≥ 25 %	
	1) md = machine direction 2) cmd = cross machine direction		
Dimensional Stability	longitudinal (md)[1)]	≤ |0.2| %	(EN 1107-2)
	transversal (cmd)[2)]	≤ |0.1| %	
	1) md = machine direction 2) cmd = cross machine direction		
Joint Peel Resistance	≥ 300 N/50 mm		(EN 12316-2)
Joint Shear Resistance	≥ 600 N/50 mm		(EN 12317-2)
Foldability at Low Temperature	≤ -25 °C		(EN 495-5)
External Fire Performance	B_{ROOF} (t1) < 20°, B_{ROOF} (t4)		(EN 1187) (EN 13501-5)
Resistance to fire	Class E		(EN ISO 11925-2, classification to EN 13501-1)
Effect of Liquid Chemicals, Including Water	Resistant to many chemicals. Contact Sika Technical Services for additional information.		
Resistance to UV Exposure	Pass (> 5 000 h / grade 0)		(EN 1297)
Water Vapour Transimission	μ = 18 000		(EN 1931)

Water Tightness	Pass	(EN 1928)

APPLICATION INFORMATION

Ambient Air Temperature	+5 °C min. / +60 °C max.
Substrate Temperature	+5 °C min. / +60 °C max.

SYSTEM INFORMATION

System Structure	Substrate	Primer
	PIR glass tissue phased	SikaRoof® Primer-600 or SikaRoof® Primer-780
	PIR aluminum phased	No priming required
	EPS (≥ 20 kg/m³ density, compressive strength >100 kPa)	No priming required
	Mineral wool (glass tissue phased, compressive strength >80 kPa)	SikaRoof® Primer-600 or SikaRoof® Primer-780
	Metal composite panel (only approved panels)	No priming required
	Bitumen (sanded or slated)	SikaRoof® Primer-600
	Galvanized steel	No priming required
	OSB 3 or Plywood	SikaRoof® Primer-600 or SikaRoof® Primer-780
	Concrete	SikaRoof® Primer-600 or SikaRoof® Primer-780 or Sikafloor®-161
Compatibility	Not compatible in direct contact with bitumen, tar, fat, oil, solvent containing materials and other plastic materials, e.g. expanded polystyrene (EPS), extruded polystyrene (XPS), polyurethane (PUR), polyisocyanurate (PIR) or phenolic foam (PF). These materials could adversely affect the product properties.	

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTS

- Installation instructions: Sarnafil® G 410-L type systems fully bonded for exposed roofs
- Sika Method Statement: Sarnafil® G 410-20 SA Feltback
- Sika Method Statement: Fully adhered roof surfaces by integrated self-adhesive film

IMPORTANT CONSIDERATIONS

Installation work must only be carried out by Sika® trained and approved contractors, experienced in this type of application.

- Do not apply to wet, damp or unclean surfaces
- Ensure Sarnafil® G 410-20 SA Feltback is prevented from direct contact with incompatible materials (refer to compatibility section).
- The use of Sarnafil® G 410-20 SA Feltback membrane is limited to geographical locations with average monthly minimum temperatures of -50 °C. Permanent ambient temperature during use is limited to +50 °C.
- The use of some ancillary products such as adhesives, cleaners and solvents is limited to temperatures above +5 °C. Observe temperature limitations in the appropriate Product Data Sheets.
- Special measures may be compulsory for installation below +5 °C ambient temperature due to safety requirements in accordance with national regulations.

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no sub- stances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the product data sheet.

Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0,1 % (w/w).

APPLICATION INSTRUCTIONS

EQUIPMENT

Electric hot air welding equipment, such as hand held manual hot air welding equipment and pressure rollers or automatic hot air welding machines with controlled hot air temperature capability of a minimum +600 °C.
Recommended type of equipment:
- Manual: Leister Triac PID
- Semi-automatic: Leister Triac Drive

SUBSTRATE QUALITY

The supporting structure must be of sufficient structural strength to apply all new and existing layers of the roof build-up and the complete roof system must be designed and secured against wind uplift loadings. The substrate must be uniform, firm, solvent resistant, smooth and free of any sharp protrusion or burrs, clean, dry, free of grease, bitumen, oil, dust and loose surface sand / gravel dressing.

SUBSTRATE PREPARATION

The substrate surface must be smooth and uniform.
1. Remove any sharp protrusions or burrs from the substrate.
2. If contaminants such as grease or dust are present, clean the supporting layer.
3. Depending on the substrate, apply the required primer as described in System structure.
4. Ensure that the supporting layer is dry.

APPLICATION

Installation procedure
Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.
Substrate priming
If required, apply primer to the substrate according to the PDS of the primer.

Membrane application
Refer to Installation instructions: Sarnafil® G 410- L type systems fully bonded for exposed roofs and Sika® Method Statement: Sarnafil® G 410-20 SA Feltback.
1. Lay out and align the membrane with the felt-free edge.
2. From the end of the run, fold back the membrane approximately half-way
3. Cut release liner and apply the self-adhesive membrane to the substrate.
4. Fold back the other half of the membrane and repeat steps 2 to 4.
5. Press down the membrane with a weighted roller (approximately 50 kg).
6. Lay out the next membrane beside the applied one with an overlap of 80 mm and repeat steps 2 to 4.
7. According to site conditions (roof geometry), adjoin the next sheet at the end of the adhered membrane to form a butt joint, or lay the following rolls alongside with overlapped joints.
8. Mechanically secure the roof build-up with a peel stop using U-Bar or Sarnabar®.

Note
Peeling protection
Peeling protection must be provided at all upstands and roof penetrations greater than 500 × 500 mm.
Hot welding overlap seams
Overlap seams must be welded by electric hotwelding equipment. Prior to welding, welding parameters including temperature, machine speed, air flow, pressure, and machine settings must be evaluated, adapted and checked on site according to the type of equipment and the climatic conditions. The effective width of overlaps welded by hot air must be a minimum of 20 mm.
Testing overlap seams
1. Mechanically test seams with a rounded-edge screwdriver to ensure the integrity and completion of the weld.
2. Rectify any imperfections using hot-air welding.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability

for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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