

FESTER VAPORTITE 550

Multi-purpose, vapor-barrier, solvent-based waterproofing system

It complies with norm ASTM D-4479-93 Type II, asbestosfree, asphalt waterproof coatings

USES

- Waterproofing system for roofs, foundations, wet room floors, laundry rooms, planters, gutters for roofing water drain, fountains, water mirrors, battered or load-bearing walls, plant pots, etc.
- As anti-corrosion protection for underground pipes and air conditioner lines.
- It is recommended for being applied under stone coverings on floors or between floors.
- It can be applied as adhesive, coating, sealant and vapor barrier for thermal isolation based on fiberglass, cork, mineral wool, and similar materials (except for expanded polystyrene).

ADVANTAGES

- Fester Vaportite 550 is one of the most complete and versatile products of its type; due to its high yield and durability under any type of weather conditions, it is preferred in the industry and construction sectors for both new works and maintenance.
- Easy to apply on concrete, sheet, masonry, brick, fiberglass, wood, metal and others in vertical or horizontal surfaces.
- Does not degrade when being constantly immersed in water or in underground structures.
- Provides effective protection to the surfaces against corrosion caused by atmospheric agents, salts, acids and light alkalis.
- Keeps all its properties between 0 °C and 90 °C and it is useful for surfaces exposed to drastic temperature changes such as machinery rooms, boiler rooms, etc.
- Creates a vapor barrier with a 0.01-perms of permeability.
- In cold application, it does not need to be warm up.
- Easy to apply with brushes in cold or warm weather.
- Good adhesion and flexibility.
- Aromatic solvent free, making it an environmental-friendly product.



APPLICATION INSTRUCTIONS

A). Roof surface waterproofing

Compounds

- 1. Substrate
- 2. Fester Hidroprimer $(4 \text{ to } 5 \text{ m}^2/\text{L})$
- 3. Fester Vaportite 550 (1 L/m² 1st coat)
- 4. Festerflex (1 linear m/m^2)
- 5. Fester Vaportite 550 (1 L/m² 2nd coat)
- 6. Festerblanc (3m²/L in two coats)



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1. Surface preparation

Remove any loose, sharp or edged parts by grubbing the area with a flat shovel.

Remove false adhesions of the existing waterproofing system, the new application will depend on this adhesion. Check any parts where enduring puddles may appear, generating muds; if there are, then fix them.

Note: Wipe a wet cloth over every dry coating layer before applying the next one. Consider these conditions for continuing the following steps.

2. Primer Application

Apply a uniform coating layer of undiluted Fester Hidroprimer at a yield of 4 - 5 m^2/L . Fester Hidroprimer dries in 4 hours approximately during a sunny day. In cloudy days, let it dry overnight (See Technical Data sheet).

3. Fissure restoring

Once Fester Hidroprimer is dry and, in case of any fissure, make a backfilling with Fester Plastic Cement Restorer (See Technical Data Sheet).

4. Critical point reinforcement

On the Fester Hidroprimer completely dry layer, on every critical point, apply two overlapped pieces of Festerflex reinforcing mash, attached to each other and to the surface with Fester Vaportite 550.

5. Waterproof coats

Apply an even coating layer of Fester Vaportite 550 all over the area to be waterproofed using at least 1 L/m² and, then, at the same time, on the still fresh Fester Vaportite 550, lay down the Festerflex reinforcing mesh, and fix any possible flaws such as folds or bulging just notching them with a paintbrush.

Between the sheets, there should be at least a 10 cm overlap on the sides and 10 cm overlap at the end of each roll. Let it dry for 24 hours.

Note: In the case of water tanks or similar, continue to apply Festerflex reinforcing mesh up to 20 cm above the chamfer.

Once first coating layer of Vaportite 550 has dried, apply the second coating layer of Fester Vaportite 550 evenly, at a yield of 1 L/m^2 . Let it dry for 7 days.

Fester Vaportite 550 can be applied with short-bristle paintbrush, ixtle brush or with a wedge or trowel, using personal-protection equipment, such as rubber gloves.

6. Protective covering of the finish

Protect your waterproofing system from the effects of solar

radiation and weathering applying two coating layers of Festerblanc at a yield of 3 m^2/L on the dry Fester Vaportite 550, respecting the drying time between both coating layers.

Once the waterproofing system has been applied, the total thickness should not be less than 1.8 mm.

Optional finishes

Fester Vaportite 550-based waterproofing systems can be protected with the following optional finishes:

Festalum, this coat is recommended for Fester Vaportite in gutters of roofing water drain (See Technical Data Sheet).

Stone coatings, such as floor/roof tiles, mosaics, brickworks, mortars, etc., is only recommended on Fester Vaportite 550 applied with double membrane.

If stone coverings are used, before placing them, spread clean and dry sifting sand (50-60 sieve) on the last and fresh coating layer of Fester Vaportite 550. Let it dry 2-3 days, sweep and remove the excess and place your favorite stone coating.

Double-membrane Reinforced systems

For extension of the system useful life or for placing stone coverings, the Fester Vaportite 550 based waterproofing system can be easily and significantly reinforced by placing 2 sheets of Festerflex reinforcing mesh. On the second fresh coating layer of Fester Vaportite 550, place a second sheet of Festerflex mesh. With a brush, notch it for avoiding bulging and folds; Let it dry 24 h. Finally, apply a third layer of coat of Fester Vaportite 550 (Two sheets of Festerflex reinforced mesh and three coating layers of Fester Vaportite 550). In this case, Fester Hidroprimer and the reflective coating (Festalum or Festerblanc) are just applied only once.

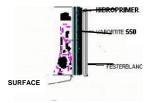
B). Vertical surface waterproofing

Compounds

Fester Hidroprimer Fester Plastic Cement Fester Vaportite Fester Vaportite Festerblanc (4 - 5 m²/L)
(for fissures)
(0.75 L/m²) 1st layer of coat
(0.75 L/m²) 2nd layer of coat
(3 m²/L); only when the waterproof

system is exposed to sunlight. When the system is in the shadow or covered with soil, it is not necessary to apply a reflecting coating.





1. Surface preparation, primer, fissure restoring and corresponding reinforcement

The first 4 steps are similar to those steps for floor waterproofing.

2. Waterproof coat

First, apply an even coating layer of Fester Vaportite 500 in waterproofed surface. Rough yield is 0.75 L/m^2 which may vary depending on the type and surface conditions. Let it dry 24 hours and continue with the second layer of coat with the same yield of 0.75 L/m^2 , to achieve a total yield of 1.5 L/m^2 in two coating layers. Let it dry 7 days.

Fester Vaportite 550 can be applied with short-bristle paintbrush, hard ixtle brush or with a wedge or trowel, personal-protection equipment, such as rubber gloves.

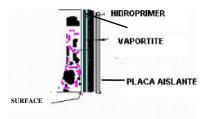
3. Finishing Protection Coat

Follow the previously mentioned instructions regarding this point in the roof waterproofing instructions.

C). Bonding agent for thermal insulating plates

Compounds

Fester Hidroprimer(4 - 5 m²/L)Fester Vaportite 550(1.5 to 2.0 L/m²)



1. Surface preparation and primer

The first 2 steps are similar to those for the roof waterproofing system

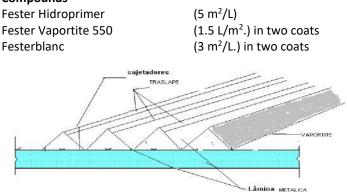
2. Arrangement of thermal insulating plates

Once the primer is dry, apply an even layer of coat of Fester Vaportite 550 at a yield of $1.5-2.0 \text{ L/m}^2$. Proceed immediately to place (with Fester Vaportite still fresh) the thermal insulating plates (except for Polystyrene). The system may be put into operation after 7 days.

Fester Vaportite 550 can be applied with short-bristle paintbrush, hard ixtle brush or with a wedge or trowel, using personal-protection, solvent-resistant, industrial, rubber gloves. After the plates had been fixed, the placement of the corresponding coatings may be done.

D) As protective, anti-rust, rain-silencer waterproofing system

Compounds



1. Surface preparation

The surface must be free from oxide, oil, grease, dust or any other pollutant film that avoids adhesion. Previous poorly adhered coats must be removed. Perfectly wash out the area and let it dry.

2. Primer

Apply a uniform coating layer of undiluted Fester Hidroprimer at a yield of 4 - 5 m²/ L. Fester Hidroprimer dries in 4 hours approximately during a sunny day. In cloudy days, let it dry overnight (See Technical Data Sheet).

3. Treatment of overlaps, critical points and screws.

The longitudinal and transversal overlaps should be treated with Fester Vaportite 550, making the product penetrates between the two sheets with the screws previously loosened. Additionally, apply Fester Vaportite 550 in stripes on the overlap for applying a reinforcement with Festerflex mesh, making cuts according to the required width. Previously, wherever necessary due to sheet separation, saturate the membrane cuts

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with the waterproofing system and roll the membranes to introduce them for making a "gasket" or "backfilling" between the sheets separation.

Remember to tight the screws after finishing the treatment. The screws must be reinforced with a "cap" made of the waterproofing system. The capping or reinforcement of walls and parapets also must be reinforced with Fester Vaportite 550 and Festerflex.

4. Waterproofing system Application

Apply two uniform coating layers of Fester Vaportite 550 on the area to be waterproofed using a minimum yield of 0.75 L/m^2 per coating layer. You must wait 24 hours to let the first coating layer to dry before applying the second coating layer, which must be dry in 7 days.

Note: In this case, placing a supporting membrane all over the surface is not necessary (only on overlaps and reinforcements).

5. Finishing Protection Coat

In this case, the best choice for finishing coat is Festerblanc (in white color) with a yield of 3 m^2/L in two coating layers, which has the benefit of high sunlight reflectance and avoids sheet heating.

Festalum, in its yield of 6 - 8 m^2/L , is recommended for being applied in water drain gutters.

E) As Exterior Pipes Treatment and Anti-corrosive Protector System

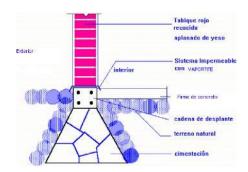
For metallic pipes, after preparing the surface by removing scales, oxide, poorly adhered coverings, and after priming with Fester Hidroprimer, apply the first coating layer of Fester Vaportite 550 and while this layer is still fresh, place a sheet of Festerflex mesh as reinforcing membrane, cut it with appropriate dimensions for the treatment and rolling it as if it were a bandaging. The transversal overlap can be of 10 cm and the longitudinal overlap can be 2 to 3 cm. Let it dry 24 hours, and then apply the second asphalt coating layer. The yield is 0.750 L/m² per coating layer. Let it dry 7 days after the 2nd coating layer and then apply Festerblanc or Festalum reflective coating.

In case that ducts and pipes require an insulating system on the first asphalt coating layer, arrange the insulating material (it can be polyurethane, fiberglass, etc., except polystyrene) and then make the bandaging treatment on the insulating material as described in the first paragraphs of this section. If preferred, the asphalt coating layer on the pipe may be not necessary, and the insulating system can be applied directly attaching it with lashings and proceed as the beginning of this section.

F) Waterproofing system for foundation crests

Compounds

Fester Vaportite 550	(1.0 L/m ²) per coat	
Fester Felt 15	(crest width + 10 cm.)	
Clean and sifted construction sand (50-60 sieve)		



1. Surface preparation

Make sure the foundation crest is dry. Remove any loose, sharp or edged parts by grubbing it with a flat shovel.

2. Primer

Apply on the area an even coating layer of Fester Hidroprimer with a yield of 4 to 5 $\rm m^2/L.$

3. Waterproof coats

Apply an even coating layer of Fester Vaportite 550 on the area to be waterproofed using at least 1.0 L/m^2 . Simultaneously, with Fester Vaportite 550 still fresh, lay down the Fester Felt 15 reinforcing membrane, adjusting it to prevent bulging and folds. There should be at least a 10 cm of overlap between the sheets. Leave 5 cm of excess membrane as a flange on both sides of the crest.

Immediately after, of placing the supporting membrane, apply a second coating layer of Fester Vaportite 550, with a yield of 1.0 L/m^2 , and just before it dries, spread clean and sifted sand on the Fester Vaportite 550. Let it dry 24 hours before beginning the wall footing, taking care not to perforate or damage the waterproofing system.

Consider that this system is not applied in the sections corresponding to the load bearing columns or pillars.



YIELD

- A) Roof surfaces waterproofing 2 L/m²
- B) Vertical surfaces waterproofing 1.5 L/m²
- C) Bonding agent for thermal insulating plates 1.5 to 2 L/m^2
- D) As protective, anti-dust, rain silencer system 1.5 L/m²
- E) As protective, anti-corrosive, treatment system of pipe exterior 1.5 $\mbox{L/m}^2$
- F) Waterproofing system for foundations crests 2 L/m²

IMPORTANT INFORMATION

Consider that, under certain surface conditions or to improve the reinforcement of some critical points, it is highly recommendable to use Fester Acriflex or Fester Revoflex reinforcement membranes (see Technical Data sheet).

- Do not apply on wet surfaces.
- Do not dilute it with any solvent.
- It is not compatible with polystyrene- or polyurethane-based products.

6 BASIC STANDARDS FOR WATERPROOFING EFFICACY

- 1.- Read the instructions carefully.
- 2.- Prepare the surface correctly.
- 3.- Reinforce the Critical Points.
- 4.- Respect the drying time according to the weather.
- 5.- Provide preventive maintenance.

6.- Respect the specified yield per square meter. Never try save by losing thickness in the waterproof coats.

PRECAUTIONS

- Use the appropriate personal protective equipment, such as vapor mask and industrial rubber gloves, (see Safety Data Sheets).
- Flammable product before drying. Do not smoke, weld or light up any type of flame near the containers where the product is stored or areas where it is being applied.

- This product has chemical substances and solvents that may cause health issues, such as intoxication when inhaled, skin injuries, like dryness, allergies, irritations. Therefore, caution must be taken when using it, so we recommend using safety equipment, such as industrial rubber gloves resistant to solvents, safety glasses, gas masks, etc.
- Toxic when ingested or inhaled for an extended period of time.
- Never apply in closed or poorly ventilated sites.
- Within water tanks and deposits, the product may only be applied at open air.
- After being applied, it must dry for 12 days before putting it into service. It is recommended to wash up using soap and brush with soft bristles before commissioning it.

PACKAGE AND PACKAGING

PRESENTATION	4 L Bottle 19 L Bucket 200 L Drum
STORAGE	 Within a sealed container in a dry, well-ventilated, and sunlight-protected place, VAPORTITE preserves its properties for 18 months. VAPORTITE contains flammable solvent. Do not use flame near the product containers or the areas where it is being applied.
EXPIRATION	1 YEAR 6 MONTHS
MAXIMUM STOWAGE	Bottle: 8 pieces one on top of the other Bucket: 5 pieces one on top of the other Barrel: 3 pieces one on top of the other

ECOLOGICAL FEATURES

Fester Vaportite 550 contributes to increase the demand of construction material and products extracted or manufactured in the region, reducing the environmental impact of transportation.

Production Site: Carretera Panamericana Km 312. Tramo Libre Celaya- Salamanca, Gto. CP. 36700.





PHYSICAL PROPERTIES

TEST	ASTM METHOD	SPECIFICATIONS
Color		Bright black
Odor		Solvent
Toxicity		Toxic when ingested or inhaled for an extended period of time.
Density at 25°C (g/cm³)	D-1475-90	1.02 – 1.06
Non-volatile material (%)	D-2369 – 95 mod.	63 - 69
Runoff at 60°C (It does not run-off and not deteriorate)	D-4479-93	Complies
Flexibility at 0°C to 1 hour and 1 inch of diameter (It does not present crack or peel off)	D-4479-93	Complies
Tact Free Time (40 thousandth of inch "in wet"), min	D – 2939-94	60 minimum
Total Drying (40 thousandth of inch "in wet"), hours	D- 2939-94	24
Flash point °C	D-92-90	29
Accelerated weathering 1800 hours (It does not present a crack)	D-4799-93/A	Complies
Penetration (mm)		367 -383

Under test conditions set in the AST Method:

Note: The data included were obtained under laboratory conditions. VAPORTITE satisfactorily complies with the set specifications.



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