



FESTER ACRITON 12 YEARS

Latest-generation, elastomeric waterproofing system, with revolutionary technology that provides the best balance of mechanical properties such as: elongation, stress, and deterioration resistant; In addition of extra-quick drying, hydro repellent and beading properties with Proshield technology, it complies with the norm NMX-C-450-ONNCE-2010.

USES

- Fester Acriton® is recommended as a waterproofing system for flat or sloped concrete slabs, but it is also used on sheet roofing, such as metallic and fiber cement and even on polystyrene thermal finish and polyurethane foam, with prior application of the primer Fester Acriton® Sealant.
- Fester Acriton® in white color is suitable to waterproof and achieve maximum reflectance, isolating sunlight to have more comfortable interiors and significant power savings compared with air conditioning or ventilation systems.
- Due to its properties, Fester Acriton® can be applied for the maintenance of aged systems made of prefabricated, acrylic or even asphalt coatings with prior application of primer Fester Acriton® Sealant.

ADVANTAGES

- With the new **Proshield®** technology you can know when the Fester Acriton extra-quick drying process is completed due to its hydro repellent and beading properties. Two hours after application, water can be sprayed on the waterproofing to observe the drying speed and hydro repellent effect of Fester Acriton®. These properties are maintained during some time, and gradually incorporated to the waterproof coat, improving the system yield and useful life.
- The best mechanical balance in Fester Acriton® formulation allows optimization of its yield regarding structural movements, so cracks and fissures (except highly dynamic junctions) can move without breaking the waterproofing system, thus reducing repair expenses. Also, its efficiency to resist adverse weather conditions, as rain, UV radiation, cold, drought and dust, is higher. Fester Acriton® does not become rigid or brittle, preserving its elongation and flexibility even in longer periods of time or during weathering tests. Therefore, the waterproofing system endures 12 years.



- The improvements and benefits achieved by Fester Acriton®, make it the only renewable product in the market because at the end of its relevant duration, a maintenance a coating layer can be applied, extending its useful time or warranty period up to 50% in relation to its original term (see Yield section).
- Fester Acriton® is characterized for having a very low conductivity, so it does not transfer the sunlight heat to the roof surfaces thanks to its high thermal resistance. In construction projects adapted to regional weather conditions, this product works with typical building materials to enhance heat resistance and prevent roofs from overheating.
- In white color, Fester Acriton® has high solar reflectivity (80% minimum), maintaining its whiteness and reflective properties during long periods of time. With this characteristic and its thermal resistance, this product prevents roofs from overheating, thus reducing the interior temperature and saving power expenses related to air conditioning and ventilation systems.



- Fester Acriton® preserves its extra-quick drying property, so under equal conditions, it dries up to 60% quicker than any similar product. Thus, after letting 3 hours for the first coating layer to dry, you may walk on the area for applying the second coating layer and complete the system application in one single morning, with significant time savings during the work.
- Such competitive advantage allows to begin application of Fester Acriton® Sealant at 8:00 am; one hour later apply the first coating layer of Fester Acriton®, and its second coating layer 3 hours later, for completing a 100 m² surface at 13:00 pm, so if necessary, the surface could withstand a rain after 14:00 pm.

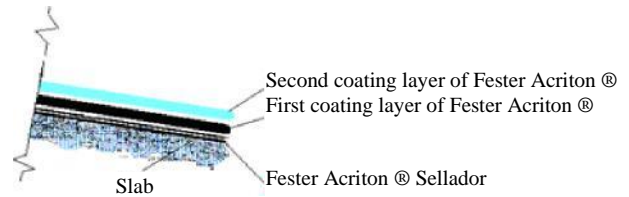
Note: This product is applied at 2 L/m² in two coating layers, so, due to its thickness, it may have drying delays if weather conditions are not fully sunny. Consider this if there is any chance of rain within 2 hours.

- High content of reinforcing synthetic fibers that significantly improves its yield.
- Resistance to moderate pedestrian crossing.
- Resistance to puddles.
- In rainy season, when sudden rain may occur 2 hours after applying the first or second coating layer, significant savings are achieved with less product loss due to runoff or time out to re-apply.
- Ready to be used.
- Easy and quick to be applied.
- It adheres to wet surfaces, but not soaked or water-saturated, since the pores must be free to achieve adhesion.
- Resistance to cement alkalinity and industrial fumes.
- Strong waterproofing properties and weathering stability.
- It is not toxic, unless ingested.
- The warranty and extended warranty are supplied in writing for a waterproofing system that had been completely applied only by an authorized expert of Fester® Distributor Network. For more information, consult an authorized expert of the Fester® Distributor Network.

APPLICATION INSTRUCTIONS

1. Surface preparation

In rainy season, it's advisable to prepare and repair the surface one day before waterproofing, because if such work is done the same day, waterproofing application will be delayed, and it may be affected in case of rain in the afternoon. **Note:** Special cases, when you used concrete for fixing areas, you must wait 3 days, since it must dry and heal properly.



a. New surfaces

- Remove any loose, sharp or edged parts by grubbing the area with a flat shovel.
- Verify there are no zones where puddles may be formed and cause mud accumulation; if there are, you must fix them.
- Sweep to remove dust, dirt and trash. Wipe the entire surface over and over with a wet mop to fully remove any persistent dust. If necessary, wash out the area and let it dry to obtain better results.

b. Surfaces with an existing waterproofing system.

- Remove false adhesions from existing waterproofing, because the new application will depend on its adherence. Verify there are no zones where puddles may be formed and cause mud accumulation; if there are, you must fix them.
- If cavities or irregularities are formed when removing poorly adhered parts, repair and/or level the affected zones.
- Fully remove dust, dirt and trash. If necessary, wash the area with water-blast and let it dry.

c. Metal plate surfaces

- On metal surfaces, cleaning must be done with pressurized water blast, detergent and rubbing with brushes until you achieve a total clean, regardless if it is a roof of new sheets (have oils), weathered sheets or an existing waterproofing system. Sections with rust or corrosion must be mechanically treated and then a suitable anticorrosive primer must be applied. For degraded sheets, you must replace them. Gutters shall be waterproofed with Fester Vaportite® 500, because these sections usually have puddles and are covered with water or mud sediments (see Technical Data Sheet).

2. Primer application.

On the clean and dry surface, apply a coating layer of undiluted Fester Acriton® Sellador with a paintbrush, brush, plush roller or Airless spray equipment. Rough yield is 5 m²/liter, which may vary depending on the type, absorption and roughness of the surface. Let it dry 1 to 2 hours, (depending on the weather) and continue the application process.



3. Treatment of critical points

a. Fissures and cracks.

- We recommend backfilling with Fester Acriton® Restorer, that shall be applied with a wide trowel flush to the surface, then let it dry 2 to 4 hours (depending on fissure dimensions), until you can walk on the surface and restoration not be affected (see Technical Data Sheet).

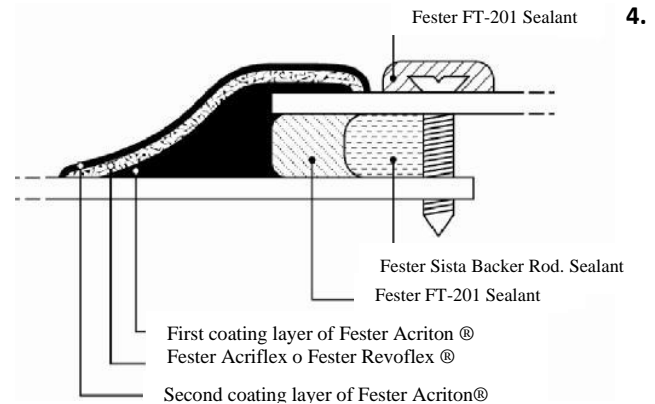
b. Drain spouts, cold joints, parapets, chamfers, pipe bases, antennas, water tanks and others.

- On the area to be reinforced, apply an even coating layer of undiluted Fester Acriton® and then immediately lay down a sheet of Fester® Acriflex or Fester® Revoflex®, so it fully covers the surface to be “treated” avoiding any flaws, such as folds or bulging. In areas with high movement, consider a reinforcing with Fester® FT 201 cord. Let it dry and continue application.

c. Sheet roofs, overlap treatment, ridges, attachment screws and gutters.

- Overlaps and ridges must be checked and decide the kind of treatment. It can be applying a coating layer of undiluted Fester Acriton® making a “backfilling” between two sheets, then with a brush apply it uniformly and lying down a sheet of Fester® Acriflex or Fester® Revoflex®, so it fully covers the surface to be “treated” and fix any flaws, such as folds or bulging. If sheets do not have important separations, can consider the use of Fester® FT 201 sealant, which is characterized by its high elongation.
- **Reinforcement.** For industrial units, where the roof sheets are very long and expansion is focused on some overlaps and joints, treatment should be loosening such sheets, separate them and apply Fester® FT 201. The objective is the cords between two sheets will work as a bellow and absorb the movement caused by expansion in those points. Next, a parallel sealant cord may be applied in the sheet joint to work as a bridge and support for the bellow. Finally, when the supporting membrane is placed on the overlap with Fester Acriton®, the risk of reinforcement break caused by the sheet expansion movement will be reduced.
- The screws must be re-tightened and then covered with caps formed with the same Fester Acriton® product. In this case, and if so preferred, you can also use Fester® FT 201 sealant. When considering a reinforcement treatment, be careful not to exceed the tighten of the screws to avoid completely “closing” the joint as that would hamper the bellow.

- The gutters, overlaps and drain spouts, they can be treated with Fester® FT 201 sealant or Fester Vaportite® 550, after placing Fester® Acriflex or Fester® Revoflex reinforcement membrane sheets; these elements must be complemented with Fester Vaportite® 550 and Fester® Festalum®.



First waterproofing coat

- For surfaces in good conditions**, on previously prepared area apply the first coating layer of undiluted Fester Acriton® following one single direction, with yield of 1.0 liters per m². **Note:** this amount is the minimum to be applied. Application can be done with brushes or paintbrushes with natural, synthetic, soft bristles (do not use spray equipment to avoid blockage due to the fiber). Let it dry 3 hours before applying the next coating layer.
- For metal plate roofs**, the recommendation is to apply white-color product to avoid heating that can damage the structure due to expansion or derive in too warm interior conditions.
- Fester Acriton® optimization, with aforesaid benefits, allows such yield boost that, on cracked concrete surfaces (except highly dynamic joints and cracks), the product can be applied without the use of reinforcement mesh. In this case, the yield of the first coating layer is 1.0 liter per m². Let it dry 3 hours before applying the next coating layer.
- For concrete surfaces with high structural movement**, where fissures, cracks and very dynamic joints are common, or with risk of fissure formation, such as slabs, steel, compressive mortars, brickworks, prefabricated slabs or very cracked slabs, follow these recommendations:



After preparing and priming the surface, apply the treatment for cracks, fissures, joints and other critical points as indicated in item No. 3, as applicable.

Apply the first coating layer of undiluted Fester Acriton® all over the surface evenly, respecting the yield specification. In each segment place Fester® Acriflex or Fester® Revoflex laying it down to cover 100 % of the area to be waterproofed. Avoid folds or bulging on the membrane. The longitudinal and transversal overlaps of the mesh must be 10 cm minimum. Application must follow one single direction, using brushes or paintbrushes with natural, synthetic, soft bristles (avoid the use of spray and, in general, of rollers use). For this first coating layer, the yield is 1.0 liters per m² (minimum amount to apply). Let it dry 3 to 4 hours, and then apply the next coating layer. (The bottom layer must be dry to avoid bubble formation due to moisture).

Note: Drying times for the first coating layer in the 3 aforesaid cases are estimated in sunny day. Otherwise, in cloudy days it is possible the product is not totally dry, having a risk of bulging (bubbles), especially in red-color product, due to heat absorption of solar radiation.

5. Second waterproofing coat

Once the first coating layer of Fester Acriton® is dry, in which supporting membrane could or could NOT be used as in aforesaid cases (consistent with surface conditions 4.a, 4.c or 4.d), apply the second coating layer of undiluted Fester Acriton® with same technique and yield as the first coating layer. Application direction must be transversal to the first coating layer. **Note:** The tools and equipment used can be washed with water while the material is fresh.

Extension of useful life or warranty.

Among the advantages of this product, one is the extension of the system useful life or warranty up to further 50% linked to the quality (years) of the originally applied product. The system renewal consists in applying one single coating layer of Fester Acriton®, except in the points where, due to lack of adhesion or cracking, the system has been removed and in which case those places shall be treated with a complete system, following instructions in steps 1, 2, 3 and 4 of the corresponding section. For the application of the single coating layer and system renewal on the whole surface, follow the yield section.

For purposes of waterproofing system renewal, the surface shall be examined and at least 70% of the system must have good conditions and optimal adhesion. If the areas do not meet these conditions, a new system shall be applied.

YIELD

According to surface conditions, as indicated in these points:

- 4.a. We recommend applying at least 2.0 liter per m² in two layers.
- 4.c. We recommend applying at least 2.2 liter per m² in two layers.
- 4.d. We recommend applying at least 2.2 liter per m² in two layers.

Yield to extend the system useful life or warranty:

- We recommend applying at least 1.3 liters per m² in one layer, being careful to distribute the product uniformly.
- Aforesaid yield in this last case is equal to: 19 L Bucket for 15 m².

In general, yields may vary depending on the roughness, absorption, surface type and application technique.

IMPORTANT INFORMATION

- Do not place as waterproofing system to be covered by tile or brick finishes, nor in sites with constant water immersion.
- Avoid application on areas tending to form enduring puddles that result in mud formation, because these factors accelerate degradation of the waterproofing system in such points.
- Avoid applying on wet or water-saturated surfaces, as this can cause bulging (bubbles) due to evaporation trapped under the waterproofing system.
- For sheet roofs we recommend white-color products because with other colors the sheets and structures move due to the expansion experienced when heated by the sun and damage the system, especially at overlaps and screws.
- In highly dynamic joints and cracks, do not apply the product directly; we recommend a reinforcing with the use of Fester Acriflex or Fester Revoflex.
- Do not apply on surfaces poorly adhered to substrate.



- Do not apply on weathered isolating foams.
- Do not use it in conditions of circulation, vehicular traffic, pedestrian crossing (only moderate and with flat sole shoes).
- Do not mix it with other products.
- Do not apply Fester Acriton® at temperatures under 5° C.
- All safety measures for working at heights must be considered (Including ladder in optimal conditions, fastenings, life cords, harness, among others). In sheet roofs, we recommend using planks to make “bridges” and walk on them to reduce risks when working.
- Application of this product must be done in “open” areas, this is, outdoor surfaces.

PRECAUTIONS

- If liquid product must be handled, avoid direct contact with skin and eyes using rubber gloves and safety glasses.
- If it is handled in closed areas, a gas mask must be used because the product contains ammonia.

CONTAINER AND PACKAGING

PRESENTATION	19 L Bucket white and red colors
STORAGE	Keep in its original container, well closed, stored in a dry place and protect it from sunlight.
EXPIRATION	24 months
MAXIMUM STOWAGE	24 kg Bucket: 3 pieces one on top of the other
COLOR	White and Terracota Red

ECOLOGICAL FEATURES

- Water-based
- This is a product that contains water-based polymers and biodegradable surfactants.
- Does not have mercury preservatives.
- Does not contain heavy metals, such as lead and chromium.
- Does not have asbestos fibers.
- The product does not contain solvents.
- Once the product is dry, it forms an inert plastic film; this means it does not affect the environment.

Fester Acriton® helps to enhance the quality of environment and the well-being of workers and residents since its VOC g/l content is as indicated in the following table:

Product's Name	VOC (g/l)	Production site
Fester Acriton® 12 years white	0.25	Local
Fester Acriton® 12 years red	0.51	Local

Manufacture site: Carretera Panamericana Km 312.
Tramo Libre Celaya-Salamanca, Guanajuato. CP. 36700



PHYSICAL PROPERTIES

TEST	ASTM METHOD	SPECIFICATIONS	TYPICAL VALUE Fester Acriton® 12 years
Density, g /c. c.	D - 1475	1.26 - 1.30	1.28
Solid percentage in weight, (%)	D - 2369 mod.	59.0 – 61.0	61.00
Brookfield Viscosity, [Cps.]	D- 2196	Approval: 34,000 – 39,000	38,000
		Settled (at 15 days): 42,000 to 55,000	43,200
Contact drying, (20 wet mils). [Minutes]	D -1640	45 - 65	55
Total Drying, (20 wet mils) [Hours]	D -1640	2.5 h max.	2 h
Accelerated weathering (QUV, ultraviolet condensation and spraying).	G - 53	Compliance without damage after:	4,380 hours
Elongation after weathering, [%]	D - 2370	250 Minimum	250
Stress after weathering [psi]	D - 2370	Minimum 600	> 610
Flexion in cold at -15° C.	C- 711	Complies	Complies
pH @25°C, minimum	E - 70	10.5	10.6
24-month stability	D - 1849	Complies	Complies

ENERGY PROPERTIES (applicable only for white product)

Solar reflectance, %	C -1549 - 09	Minimum 82.0	83.9
Thermal emittance, index	C - 1371 - 04	Minimum 0.86	0.90
Solar Reflectance Index (SRI), (estimate)	E – 1980 - 11	Minimum 102	106



STANDARD NMX-C-450-ONNCCE-2010

TEST	SPECIFICATION STANDARD NMX - C - 450 - ONNCCE—2010	Fester Acriton® 12 years
Brookfield Viscosity, Cps.	15,000 – 50,000 with Viscometer RVT 10 rev /minute, needle 4 and 6	Complies
Shelf stability	Homogeneous, without surface film formations, clots, dust, foreign particles or sediments affecting its homogeneity, nor any characteristic odor of decay.	Complies
Maximum permeability	50 perms	Complies
Wet adhesion, minimum	357.16 g/ linear cm (2.0 pounds per linear inch) in trial substrate.	Complies
Water absorption in weight [%]	20% maximum after 168 hours	Complies
Accelerated weathering*	Accelerated weathering chamber UV-B 313 nm. For 12 years product, 2,400 hours. Without prominences, softening, cracking or any other evidence of deterioration, including any slight loss of brightness.	Complies
Tensile strength	After accelerated weathering, minimum 200 pounds. Include new values	Complies
Elongation to crack	After accelerated weathering, minimum 100% without crack. Include new values	Complies
Whiteness and dirtiness	Initial minimum 82.0 and final minimum 53.0	Complies
Flexibility at low temperature	At -10°C with 1/2" rod mandrel and 180° bend. It must not show cracks or separation between coats.	Complies

* The standard refers to 10 years. However, as this Fester Acriton® technical sheet refers to 12 years, the corresponding time is proportionally applied to the pertinent test.

Note: Aforesaid data were obtained under conditions of HENKEL laboratory.

BASIC RECOMMENDATIONS TO OBTAIN THE BEST YIELD IN THE PRODUCT APPLICATION

1. Read the instructions carefully
2. Prepare the surface thoroughly
3. Respect the specified yield
4. Respect the drying times according to the weather



Henkel Capital S.A. de C.V.,
Boulevard Magnocentro No 8, Piso 2, Col. Centro Urbano Interlomas, Huixquilucan, State of Mexico, CP 52760
Customer Service: 01800-FESTER7 web.fester@henkel.com www.fester.com.mx

The previous information, particularly the recommendations to handle and use our products, is based on our professional knowledge and experience. Since materials and conditions may vary in each application and thus are beyond our sphere of influence, we recommend performing enough tests to confirm the suitability of our products for intended application method and use. No legal liability may be accepted based on this data sheet contents or verbal advice provided, unless there is evidence of deceit or serious negligence on our part. This technical data sheet supersedes any previous editions for this product and is complemented by the data in the relevant safety sheet. We recommended reviewing the safety sheet before applying this product.