



FAST - INTELLIGENT - SAFE

THE INNOVATION IN PASSIVE FIRE PROTECTION



Quality for Professionals





Being a specialist in applied chemistry, Henkel is a world market leader in adhesive, sealant & surface treatment technologies.

Professional users and experts from the building trade & industry put their trust in our products.

Founded in 1876, Henkel has developed from a German family business to a DAX listed global enterprise. Today, Henkel boasts a workforce of 53,000 employees in 125 countries.

02 FP 550 - THE FIRE STOPPER



WOLFIN



Teroson

Thomsit

Ceresit



Tangit - the professional brand for plumbers

For more than 40 years now, Henkel has been offering high-quality, reliable systems and products under the brand name Tangit for professional applications. These include:

- > Fire protection systems
- > Sealing systems for wall ducts
- > PVC pipe adhesives and cleaners
- > Thread sealants.



MAXIMUM SAFETY FROM HENKEL

PUT PASSIVE FIRE PROTECTION IN TRUSTWORTHY HANDS

Our vision at Henkel is to make people's lives easier, better and more beautiful with strong brands and technologies. Innovations are the basis for successfully turning this vision into reality. In order to constantly strengthen our innovative power, Henkel annually invests 340 mio € into R & D. After an intensive development phase, Henkel now presents Tangit Fire Protection - an innovation in passive fire protection that will set a new benchmark. This novel, intelligent fire protection system has been tested and certified with the know-how of our scientists in compliance with the latest national and European standards. It provides you with maximum safety and quality. This is competence you can rely on.



04 FP 550 - THE FIRE STOPPER





Fire propagation in buildings

Fire always spreads via the weakest spots in a building. These include above all pipe and cable ducts that have not been expertly sealed. They constitute a very high risk for life and limb. In a case of fire, flames and smoke spread in no time via these passages from one room to another.



Pipe, cable, cable tray and mixed penetrations require reliable protection.

RESCUE LIVES WITH EFFECTIVE FIRE PROTECTION SEALS

Fires can develop any time and anywhere. They not only endanger human lives but also property and values, cause loss of production and incur immense costs. Fire protection seals of cable and pipe conduits constitute an essential element in a building's security. It is especially around these weak points in a building's fire protection system that fires spread systematically like the proverbial "wildfire" throughout the entire

building. And thus make life-saving and fire-fighting operations impossible!

To ensure effective limitation of fire spread, the brand-new Tangit Fire Protection System offers a particularly intelligent and safe solution. Tangit FP 550, a self-expanding, 2-component fire-resistant foam, securely seals off all conduits and ducts. Even difficultly accessible and complicated cable, pipe and mixed

penetration seals are thus equipped with a maximum fire resistance of at least 90 minutes and a live-saving smoke tightness of 100 %.

This is fire safety from Henkel which you can build on.



Tangit Fire Protection System is based on a compact product range, offering safe solutions for a broad field of applications



06 SYSTEM BENEFITS



INTELLIGENT FIRE PROTECTION

WITH BUILT-IN SAFETY!

Tangit Fire Protection offers a unique combination of measurable benefits:



Future-proof fire protection
First 2-c foam system tested
to comply with EN 1366



Cost-efficient
solution –
high yield



100 %
live-saving
smoke tightness



Quick and easy
installation



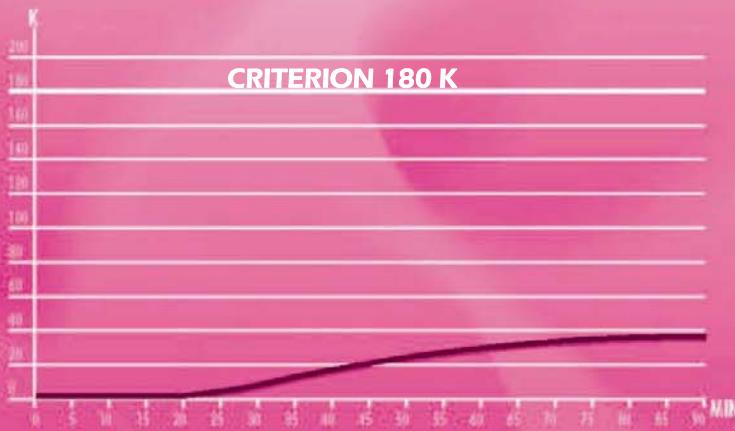
Precise,
self-expanding
foam filling



Flexible
post installation
of cables/pipes
Up to 60 % faster
acc. to a REFA study



Up to 60 % faster
installation,
tested and confirmed
by the REFA



Tangit Fire Protection was externally tested in more than 300 pipe and cable penetrations to successfully comply with DIN EN 1366 and DIN 4102.. See graph on the left for an example of a typical temperature gradient for a multi-layer composite pipe.



AVOIDANCE OF FIRE HAZARDS

07



FUTURE-PROOF FIRE PROTECTION

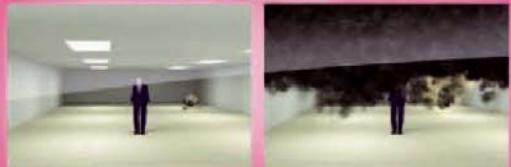
FIRST 2-C FOAM SYSTEM TESTED ACCORDING TO EN 1366

Be well prepared for the future and international projects. In the course of Europeanization, national standards and regulations - especially with respect to fire protection - will be more and more adapted to EN standards. Tangit Fire Protection is the first fire-resistant foam system that has already been tested to comply with the new Euronorm 1366. It has been approved according to DIN EN 1366 and DIN 4102 and meets the highest requirements up to class R90, S90 resp. EI90.





1 kg burning PVC produces 500 m³ smoke within a very short time. Related to a DN 100 pipe of 1 m length, this means up to 2800 m³ smoke, corresponding to a hall of 100 m x 10 m x 2.5 m size..



100 % LIVE-SAVING SMOKE TIGHTNESS

ALREADY WITH COLD SMOKE



Tightness to smoke saves lives. 95 % of all fire victims die from smoke poisoning and not from the flames. Even minor installation faults will result in leaks that may have fatal consequences. Therefore play it safe: Thanks to its self-expanding property, Tangit Fire Protection excellently seals all passages regardless of their size and shape - 100 % reliable. Even in the presence of cold smoke does the Tangit system form a 100 % smoke barrier - contrary to most conventional but inflexible systems which only seal under the effect of heat.



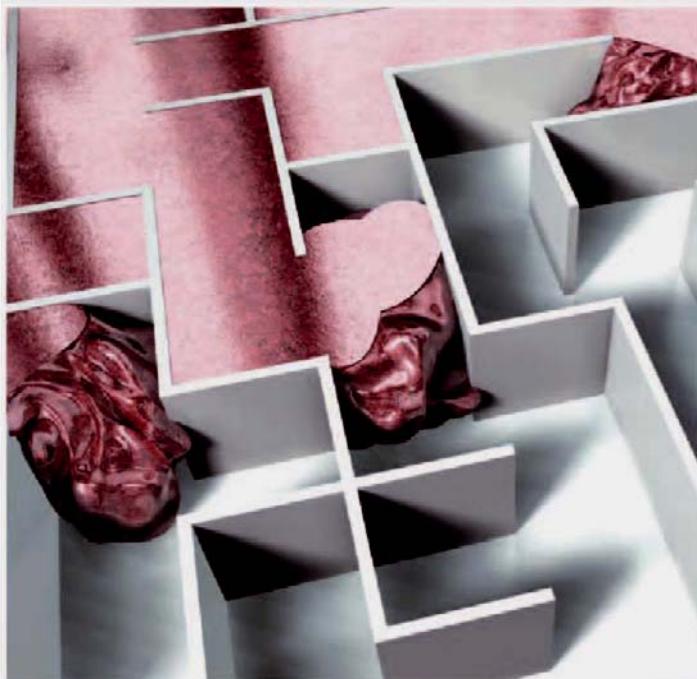
Tangit FP 550 is a 2-component, high-performance fire protection foam. With an initial viscosity of 18 Pas, it flows around the penetrations, reliably filling all gaps and voids. After approx. 5 seconds, the self-active foam starts to expand by up to 1200 % and thus encloses all openings.



PRECISE SELFEXPANDING FOAM FILLING

WITH BUILT-IN SAFETY

The self-acting Tangit Fire Protection automatically seals off penetrations regardless of their size and shape. Every gap and every void is securely filled. Even with complicated cable/pipe occupancies or difficultly accessible installation environments - Tangit always provides a professional and 100 % smoke-tight penetration seal. But this high-performance, 2-component foam offers additional benefits: thermal insulation plus acoustic decoupling. Expert performance from the very first minute!





The official REFA time study "110.220.08 HT", conducted for the installation of mixed penetration seals and comparing different systems, produced the following result after three installation runs:
Tangit Fire Protection requires the shortest installation time and is therefore rated best.



10 TIME ADVANTAGE



UP TO 60 % FASTER INSTALLATION

TESTED AND CONFIRMED BY THE REFA



Tangit Fire Protection features highly efficient application. According to an independent time-efficiency study by the REFA

association, you will benefit from an installation time saving of up to 60 % compared to conventional fire protection systems.

- The reasons for this are obvious:
- No preparation time - immediately ready for use
- Ideally suited for difficult installation environments and complicated cable/pipe occupancies
- Quick installation thanks to self-expanding, 2-c fire protection foam
- Optimized, time-saving sheathing through innovative sheathing tape
- Innovative fire protection collar for insertion - no need for fastening
- High yield - therefore less frequent cartridge exchange
- No need for time – consuming wall doubling already from 150 mm wall thickness upwards
- Easy transport on site thanks to lightweight, highly compressed 2-c foam cartridges
- Cuttable and further processable after only 5Min



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Thanks to the high yield of 3.5 L, only a small number of cartridges is required for every penetration seal.



COST ADVANTAGE 11



COSTEFFICIENT SOLUTIONS AND HIGH YIELD

FOR TANGIBLE SAVINGS

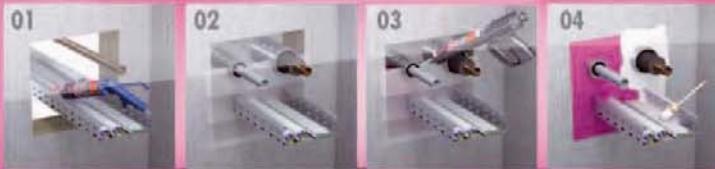
Time is money. Tangit Fire Protection can help you save both. Apart from high savings in labour costs, this innovative fire protection system additionally offers economical material consumption. With a foam yield of 3.5 L per cartridge, you get nearly twice as much volume than with conventional 2-component foams. This also lowers your storage and transportation costs.





Installation of a mixed penetration seal

1. Apply FP 450 around the cable in the cable tray.
2. Install BIS Pacifyre-MK II collars and FP 200 sheeting tape.
3. Apply the FP 550 fire protection foam.
4. Apply the FP 800 paint coat.



12 OPTIMIZED HANDLING



QUICK & EASY INSTALLATION

GIVES YOU A HEAD START ON SITE



All products are immediately ready for use – there is no need for timeconsuming preparation. The innovative system requires neither water,

electricity nor a large variety of tools. Tangit Fire Protection not only ensures an exceptionally convenient but also clean application:

See exactly where the foam is applied. FP 200: the fabric-reinforced, transparent tape for innovative sheeting of the penetration opening

Align, insert - finished!
BIS Pacifyre-MK II: the one-piece fire protection collar featuring "one-step installation".

Precise foam filling without need for subsequent works
FP 550: the self-expanding, 2-component foam from a lightweight, compact cartridge

Simply cut and install new cables/pipes FP 550: simply cut the foam with a knife for subsequent installation of cables and pipes

Paint and finish off
FP 800: this white protective coat finishes off the job.



Even after curing, Tangit Fire Protection offers high flexibility. The energy required for piercing the foam (e.g. with a screwdriver) is extremely low: 0.25 N/mm².

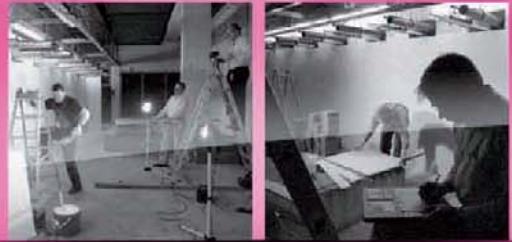


FLEXIBLE SUBSEQUENT INSTALLATION

UP TO 60 % FASTER – TESTED AND CONFIRMED BY THE REFA

Even in its cured state, the 2-component Tangit foam remains elastic and can simply be cut or pierced with a knife or screwdriver. This ensures the flexibility you need. Subsequent installations can be done in next to no time. Of course, this has a noticeable effect on the installation time needed. According to a REFA time-efficiency study, you can save up to 60 % installation time compared to conventional fire protection systems!





THE REFA TEST WINNER

FAST - INTELLIGENT - SAFE



The new Fire Protection System by Tangit does not only convince applicators, planners and housebuilders but also the REFA - the worldwide leading association for independent time studies. Compared to fire protection systems made of mineral wool, mortar, stones or alternative foams, Tangit Fire Protection offers a unique combination of measurable benefits. Go and see for yourself: put the test winner to the test!



BETTER - FASTER - EASIER TANGIT FOAM

WITH INCOMPARABLE ADVANTAGES



TANGIT FP 550

- + 100 % smoke-tight thanks to self-expanding foam
- + Easy installation - ideally suited for difficult installation environments and complicated pipe/cable occupancies
- + Up to 50 % faster installation (confirmed by the REFA)
- + Clean solution: no dust - no fibers

MINERAL WOOL



TANGIT FP 550

- + Convenient installation - no water, no electricity, no dust
- + No preparation time - immediately ready for use
- + Up to 10 % faster installation (confirmed by the REFA)
- + Quick and easy installation of subsequent pipes and cables thanks to flexible foam
- + Low transport weight due to highly compressed, lightweight cartridge products

MORTAR



TANGIT FP 550

- + More product for your money - High yield: 3.5 L / cartridge
- + Up to 60 % faster installation (confirmed by a REFA time study)
- + No need for doubling already from 150 mm penetration seal thickness upwards, therefore low material consumption
- + Quick and easy installation of subsequent pipes and cables

2-C FOAMS



TANGIT FP 550

- + No need for time-consuming wall doubling already from 150 mm wall thickness upwards
- + Durable and safe penetration seals
- + Easy application thanks to precise self-expansion
- + Ideally suited for difficult installation environments and complicated pipe/cable occupancies
- + Transport and storage benefits due to highly compressed cartridge products

STONES





Quality for Professionals