WHAT IS TESTED?



1. WIND UPLIFT TESTING Simulated wind uplift forces as well as testing of the pull-off strength and impact resistance for relevant fastening components to verify the wind uplift security of Sika roofing systems



2. INTERNAL FIRE TESTING Cone calorimeter testing to assess the behaviour in fire of the roof structure in relation to ignitability, combustibility, and the production of smoke and toxic gases



3. EXTERNAL FIRE TESTING Physically testing the flammability and flame propagation of the materials to verify the fire resistance of Sika roofing systems



4. HAILSTONE DAMAGE TESTING Simulated hail storms are used to verify the hailstone impact resistance of the Sika roofing systems



5. WATERTIGHTNESS - LEAK TESTING 6. FOOT TRAFFIC TESTING Artificial weathering and liquid water resistance testing to verify the outstanding watertightness of Sika roofing and traffic resistance of Sika roofing systems



Physical and simulated walking and load testing to verify the pedestrian systems



7. TEAR RESISTANCE TESTING Testing the fixings and fasteners to verify the pull-out strength and tear resistance of Sika roofing systems



8. CORROSION TESTING Testing the fixings and fasteners to verify the corrosion resistance and durability of Sika roofing systems

GLOBAL BUT LOCAL PARTNERSHIP



WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply. Please most current local Product Data Sheet prior to any us



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FM APPROVALS FOR SIKA ROOFING SYSTEMS

FACTORY MUTUAL APPROVALS - SIKA ROOFING SYSTEMS - SINCE 1995





SIKA ROOFING SYSTEMS WITH FM APPROVALS TESTING AND CERTIFICATION

WHO ARE FM GLOBAL AND WHAT ARE FM APPROVALS?

FM Global (Factory Mutual) provides comprehensive global commercial and industrial property insurance, engineering-driven underwriting and risk management solutions, plus innovative property loss prevention research and risk management. (www.fmglobal.com) At its research and testing center unique in the world - the causes of property damage and methods of damage prevention are examined under realistic site conditions, including the assessment of the effects of fire, wind, rain and other natural forces, plus explosions and the engineered protection systems for these.

Its subsidiary FM Approvals tests and certifies products and systems for property damage prevention to the highest performance, quality and safety standards.

Roofing products are covered by FM Approvals standard 4470, which is becoming increasingly important and recognized around the world, specifical- the systems used on their buildings for



ly now in Europe. Many more investors the preventive protection of their busiand building owners are requesting and obtaining FM Approvals Certificates on

ness against natural forces and fire.

FM APPROVALS CERTIFIED SIKA ROOFING SYSTEMS

Many Sika roof waterproofing products and systems have passed testing and inspection by FM Approvals since 1995. The products listed here are those currently tested and certified in different roof build-ups and combinations, and including different types of insulation from three different manufacturers in Europe. In addition to the strict and demanding FM Approvals criteria, all of these Sika roofing systems fully comply with all other relevant national and international requirements and standards.



The exact combinations of Sika roofing system build-ups tested are shown in the following tables which are also available from your local Sika Technical Services. The tables also contain details of the additional installation requirements, including pitch and fastening systems etc..

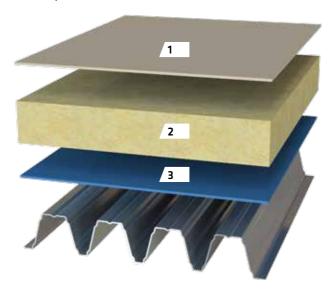
APPROVED SYSTEMS (FPO BASED MEMBRANES):

1 Sarnafil [®] waterproofing membrane (FPO) for mechanically fastened roofing systems:
Sarnafil® TS 77-12 / Sarnafil® TS 77-12E
Sarnafil® TS 77-15 / Sarnafil® TS 77-15E
Sarnafil® TS 77-18 / Sarnafil® TS 77-18E
Sarnafil® TS 77-20 / Sarnafil® TS 77-20E
2 Sikaplan® waterproofing membrane (FPO) for mechanically

2 Sikapian° waterproofing membrane (FPU) for mechanically fastened roofing systems
Sikaplan® TM-12
Sikaplan® TM-15
Sikaplan® TM-18

2 Thermal insulation:				
Sika	Sikatherm PIR AL	PUR/PIR		
	Sikatherm PIR GT			
Recticel NV	Powerdeck			
Kingspan (Ltd.)	Thermaroof TR26 FM			
	Thermaroof TR27 FM			
Rockwool GmbH	Hardrock	Mineral wool		
	Durock			



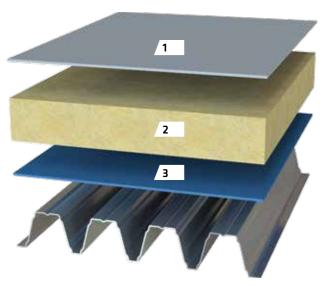


3 Vapour Retarder Sarnavap 1000 E Sarnavap 2000 E Sarnavap 5000 E SA FR

APPROVED SYSTEMS (PVC BASED MEMBRANES):

1 Sarnafil [®] waterproofing membrane (PVC) for mechanically fastened roofing systems:				
Sarnafil [®] S 327-12EL	Sarnafil [®] S 327-18EL			
Sarnafil® S 327-15EL	Sarnafil [®] S 327-20EL			
1 Sikaplan [®] waterproofing membrane (PVC) for mechanically fastened roofing systems:				
Sikaplan® 12 G / Sikaplan® 12 VG				
Sikaplan® 15 G / Sikaplan® 15 VG				
Sikaplan® 18 G / Sikaplan® 18 \	/G			
Sikaplan® 20 G / Sikaplan® 20 \	/G			

2 Thermal insulation:				
Sika	Sikatherm PIR AL	PUR/PIR		
	Sikatherm PIR GT			
Recticel NV	Powerdeck			
Kingspan (Ltd.)	Thermaroof TR26 FM			
	Thermaroof TR27 FM			
Rockwool GmbH	Hardrock	Mineral wool		
	Durock			



3 Vapour Retarder:
Sarnavap 500 E
Sarnavap 1000 E
Sarnavap 2000 E
Sarnavap 5000 E SA FR

