



ROOFING

# Sika<sup>®</sup> ROOF CONTROL SYSTEM

SYSTEM FOR PRECISE LEAK DETECTION

BUILDING TRUST



# SIKA® ROOF CONTROL SYSTEM

**SYSTEM FOR PRECISE LEAK DETECTION ON FLAT ROOFS** helps protecting the building and its material assets from damages during its entire service life.

A flat roof, using the proper materials and installed by professionals, is tight for the lifetime. However, if unpredictable mechanical influence occurs, for example subsequent application of ballast such as Green Roof, it can lead to unintended leaks in the waterproofing layer. As a solution Sika® Roof Control System provides security for investors and building owners.

In the construction phase of the roof, an electrically conductive special glass fleece is installed below Sarnafil® waterproofing membrane and on top of the insulation.

This fleece serves also as a separating layer for the roof structure wherever it is required.

The fleece is bonded with Sarnatape® 60 at regular intervals for contact protection in the overlapping areas. In order to carry out measurements, two contact plates per 1,500 m<sup>2</sup> are installed in order to ensure an easily accessible connection to the outside. Control tubes are installed above the contact plates in order to ensure the tightness and access to the measuring point. After realization of the roofing works, an initial leak test is carried out by the experts from the Sika cooperation partner ILD® (International Leak Detection). For this purpose, the roof surface must be moistened; therefore the procedure can be implemented during a rainy day.



Victorian Desalination Plant, Australia

Suitable for new construction and refurbishment projects. After application of ballast or other technical installations, roof can be precisely inspected at any desired time with little effort needed. This substrate-independent measuring method allows transparency of performance for all the parts of roofing system, therefore increases quality of the roof and decreases costs of roof surveys and repairs in case of the failure. This advantage is especially important on utility roofs, since

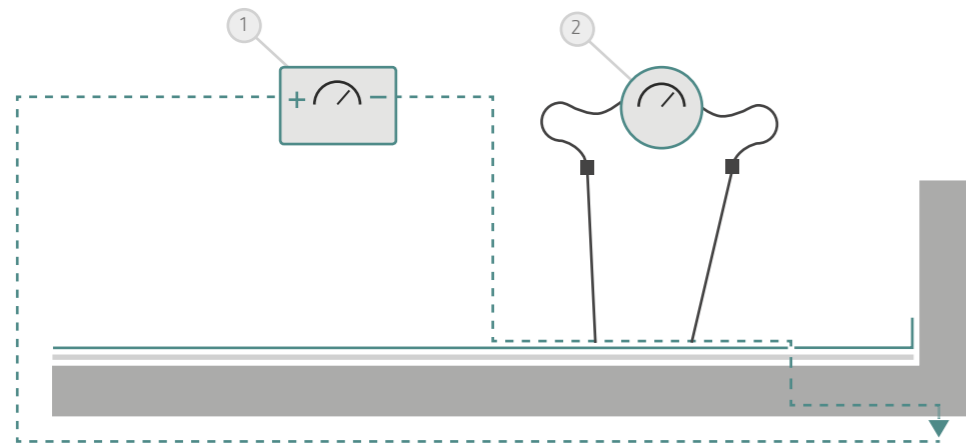
any possible repair action can be carried out within the smallest extent and without interfering with ongoing operations. Furthermore this system gives the owner security that there will be no interruptions in operations 'under the roof' caused by the leakage. This is particularly advisable in case of installations located on the roof (e.g. ventilation systems, etc.) and for buildings with valuable equipment inside (e.g. cleanroom production line, etc.).

In order to ensure a measuring capability of the Sika® Roof Control System, the roof layers above the Roofing Membrane must be water-permeable.



# SIKA® ROOF CONTROL SYSTEM

Test method

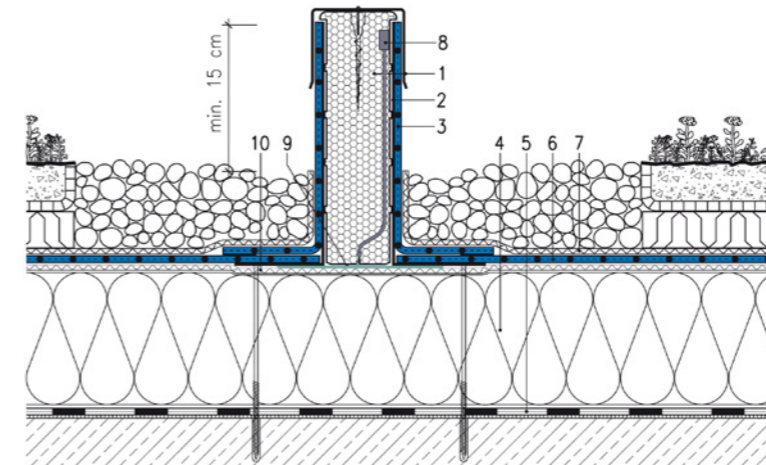


1. A low voltage current is applied to a thin film of water on roof surface.

2. Instrumental change directs the technician towards the defect

The innovative measuring system requires only a thin film of water on the tested surface to be totally effective. An intermittent low voltage current is applied to the roof surface which, in general principle, will flow towards a defect in an effort to find a grounded earth. This information enables us to pinpoint the precise location of the defects, regardless of their size.

Inspection, documentation consisting of a detailed report, a CAD drawing showing the exact positional measurements for all the defect positions, plus additional supportive photographic evidence is provided as part of the ILD® service.



1. Insulating plug
2. RCS Cable access Duct
3. Sarnafil® Pipe flashing
4. Thermal insulation
5. Vapor control layer
6. Sarnafil® waterproofing membrane
7. Sarnafil® protection layer if required
8. Contact plug
9. Sika® RCS Contact Plate
10. Sika RCS glass fleece



#### Sarnafil® T RCS Set:

- 2 pcs. RCS Cable Access Dust with base plate
- 2 pcs. Insulating plug with cap incl. clamp fitting
- 2 pcs. Sarnafil® T Pipe flashing 125
- 2 pcs. RCS contact plate with 1m connection cable
- 1 roll Sarnatape® 60 adhesive tape

Sika® RCS Glass fleece

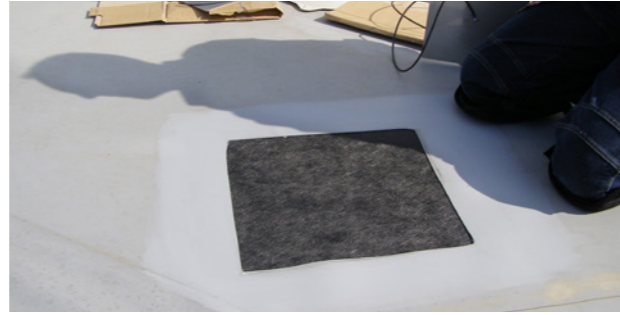
Product name	Article code
S-RCS set (PVC) light grey	481891
Sarnafil® T RCS set (FPO) beige	481868
Sika® RCS Glass Fleece	426494

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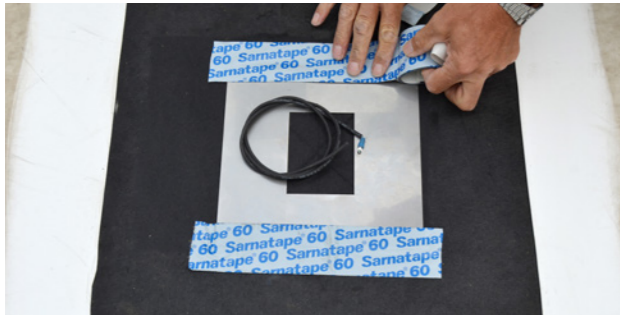
Installation



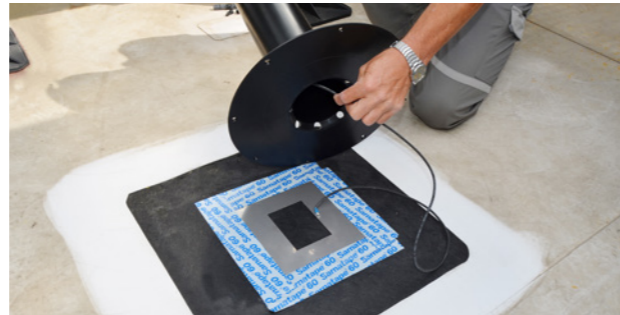
Application of roofing membrane above the Sika® RCS Glass Fleece.



Preparation for attaching the RCS Contact Plate.



Installation of the RCS Contact Plate with Sarnatape® 60.



Inserting of the RCS Connection cable vertical up.



Fixing the RCS Cable Access Duct with base plate to the substrate. Covering the screw head with a piece of membrane.



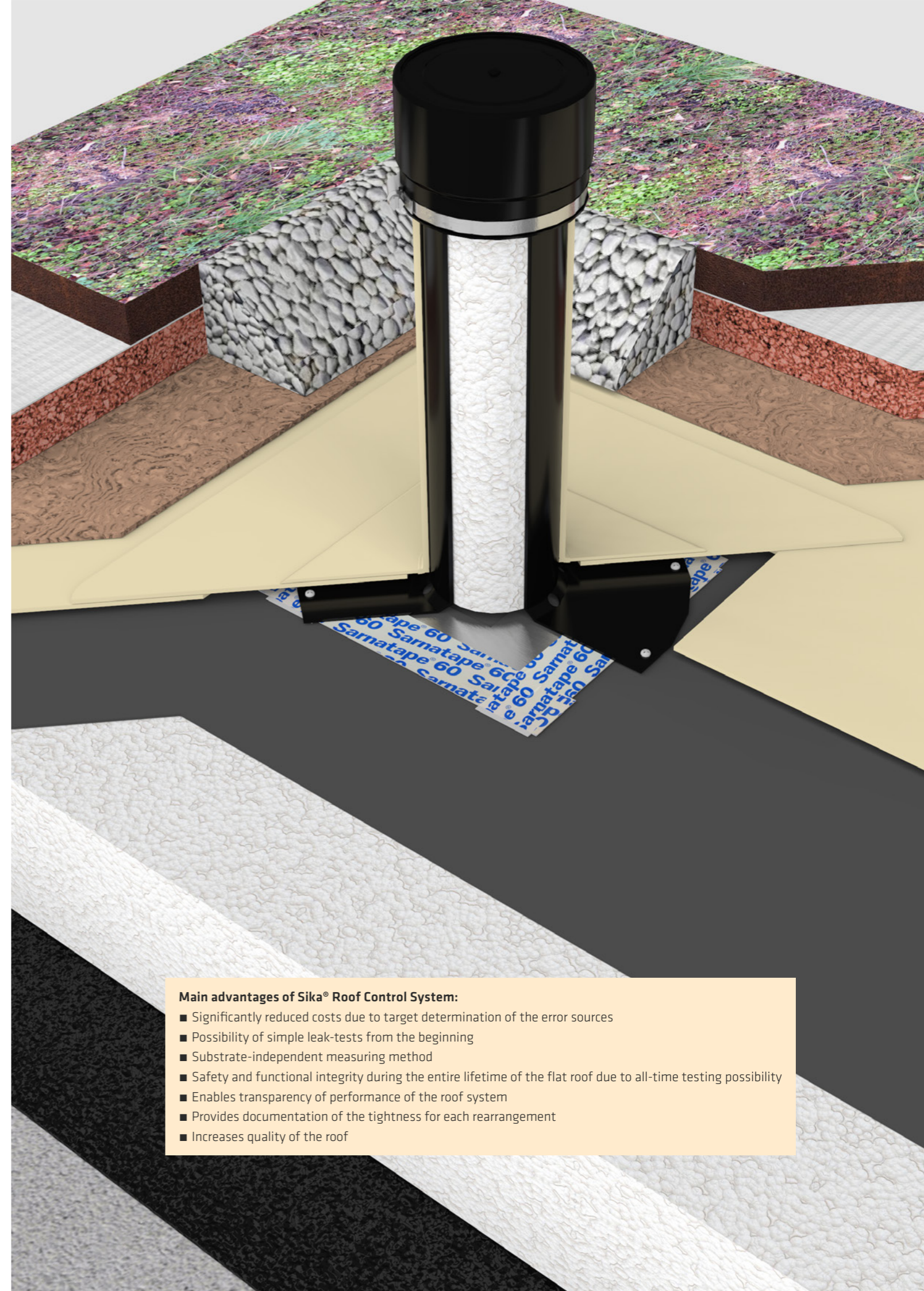
Preparation of appropriate roofing membrane patch, hot air welded.



Sealing of the Sarnafil® Control Pipe and subsequent seam inspection.



Finished Sarnafil® T RCS set.



### Main advantages of Sika® Roof Control System:

- Significantly reduced costs due to target determination of the error sources
- Possibility of simple leak-tests from the beginning
- Substrate-independent measuring method
- Safety and functional integrity during the entire lifetime of the flat roof due to all-time testing possibility
- Enables transparency of performance of the roof system
- Provides documentation of the tightness for each rearrangement
- Increases quality of the roof

# GLOBAL BUT LOCAL PARTNERSHIP



## FOR MORE ROOFING INFORMATION:



### 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 consult the Data Sheet prior to any use and processing.



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