

INSPECTION AND MAINTENANCE OF SAFE TILES

The SAFE TILES fall protection system is a new type of safety surfacing developed to offer a sustainable alternative to traditional impact-attenuating products. Choosing SAFE TILES is a choice made for future generations.

Surfaces covered with SAFE TILES should be visually inspected and cleaned at regular intervals. The required maintenance level depends on the environment in which the surface is installed and on the degree of load and wear it is exposed to. SAFE TILES AB recommends visual inspection and cleaning at least once per week. This helps prevent major repairs from being needed before the expected product lifespan is reached.

PRODUCTS COVERED BY THIS DOCUMENT

This document applies to the following SAFE TILES impact-attenuating surface systems tested and certified by TÜV Nord:

- **SAFETILES ELT75** – total thickness 75 mm (Critical height 2.53 m)
- **SAFETILES ELT55** – total thickness 55 mm (Critical height 2.22 m)
- **SAFETILES ELT40** – total thickness 40 mm (Critical height 1.52 m)
- **SAFETILES EPDM75** – total thickness 75 mm (Critical height 2.64 m)
- **SAFETILES EPDM55** – total thickness 55 mm (Critical height 2.17 m)
- **SAFETILES EPDM40** – total thickness 40 mm (Critical height 1.52 m)

All installation, inspection, and maintenance procedures described in this document apply to the products listed above.



GENERAL MAINTENANCE INFORMATION

SS-EN 1176-1:6.2.3.2 Maintenance information for impact-attenuating surfaces

Maintenance of SAFE TILES increases lifespan

SAFE TILES is an accessible and impact-attenuating surface designed for use under playground equipment. A SAFE TILES surface is easy to maintain. Maintenance shall be performed continuously at set intervals to ensure that the surface maintains excellent shock-absorbing properties over time, even in areas with heavy use.

Ageing and Material Performance

SS-EN 1176-1:6.2.3 Installation instructions for impact-attenuating surfaces

Over time, exposure to sunlight, temperature fluctuations, and moisture may cause gradual changes in the surface properties of SAFE TILES. These natural ageing effects can slightly reduce the material's elasticity and impact absorption. Regular inspection, cleaning, and timely replacement of worn tiles will maintain the required safety performance throughout the product's service life.

Weekly maintenance of SAFE TILES impact-attenuating surface:

SAFE TILES generally requires little maintenance. The need depends on the surface's location and the level of use and load it is exposed to.

Key maintenance points:

- Sweep the surface with a stiff brush to remove larger organic material, dirt, and debris.
- Rinse away light stains with lukewarm water on the affected area.
- Keep joints between tiles clean using, for example, a leaf blower.
- If needed, attach a scraper to the blower nozzle to remove loose organic or unwanted material between tiles. Organic matter over time can cause the corners and edges of the surface to lift.
- It is important that joints remain clean and free from debris.
- Any damage or vandalism to SAFE TILES surfaces must be documented, and the need for action assessed. Damaged tiles should be replaced as soon as possible to prevent further damage to adjacent tiles. If necessary, the area may need to be closed off for play and use.

OIL SPILLS

Avoid spilling oil on SAFE TILES during maintenance. Oil spills can cause discoloration. Battery acid and similar chemicals must never come into contact with the product. Any maintenance or refueling of machines should not be carried out on a SAFE TILES surface.

STAIN REMOVAL

It is important to remove stains as soon as they are noticed. Prompt cleaning prevents liquids from discoloring or damaging the surface's properties.

- Use a mild detergent, water, and a soft brush to scrub the stain until it is gone.
- Rinse the area thoroughly with clean water to remove all detergent residues.

SNOW REMOVAL

Allow snow to melt and drain naturally. If snow removal is necessary on a SAFE TILES surface, do not use snow plows or mechanical clearing equipment, as these can easily cause serious damage to the surface. Snow blowers are suitable. Salt or other de-icing agents must not be used on SAFE TILES surfaces.

WASTE BINS

Place waste bins near SAFE TILES areas to prevent littering. Integrate pathways where high foot traffic is expected. If possible, designate a smoke-free zone adjacent to the area.

ANNUAL MAINTENANCE OF SAFE TILES IMPACT-ATTENUATING SURFACES

May be performed more frequently if required:

- Remove debris or any loose material.
- Sweep or blow the entire surface clean.
- Rinse the surface with clean water.
- Apply a mild detergent mixed with water over the entire surface. Use a soft brush and scrub thoroughly.
- Finally, rinse with clean water to remove any remaining cleaning agent residues.

INSPECTION OF SAFE TILES IMPACT-ATTENUATING SURFACES

SS-EN 1176-1:6.2.3.1 Inspection information for impact-attenuating surfaces

A structured inspection system shall be established by the owner or the operator responsible for the playground and the impact-attenuating surface. The following types of inspections must be carried out:

Inspection type	Timing	Description
Installation inspection	Before the playground is opened	For newly installed or renovated surfaces
Visual inspection (routine check)	Weekly	To identify visible damage or contamination
Functional inspection (operational check)	Quarterly or monthly	To ensure continued performance
Annual safety inspection	Annually	To verify long-term safety and compliance

Inspection checklist:

- Ensure that the surface area provides sufficient coverage relative to the type of equipment and its free fall height.
- Verify that the SAFE TILES surface's certified critical fall height is at least equal to the equipment's free fall height.
- Example: SAFE TILES EPDM55 mm thickness – Critical fall height 2.17 m (see test certificate, page 6).
- Check the surface for any damage or wear.
- Confirm that edges and corners are properly fixed and secured.
- Ensure the surface is intact and free from debris or buildup.
- The inspection frequency may vary depending on material type, environmental exposure (e.g., entrances/exits, coastal areas, pollution), vandalism, or ageing.
- Lack of maintenance can reduce impact-absorbing properties.
- Verify that the operator has established documented procedures and inspection frequencies, and that these are followed.
- Ensure that information on the surface's impact-absorbing properties, test reports, and certificates is available during inspections and maintenance.

IDENTIFICATION OF SAFE TILES IMPACT-ATTENUATING SURFACES

SS-EN 1176-1:6.2.4 Identification of impact-attenuating playground surfaces

SAFE TILES surfaces do not include physical labels showing the supplier or product type. The documentation provided to the operator upon delivery and installation must be kept for each playground to enable proper identification during inspections or maintenance.

PRE-INSTALLATION INFORMATION FOR SAFE TILES IMPACT-ATTENUATING SURFACES

SS-EN 1176-1:6.2.1 Pre-installation information for impact-attenuating surfaces

- SAFE TILES system is delivered in different thicknesses (see test certificate, page 6 of this document).
- SAFE TILES must not be installed on surfaces that have not been properly prepared to provide a stable foundation, for example due to unsuitable weather conditions or frozen ground. When the base and sub-base layers are completed, SAFE TILES can be installed under all weather conditions.
- SAFE TILES must be maintained according to the procedures described in the maintenance and inspection sections of this document.
- Lack of proper care and maintenance of SAFE TILES surfaces may, over time, reduce their impact-absorbing capacity.
- When installed, used, and maintained according to our recommendations, SAFE TILES surfaces are expected to maintain sufficient impact absorption for up to 25 years.
- During inspection of posts and foundations for play equipment with a single support post, SAFE TILES allows easy access. Lift the tile vertically using an L-shaped tool to avoid damaging the tiles. After inspection, replace the tiles according to the SAFE TILES installation instructions. SAFE TILES surfaces are primarily intended for outdoor use but can also be used indoors.
- Contact your SAFE TILES supplier for spare parts. Installation methods are described in the installation instructions.
- SAFE TILES is an environmentally friendly product. See reports and documentation available on the website.
- The owner or operator must be aware of any increased need for inspection or maintenance in areas exposed to heavy use or environmental conditions that may affect shock absorption. If the installation is incomplete or maintenance work is ongoing, the responsible operator must ensure that children cannot access the

affected area. The area should be temporarily closed off, for example using barriers or fencing.

INSTALLATION INSTRUCTIONS FOR SAFE TILES IMPACT-ATTENUATING SURFACES

SS-EN 1176-1:6.2.2 Installation instructions for impact-attenuating surfaces

Refer to the SAFE TILES (“Assembly Instructions”) for the prefabricated tiles, and to the SAFE TILES principle drawings (“Section Drawings”) for base and sub-base design as well as edge terminations. See also SAFE TILES drainage solutions for sustainable management of drainage water (MICROSAFE).

- Installation must follow all SAFE TILES instructions for edges, cut-outs, and terminations precisely.
- The adhesive used must be of the type PL400 CONSTRUCTION ADHESIVE or similar.
- SAFE TILES must not be installed on surfaces that are inadequately prepared, for example due to unsuitable weather conditions or frozen ground.
- Once the sub-base and foundation layers are completed, SAFE TILES can be installed in all weather conditions.
- The SAFE TILES impact-attenuating surface must be installed ensuring that its critical fall height equals or exceeds the free fall height of the playground equipment and that the coverage area complies with each equipment manufacturer’s installation requirements.
- After completion of the installation, a final installation inspection must be carried out by a competent person to ensure the entire facility is constructed safely and correctly. This inspection must be performed before the playground is opened for use.
- It is recommended that this installation inspection be conducted by a certified inspector.