

# SHIELDTAC® Installation Recommendation

This instruction is valid for SHIELDTAC® **ricosys PU**.

## 1. Substrate

SHIELDTAC® **ricosys PU** is a fire resistant system to apply on SHIELDTAC® **ricotile** tiles in format 500x1000mm in shooting ranges. Please follow the installation recommendation of the tiles to prepare the flooring correctly. The tiles should be glued down to the subbase to avoid movement between the tiles.

## 2. Preparation Work

The tiles have to be brushed and cleaned thoroughly before starting to install.

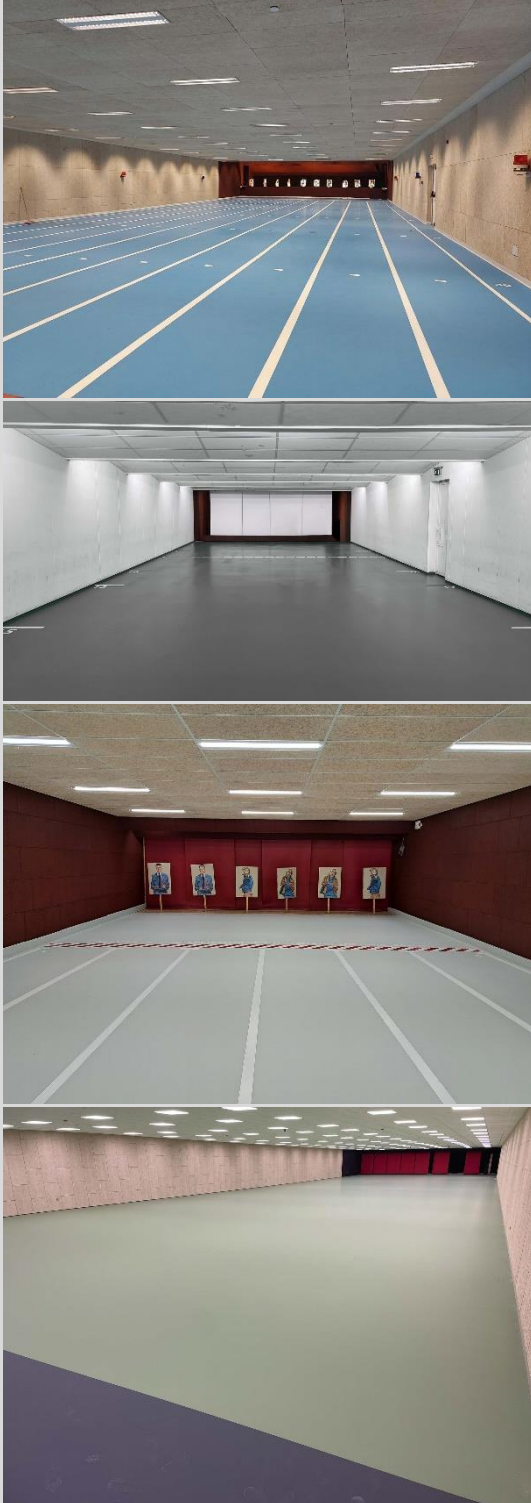
## 3. System Built Up

Layer	Product	Consumption
Base Layer	SHIELDTAC® <b>ricotile</b>	-
Glue	SPORTEC® 700	0,40 kg/m <sup>2</sup>
Pore Filler	SHIELDTAC® <b>ricosys</b> Pore Filler	1,30 kg/m <sup>2</sup>
Self-Leveling Layer	SHIELDTAC® <b>ricosys</b> Protector	2,60 kg/m <sup>2</sup>
Top Coat	SHIELDTAC® <b>ricosys</b> Finisher	0,15 kg/m <sup>2</sup>

## 4. Installation Manual

### 4.1 SHIELDTAC **ricosys** Pore Filler

- The SHIELDTAC® **ricotile** must be closed with SHIELDTAC® **ricosys** Pore Filler pore filler using a straight trowel.
- SHIELDTAC® **ricosys** Pore Filler is a 2-component material, consisting of a Resin and a Hardener, which must be mixed to each other prior to installation.



- Usage approximately 1,30 kg/m<sup>2</sup>
- The application time is about 20-25 minutes at 20 °C.
- **SHIELDTAC® ricosys** Pore Filler is recoatable after 16 hours and within 48 hours at 20 °C.

#### Application method:

Prepare all needed tools before work starts and ensure that electricity is available and tested. Prepare a work area with a mixing station and clean this area before doing so. Place all materials and tools in the working area and organize enough material of **SHIELDTAC® ricosys** for the whole area.

Inspect the shooting tiles and repair possible damages before applying the **SHIELDTAC® ricosys** Pore Filler. Open all boxes and keep them well organized for mixing.

First mix the A-component of the **SHIELDTAC® ricosys** properly for about 1 minute before adding the B-component. Mix A and B thoroughly for about 2 minutes till the mixture is homogeneous.

Pour a workable amount of the freshly mixed **SHIELDTAC® ricosys** Pore Filler onto the shooting tiles. Use the straight trowel to apply the **SHIELDTAC® ricosys** Pore Filler. Do this on the length of the shooting tiles and keep an overlap of approximately 5 cm onto the adjacent tile. The seams between the shooting tiles will be touched twice this way, making sure they are completely filled with **SHIELDTAC® ricosys** Pore Filler. Also, take extra care for the seams that are left between the shooting tile and the walls as well as for other vertical obstructions.

Mix new material when required and try to have the new material ready when the old material is almost installed. So keep in mind the time needed for mixing in relation to the installation. Pour the new material on the floor and install this. Repeat this till the whole surface has been covered with **SHIELDTAC® ricosys** Pore Filler and no pinholes are left.

#### 4.2 SHIELDTAC® ricosys Protector (self-leveling base layer)

- SHIELDTAC® ricosys Pore Filler must be fitted with the SHIELDTAC® ricosys Protector, using a squeegee rubber blade or straight or toothed trowel.
- SHIELDTAC® ricosys Protector is a 2-component material, consisting of a Resin and a Hardener, which must be mixed to each other prior to installation.
- Usage approximately. 2,60 kg/m<sup>2</sup>
- The application time is about 15-20 minutes at 20 °C
- SHIELDTAC® ricosys Protector is recoatable after 16 hours and within 48 hours at 20 °C

##### Application Method:

Prepare a work area with a mixing station and clean this area before doing so. Place all materials and tools in the working area. Set the height of the squeegee rubber blade using the adjusting plate for the squeegee rubber blade.

Organize enough material of SHIELDTAC® ricosys Protector for the whole area and open all boxes and keep them well organized for mixing.

First mix the A-component of the SHIELDTAC® ricosys Protector properly for about 1 minute before adding the B-component. Mix A and B thoroughly for about 2 minutes till the mixture is homogeneous.

Pour the mixed material onto the surface in a straight line from one side to another.

Spread the mixture using the squeegee rubber blade or toothed trowel. When using the squeegee rubber blade; be sure that the squeegee rubber blade is used properly. The squeegee rubber blade should remain at a 90 degree angle to the floor. If the angle alters, the coverage will vary and will always be less than the required 2.60 kg/m<sup>2</sup>. Mix new material when required and try to have the new material ready when the old material is almost installed. So keep in mind the time needed for mixing in relation to the installation.

Pour the new material on the floor and make sure that it is poured out on the edge of the already installed material, but on the material and not beside it. Back push this material in the already installed material by approx. 30 cm so no pouring lines will remain visible.

Repeat this till the whole surface has been covered with SHIELDTAC® **ricosys** Protector.

#### 4.3. SHIELDTAC® **ricosys** Finisher

- SHIELDTAC® **ricosys** Protector must be fitted with the SHIELDTAC® **ricosys** Finisher, using a long haired roller.
- SHIELDTAC® **ricosys** Finisher is a 2-component material, consisting of a Resin and a Hardener, which must be mixed to each other prior to installation.
- Usage approximately 0,15 kg/m<sup>2</sup>.
- The application time is about 45 minutes at 20 °C
- SHIELDTAC® **ricosys** Finisher is recoatable after 16 hours at 20°C and within 48 hours at 20°C.

#### Application method:

Prepare all needed tools before work starts and prepare a work area with a mixing station and clean this area before doing so. Place all materials and tools in the working area.

When necessary in case of contaminations in the SHIELDTAC® **ricosys** Protector, please sand the floor or the specific spots where the contaminations are present. Afterwards, vacuum the floor thoroughly.

To ensure that the SHIELDTAC® **ricosys** Finisher is installed to a good standard, it is important to prepare the rollers used in the application. Any loose or single fibers must be removed from every roller. This is best achieved by applying masking tape on the whole of the rollers and removing this after a few minutes. This will remove all of the loose fibers.

Organize enough material of **SHIELDTAC® ricosys** Finisher for the whole area and open all boxes and keep them well organized for mixing. First mix the A-component of the **SHIELDTAC® ricosys** Finisher properly for about 1 minute before adding the B-component. Mix A and B thoroughly for about 2 minutes till the mixture is homogeneous.

Pour the mixed material onto the surface in a straight line from one side to another over the width of the floor. Divide the material slightly with the 50 cm roller, by going over the material also over the width of the floor. This ensures that there is not too much material on one place which would lead to problems dividing the material to get a uniform paint coat thickness. For the sides, keep a small amount of **SHIELDTAC® ricosys** Finisher to use this for coating the sides of the area

Use a radiator brush and a 10 cm polyester fiber roller to do this. It is important not to prepare too much of these sides as the coating will start drying and the aim is to ensure that the coating is installed on a “wet to wet” basis to form the best looking finish.

Spread out and install the material parallel to the long sides using the 50 cm long haired roller.

After dividing the material with the 50 cm roller, a second technician must roll this section again with a 50 cm roller, keeping an overlap with the previous installed, adjacent material of approximately 5-10 cm. Keep in mind that the lanes remain the same workable length. If the lane is too long, the second installer cannot reach the entire lane.

Mix new material when required and try to have the new material ready when the old material is almost installed. So keep in mind the time needed for mixing in relation to the installation.

Pour the new material on the floor and make sure that it is poured out somewhere in the middle of the next section to be coated. This way the material is spread as best as possible. Repeat with the 50 cm rollers. Keep an overlap of about 15-20 cm with the previous section and make sure to lift the 50 cm roller at the end of a roller section to minimize the visibility of roller marks after installation.

Meanwhile, make sure that the sides are coated before reaching that part with the 50 cm rollers.

Repeat this step till the whole area is coated and remove the masking tape in case of using 2 color of coating. In case it is impossible to take it away after complete installation, find a way to do this while installing the **SHIELDTAC® ricosys** Finisher. Do not leave the tape since this can cause problems the next day!

Make some barriers to avoid people to walk on the floor when it is still wet.

During installation, avoid high temperatures in combination with low relative humidity because drying times will be too short which will have a negative effect on the system, aesthetical and technical. Also avoid a high relative humidity because drying times will be too slow which can have negative effect on the strength of the coating and the adhesion.

It is important to check the consumption rate before and during installation to avoid having not enough material in the end and to avoid that the **SHIELDTAC® ricosys** Finisher is installed too thickly because then the coating may crack after curing.

## 5. Important details

For installing the **SHIELDTAC® ricotile** tiles pay attention and following manufacturer's instructions and regard local laws and standards.

Do not apply over damp or wet substrates.

Do not apply to surfaces during the out-gassing of vapor.

Minimum application and curing temperature 10°C;  
maximum substrate temperature 30°C.

Minimum cure time of concrete is 28 days.

Maximum moisture content of substrate is 3 %. Substrate temperature must be a minimum of 4°C above the dew point.

Each individual layer must be installed within 48 hours after the installation of the previous layer.

All tools and machinery should be cleaned immediately after final usage.

For proper cleaning a thinner can be used.

We advise you to read the Safety Data Sheets before installation. In this way you are prepared in case something unexpected happens.

Please write down the batch numbers to simplify the traceability of the materials.

Rubber products have an odour typical of the material, which decreases over time. This can be accelerated by regular airing.

**In case of claims caused of falsely delivered goods, defect goods, insufficient quantities or other possible faults make a claim immediately and stop the installation directly. A claim of delivered material is only possible with untreated material and with confirmation of the order number.**

#### DISCLAIMER:

These recommendations for applications and installation are based on our extensive experience and on current technological practice. Our liability and responsibility in the event of damages shall be limited to the extent defined in our General Terms and Conditions of Business, regardless of the above recommendations or of any statements made or advice given by our sales representatives or applications engineering staff.