The System that Provides Reliable Protection from Ricochets

It is undeniable that top-class marksmen need top-class protection. For more than 20 years Regupol’s high-quality Regupol® Safety Elements and Flooring have been providing optimal protection from ricochet, rebounds and bullet fragmentations.

Regupol’s universal and complete solutions are available for all danger areas in shooting ranges, such as floors, walls, or bullet traps. Together with reliable partners Regupol will work out the perfect solution for your shooting range – individually tailored to the respective conditions. Contact our friendly Regupol customer consultants to find out whether Regupol® standard or customised products are most suitable for your particular shooting range.

Regupol® Safety Elements were especially developed for installation in shooting ranges for the police, hunters, armed forces, marksmen clubs, private shooting clubs and security services. The number of facilities equipped with Regupol® Safety Elements speaks in Regupol’s favour.

Whether for indoors or outdoors, whether on shooting ranges with one main shooting direction or in 180° shooting ranges – Regupol® Safety Elements have been meeting the quality requirements placed on these products for over 40 years. The range of Regupol® Safety Elements includes components for both indoor and outdoor applications: safety flooring, wall and covering, shooting blocks, fragmentation rubber sheets and custom-built components.

If cars are required for practise, Regupol® Safety Flooring bear vehicles without any difficulty.

The Benefits

- Reliable protection from ricochet and bullet fragments
- Offers protection even under unfavourable angles of impact
- Absorbs projectiles and calibres up to 7,000 joules
- Elastic material means no visible bullet holes
- High resistance to wear even under intensive use
- Longest service life in comparison with other currently used materials
- Different surface colours (flooring)
- Suitable for outdoor applications
- Sound-absorbent
- Slip-resistant
- Safety flooring
- Can be wet cleaned
- Ongoing quality monitoring during production and installation
- Weather and UV resistance
- Continuous customer support by Regupol
- Special equipment available, depending on the nature of the shooting range and the type of ammunition used

References (Extracts)

GSG 9 shooting range in Sankt Augustin-Hangelar (Germany)
GSG 9 outdoor range in Wahnerheide (Germany)
KSK shooting range in Calw (Germany)
Police Training Academy (PAI) in Biberach, Eutin, Selm Bork, etc. (Germany)
Police headquarters in Frankfurt am Main (Germany)
Police headquarters in Düsseldorf (Germany)
Police headquarters in Rosenheim (Germany)
Customs school in Sigmaringen (Germany)
Security service shooting ranges of the German states' central banks in Düsseldorf, Erfurt, Frankfurt am Main, Leipzig, etc.
Shooting ranges for police, military and other security service in Abu Dhabi, Dubai, Estonia, Italy, Kuwait, the Netherlands, Norway, Saudi Arabia, Singapore, Taiwan, Turkey, etc.

The list contains only a small selection of shooting facilities equipped with Regupol® Safety Elements. Many special designs have been developed to meet demanding requirements for training of combat, crime and terrorism situations. Solutions for ballistic protection as in stairways, multi-storey staircases or interiors of passenger airplanes are only a few examples.
Regupol® Safety Flooring FH

Our Regupol® Safety Flooring FH possesses the best possible anti-ricochet protection from projectiles up to 7,000 joules. Three layers of polyurethane on top of the tiles provide a hard wearing 2-mm-thick seamless surface. Regupol® Safety Flooring FH is applied in situ in liquid form by skilled installation technicians, in order to guarantee top-class quality and an even, seamless surface. The base layer consists either of elastic tiles made of PUR-bonded rubber fibre material or if required of Regupol® rolls type 7619/II. Its resistance to all kinds of mechanical influences makes this a hard-wearing floor surface that will be around for decades. This surface is available in numerous different colours.

Regupol® E43 Elastic Tiles
PUR-bonded high-quality rubber fibres with a triple PUR layer and a wear-resistant surface coating

Standard Dimensions
1,000 x 500 mm per tile
Dimensional tolerances: Length/Width ±1%
Thickness ±2 mm

Thickess
Black base mat 43 mm, PUR layer 2 mm; other thicknesses on request

Weight per m²
approx. 40 kg/m²

Regupol® 7619/II Elastic Layer
Instead of Regupol® Elastic Tiles, rolls made of Regupol® can also be applied as sub-base. Regupol® rolls are available in different thicknesses.

Surface
Seamless sealed

Colour Wear Layer
Black base mat, PUR coated surface available in many different colours

Cleaning
Easy to clean, wet cleaning is also possible

Test Result Rebound and Ricochet Behaviour
Projectiles fired from angles of between 10° and 90°: none of the projectiles fired resulted in rebounds or ricochet and therefore presented no danger to the marksmen. The projectiles or projectile fragments were all successfully absorbed by the Regupol® Safety Flooring. Certified by the German Proof House in Ulm.

Test Result Reaction to Fire
Cfl-s1 in line with DIN EN 13501-1 difficult to ignite. Fulfils the requirements of German National Technical Approval.

*The German Ü mark for construction products is administered by German DIBt (German Institute for Construction Technology) and defines additional specifications if European CE marking does not cover all necessary issues for German authorities. Ü stands for “Übereinstimmung” (compliance). Mostly the tests take place in so-called PÜZ testing centres. PÜZ is the German abbreviation for testing laboratories, inspection bodies and certification bodies.
**Regupol® Elastic Tiles E43/E70**

*Regupol® Elastic Tiles* have been especially developed to prevent dangerous ricochet and rebounds in shooting ranges. Preventing rebounds of penetrated projectiles the *Regupol® Elastic Tiles E43* have been used for more than 20 years offering anti-ricochet protection of walls and floors. They are ideal suited for outdoor applications, possessing outstanding weather and wear resistance.

**Standard Dimensions**
- 1,000 x 500 mm per tile
- Dimensional tolerances: Length/Width ±1%
- Thickness ±2 mm

**Thickness**
- 43 mm
- 70 mm

**Weight per m²**
- approx. 35 kg/m²
- approx. 56 kg/m²

**Colours**
- Red Brown, Black

The highly compacted material structure of our *Regupol® Elastic Tiles E43*. 

German Proof House Tested
Regupol® Elastic Tiles RG 520

Regupol® Elastic Tiles RG 520 have been especially developed to collect slow projectiles, such as in front of bullet traps. They are ideally suited for outdoor applications. Thanks to their unique material density projectiles penetrate only with a low kinetic energy into the tiles and ricochet is reliably prevented.

Standard Dimensions
1,000 x 500 mm per unit
Dimensional tolerances: length/width ± 1 %
Thickness ± 2 mm

Thickness
43, 60, 100 mm

Weight per m²
approx. 22.5 kg/m² (at 43 mm thickness)
approx. 31.5 kg/m² (at 60 mm thickness)
approx. 52 kg/m² (at 100 mm thickness)

Colours
Red Brown, Black

The material structure of our Regupol® Elastic Tiles RG is distinctly more open compared to our Regupol® Elastic Tiles.
Regupol® Interlocking Pavers

Regupol® Interlocking Pavers are made of PUR-bonded rubber fibres and granules. They are ideal suited for outdoor applications, providing a safe anti-slip surface.

The compact pavers are easy to interconnect and can easily be combined with common Behaton concrete pavers due to their shape and measurements. Regupol® Interlocking Pavers are perfectly suitable for all outdoor areas, especially for access paths, shooting ranges, etc. The compact pavers are extremely resilient and durable even under tough conditions, including vehicular traffic (a proper subbase provided).

Standard Dimensions
200 x 160 mm per unit

Thickess
43 mm

Weight per m²
38 kg/m²

Colours
Red Brown, Black

Installation
On top of a well compacted and levelled crushed stone base.
Sand is used for the joints between the pavers.
Alternatively: glued onto concrete sub-base.
Regupol® Shooting Blocks

Regupol® Shooting Blocks are perfectly suited for use in bullet traps. They can be applied in various layers or even staggered in any height and depth. Regupol® Shooting Blocks offer a wide range of application possibilities. Each bullet trap can be designed to suit individual requirements. Alternatively, specially designed constructions based on Regupol® Elastic Tiles can also be installed.

Standard Dimensions
500 x 300 x 200 mm per unit

Weight per m²
25 kg

Colour
Red Brown
Whether for indoor or outdoor applications, Regupol® Safety Flooring and Elastic Tiles are components in numerous shooting ranges for police, military, security forces and demanding marksmen. Federal police shooting range in Berlin (centre), MSZU- Miller shooting range in Ulm (Germany).
The indoor shooting range at the Police Headquarters in Frankfurt (Germany) is covered with Regupol® Elastic Tiles. The SEK/MEK indoor shooting range in Nuremberg (Germany) is also fitted with Regupol® Safety Flooring.
Theory and practice:
Extensive proof tests are a prerequisite for safety in shooting areas (above). Regupol® Elastic Tiles have been reliable components in shooting ranges for decades as shown in the picture below – numerous bullet holes in the wall coverings at a GSG9 indoor range – for more than 25 years.
Regupol® Safety Flooring at a pistol shooting range (above) and at Düsseldorf’s police headquarters.
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