RELIABLE ANTI-RICOCHET PROTECTION

# **Regupol**<sup>®</sup>

# SHOOTING RANGE SURFACES

0 0 0 0 0



### **Regupol**<sup>®</sup>

### **Ballistic Flooring**



### 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**<sup>®</sup> 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**<sup>®</sup> standard or customised products are most suitable for your particular shooting range.

**Regupol**<sup>®</sup> 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**<sup>®</sup> 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**<sup>®</sup> Safety Elements have been meeting the quality requirements placed on these products for over 40 years. The range of **Regupol**<sup>®</sup> 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) 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 airlines are only a few examples.

### **Ballistic Flooring**



### **Regupol®** Safety Flooring FH

Our **Regupol**<sup>®</sup> **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**<sup>®</sup> **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**<sup>®</sup> 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  $\pm 1\%$  Thickness  $\pm 2$  mm

#### Thickness

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

Weight per m<sup>2</sup> approx. 40 kg/m<sup>2</sup>

#### 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  $C_{\rm ff}$ -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.



Sub-base: Regupol® Elastic Tile E43



Sub-base: Regupol® 7619/II Elastic Layer

German Proof House Tested

### **Elastic Rubber Tiles**



### **Regupol**<sup>®</sup> Elastic Tiles E43/E70

**Regupol**<sup>®</sup> **Elastic Tiles** have been especially developed to prevent dangerous ricochet and rebounds in shooting ranges. Preventing rebounds of penetrated projectiles the **Regupol**<sup>®</sup> **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  $\pm$ 1% Thickness  $\pm$ 2 mm

### Thickness

43 mm 70 mm

#### Weight per m<sup>2</sup> approx. 35 kg/m<sup>2</sup> approx. 56 kg/m<sup>2</sup>

Colours Red Brown, Black





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



### **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  $\pm 1\%$  Thickness  $\pm 2$  mm

Thickness

43, 60, 100 mm

#### Weight per m<sup>2</sup>

approx. 22.5 kg/m<sup>2</sup> (at 43 mm thickness) approx. 31.5 kg/m<sup>2</sup> (at 60 mm thickness) approx. 52 kg/m<sup>2</sup> (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.

### Interlocking Rubber Pavers



### **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

Thickness 43 mm

Weight per m<sup>2</sup> 38 kg/m<sup>2</sup>

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.





### **Shooting Blocks**



### **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 m<sup>2</sup> 25 kg

Colour Red Brown





# **Ballistic Flooring**









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).

# **Ballistic Flooring**







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**.

**Ballistic Flooring** 



7,62 = 51 7,62×51 150g+TMS 60445° - 150g+ TMS 10,20g 5'FS, Ms 19,20g.,srs Ms 5 20°4 ¥20° Og 146gr VMSWK DM41 70 9,459 VM&VK D141 20°4 0 10 ¥45° 80

Theory and practice: Extensive proof tests are a prerequisite for safety in shooting areas (above). **Regupol**<sup>®</sup> 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.

# **Ballistic Flooring**







**Regupol® Safety Flooring** at a pistol shooting range (above) and at Düsseldorfs' police headquarters.

www. regupol. com.au

Regupol (Australia) Pty. Ltd. ABN 97 094 053 399 155 Smeaton Grange Road SMEATON GRANGE NSW 2567 Australia

 Phone:
 02 4624 0050

 Fax
 02 4647 4403

 sales@regupol.com.au
 www.regupol.com.au







The technical information given in the documents are guideline values. They are liable to manufacturing tolerances, which may vary depending on the type of underlying properties. The currently valid versions of this information are provided on our internet pages and in the PDF versions of this catalogue. The PDF versions are available to download from our website. We do not assume liability for spelling or printing errors.

