

## **REGUM**

Structural Protection Mats

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## **KEY ADVANTAGES**

## at a glance



→ Reliable protection against mechanical damage



→ Chemical resistance



→ Rot-proof, durable and resistant to ageing



→ Quick and easy installation

### **REGUM**

#### Structural Protection Mats



Flat roofs are one of the most common structural features of urban residential and commercial buildings. Technological and social developments have now rendered the formerly drab flat roof surfaces passé. Today's designs include elaborate roof gardens, climate-friendly green roofs or sustainable photovoltaic systems.

During the construction phase and long after completion of the work, sensitive structural parts of the roof must be protected from mechanical damage. In the case of flat roofs, it is usually a question of protecting the high-quality sealing membranes, synthetic films and insulation materials. By using durable structural protection mats, damage to the roof systems and the resulting structural damage caused by penetrating moisture can be effectively prevented.

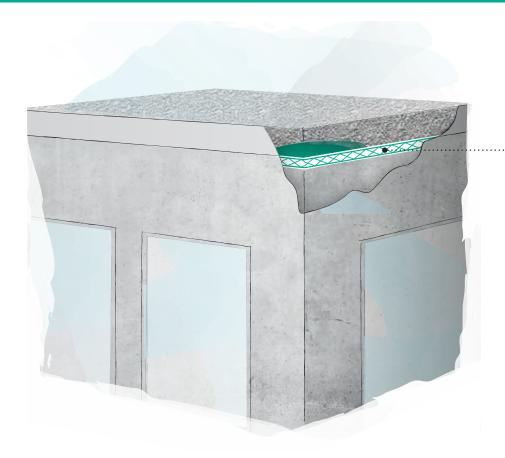
The elastic REGUM Structural Protection Mats are made of polyurethane-bonded, recycled granulated rubber and have proven themselves successfully in these applications over many years. The user can choose between sheets or panels in various dimensions and thicknesses depending on the expected loads.

REGUM Structural Protection Mats are made of polyurethane-bonded granulated rubber and are available in the form of panels in various sizes or as sheets.

### and properties

REGUM Structural Protection Mats are used to protect buildings and structures from mechanical damage. They can be laid quickly and easily over sensitive building materials to provide a protecting and separating layer. The elastic sheets adapt optimally to the shape of uneven substrates.

In addition to providing mechanical protection, REGUM Structural Protection Mats and sheets also have a number of other properties: they are permeable to water, bitumen-compatible, rot-proof and chemically compatible with various construction materials and substances with which they come into contact. However, plasticiser-sensitive plastics must be separated from the structural protection mats by a separate protective layer. For example, a non-woven fabric is placed between the protection mat and the waterproofing of a flat roof.



**REGUM Structural Protection Mat** 

We are happy to supply current data sheets, specifications, certificates and technical verifications on request.

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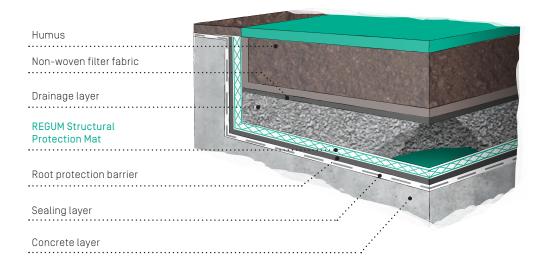
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## **APPLICATIONS**

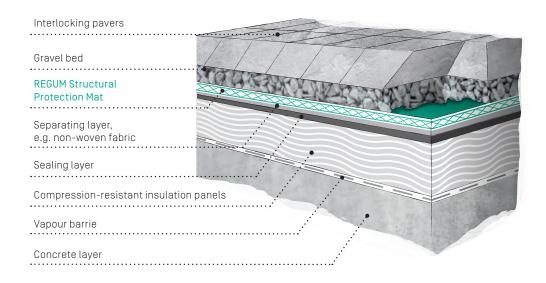
### **REGUM Mats**

Structural protection mats are used in structural and civil engineering as a protecting and separating layer under gravel fill, crushed stone layers, paving slabs, soil, greenery, planters, concrete components, photovoltaic systems and other superstructures on flat roofs, parking decks, underground garages, basements, balconies, patios, green roofs and in tunnel construction. They also protect the structure or the waterproofing layer during the construction phase, when construction workers have to walk on the roof waterproofing, for example. Often, the mats also form part of the composite system in green roofs.

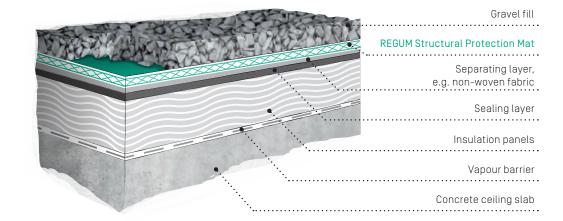
#### Planted areas



#### Parking decks or terraces



#### Slightly sloping roofs



### Data

Features	Test standard	REGUM Structural Protection Mat
Product type		sheet and plate goods made of PUR-bound rubber granulate
Granular structure		roughly
Bulk density	DIN EN ISO 845	730 kg/m³ ± 5%
Measure		Width (rolls / plates): 1.25 m / 1.05 m length: 6 mm = 10 m; 8 mm = 8 m; 10 mm = 6 m other dimensions possible
Dimensional tolerance	DIN 7715-2 M4	± 1.5 %
Strengths/tolerance		5-20 mm / to 12 mm ± 0.3 mm; from 12 mm ± 1.0 mm
Test thickness	DIN 53534	10 mm
Compressive stress deformation properties	DIN EN ISO 3386-2	cc <sub>25</sub> = 0.54 N/mm², cc <sub>40</sub> = 1.80 N/mm², cc <sub>50</sub> = 4.7 N/mm²
Pressure test (at 10 %)	DIN 53421	0.24 MPa (E-Modul) 2.9 MPa
Tensile strength / elongation at break	DIN EN ISO 1798	0.42 MPa (mean value) / 46 % (mean value)
Traffic load	DIN ISO 3386-2	6 mm 8 mm 10 mm 10 % 18 t/m² 20 t /m² 23 t/m² 15 % 33 t/m² 37 t/m² 41 t/m² 20 % 53 t/m² 55 t/m² 58 t/m²
Chemical resistance		Resistant to weak acids and alkalis, conditionally resistant to oils
Temperature resistance		-40 °C to +110 °C
Building material class	DIN 4102	B 2
Fire class	EN 13501-1	E <sub>fl</sub>

# **ADVANTAGES REGUM Structural** Protection Mats

- Reliable protection against mechanical damage
- Available in sheets or panels
- Chemical resistance
- Permanently elastic and water-permeable
- Durable, rot-proof and resistant to ageing
- Quick and easy installation
- Load bearing immediately after installation







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