



WestWood®
Qualität + Erfahrung

Parking

Rapid refurbishment ·
Business as usual



A System that pays off

The refurbishment of parking decks has to pay off in more ways than one:

1. It must cause the least possible disruption to normal operations, thereby minimising any loss of business.
2. The system must be able to withstand mechanical stresses in the long term, which extends the intervals between refurbishments.

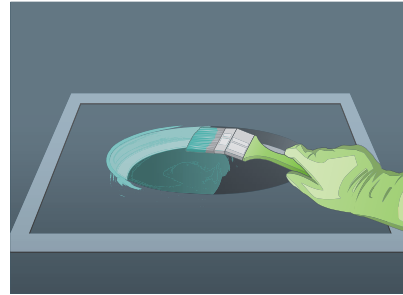
Modern waterproofing systems and coatings made from flexible PMMA resins act provide a waterproofing layer and road surfacing in one. They are only approx. 5 mm thick and weigh around 12 kg/m², and they are almost always suitable for application to existing surfaces, such as concrete and asphalt (as well as metal, plastics, glass etc.). No removal and disposal costs - the car park remains operational! Larger development projects can be carried out one section at a time while the car park stays open for business.

Professional Application The most important basic requirement is professional substrate preparation (grinding, scarifying, abrasive blasting, cleaning etc.) The waterproofing layer, just 3 mm thick, is then applied as a liquid resin in a three-step operation:

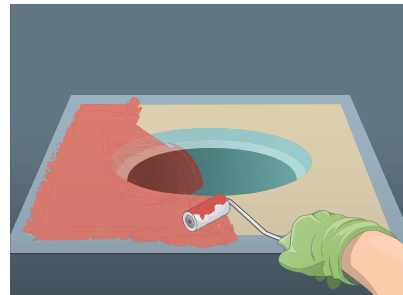
1. A generous first layer (approx. 2.0 kg/m²) is applied.
2. Sections of fleece, already cut to size, are embedded in the resin while it is still wet and any bubbles are removed. The fleece acts as a layer thickness guide and lends the system its crack-bridging properties.
3. The fleece is then saturated with resin wet in wet (approx. 1.5 kg/m²).

All interfaces and upstands can be finished perfectly using the same system. Consequently every detail around joints, pipe penetrations, drains and I-beams can be securely and durably waterproofed on site. A gully, for instance, is first lined with a fleece collar and this is then followed by a fleece cuff (see figures 3 and 4). The fully fleece-reinforced waterproofing fits like a glove.

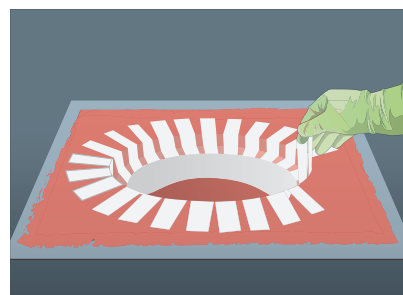
We recommend using extremely tough textured surfacing as the wearing course for very busy multi-storey car parks.



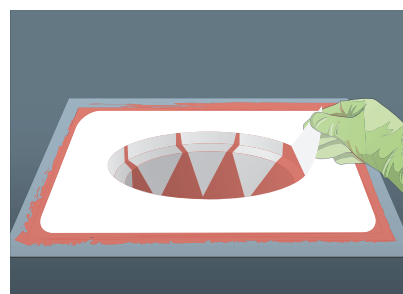
Apply the primer to details



Apply the first layer of resin



Embed the fleece collar in the resin

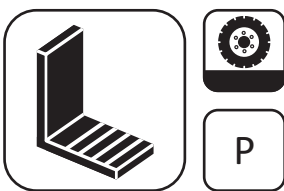
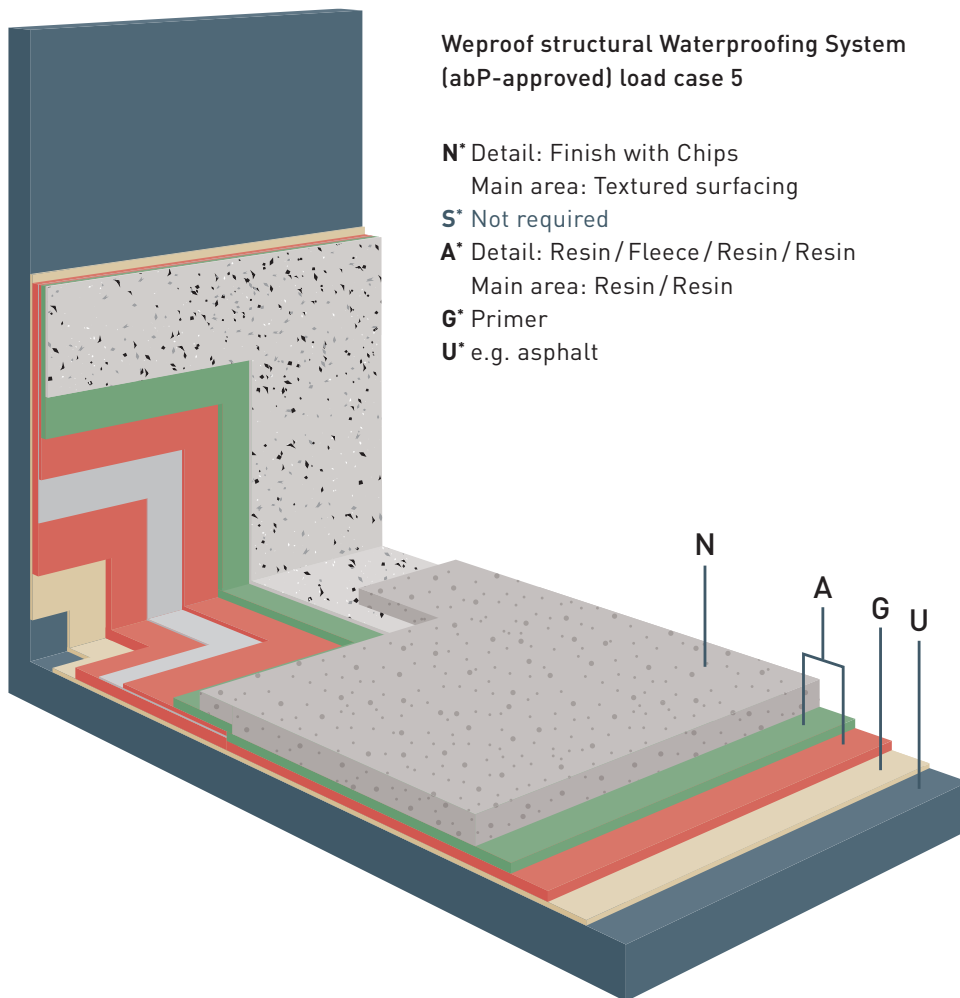


Then apply the fleece cuff

Customised, Efficient Structural Refurbishment

More durable – With built-in flexibility PMMA resins never become brittle. They are flexible and plasticiser-free on account of their chemical composition. Consequently they remain permanently elastic and extensible. Abrasion and wear are minimal. The system is able to withstand the toughest conditions. The surface of a ramp that was refurbished in 2002, for instance, is still 98 % intact after approx. 8 million vehicles have passed over it. Furthermore, Waterproofing and Surfacing Systems display superior salt resistance. They possess very high hydrolysis-resistance and are easy to clean.










Faster – Time is Money This certainly applies to commercial car parks. Ramps can be refurbished in approx. 7 hours, while entrances and exits can be repaired overnight. This is possible because modern PMMA resins are fully cured after about 20 minutes. The resin-coated areas can be overlaid or are ready for use again after only a short interval. Furthermore the weather conditions are less important. PMMA systems can be applied absolutely safely even at temperatures as low as -15 °C and at a relative humidity of up to 90 %.



Weproof structural Waterproofing System (abP-approved) load case 5 is a seamless, crack-bridging and joint-bridging Waterproofing System that is able to withstand mechanical stress. It includes a highly flexible waterproofing layer specifically designed for main areas and does not require a reinforcement fleece. As a result the system is particularly economical. Applied in conjunction with heavy-duty and abrasion-resistant protective and wearing courses, it is suitable for all areas susceptible to cracking and subjected to heavy vehicle and pedestrian traffic. Surfaces can be finished and markings applied in any colour.

With general building authority test certificate (abP) for use as structural waterproofing as defined by DIN 18195, parts 4, 5, 6, 7

Technical and Economical plus Points

	Resistant to chemicals		Hydrolysis-resistant		Easy maintenance
	Impermeable to liquids		Individual design		Flexible at low temperatures
	Joint-bridging nend		No flow paths for water under the membrane		UV-resistant
	Low own weight		Highly resistant to resistant		Fully bonded
	Low build-up		Seamless		Weathering-resistant



System compass Which system offers the best solution and for which challenging conditions? Experience has taught us that refurbishing an area with liquid resins is generally up to 30 % cheaper than using traditional methods (removal and new build-up).

It is always worth making the comparison! The Weproof System is extremely versatile and can cope with the great variety of tasks associated with refurbishing a multi-storey car park. Here is a brief outline of our recommendations for typical applications. You will find a more detailed system compass online.

Top deck

Example:

- Exposed parking deck above other parking levels
- A few nooks and crannies
- With penetrations and interfaces such as joints, gullies, drains etc.
- Substrate predominantly asphalt

Weproof structural Waterproofing System (abP-approved) load case 5

N Detail: Finish with Chips

Main area: Textured surfacing

S Not required

A Detail: Resin/Fleece/Resin/Resin

Main area: Resin/Resin

G Primer

Internal deck above utilised premises

Example:

- Busy parking deck
- Directly above utilised premises
- With numerous penetrations and interfaces such as joints, gullies, drains etc.
- Substrate predominantly concrete

Weproof structural Waterproofing System (abP-approved) load cases 6 + 7

N Detail: Finish with Chips
Main area: Textured surfacing

S Not required

A Detail: Resin/Fleece/Resin/Resin

Main area: Resin/Fleece/Resin/Resin

G Primer

Ramp

Example:

- Spiral ramp serving several levels
- In-situ concrete construction
- High volume of traffic
- With kerbs and drains at every level
- Substrate predominantly concrete

Weproof Waterproofing System 3

N Detail: Finish with Chips

Main area: Textured surfacing

S Not required

A Detail: Resin/Fleece/Resin

Main area: Resin

G Primer

Thousands of Times

Tried and Tested in Practice

WestWood offers both technical and economical benefits. The oldest, still serviceable waterproofing systems using flexible PMMA resins were installed in the 1980s and have therefore been in use now for over 35 years.

In terms of their service life, WestWood Waterproofing Systems have received the European Technical Approval classification of W3 (durability > 25 years), the highest obtainable category.

Since 1999 more than 100 multi-storey car parks with a total area in excess of 250,000 m² have been refurbished successfully. Renowned companies trust in the Quality + Experience of WestWood.

This is what our long-standing customers have to say:

»WestWood have impressed us all-round: from their technical advice and support to the professional workmanship and the durability of their systems in our car park, which has around 700 parking bays.«
(Parkhaus-Garage Hagemann GmbH + Co. KG/
ParkCenter Kö in Düsseldorf)

»WestWood's liquid-resin systems allow us to carry out repairs largely without having to remove the existing surfacing. In addition the fact that individual sections only have to be closed off for short periods means that we can practically continue to operate the car park as normal, which in turn helps our customers. The perfect teamwork between manufacturer and contractor has proved to us that we have found the right partner for the future.«
(PARK SERVICE HÜFNER GmbH + Co. KG in Stuttgart)



Schloss underground car park, Koblenz (CPS)



Ramp, entrance / exit »Rhein-Mosel-Halle« in Koblenz



Top deck »Am Steintor« in Hanover





Project: "Schloss" underground car park in Koblenz, Germany
Size: 11'260 m²
Substrate: Concrete and also metal
Date: April to May 2010
System installed: Weproof Waterproofing System 3 with fleece-reinforced waterproofing for details





"Schloss" underground car park in Koblenz, Germany

The System for Multi-Storey Car Parks with high Traffic flows

This underground car park is near the Electoral Palace (or "Schloss") in the city. It opened in May 2010 and offers its customers excellent parking facilities. The clear layout and the light and welcoming design – from floor to ceiling – are noticeable as soon as you drive in. The 446 parking areas are divided into sections of cool green and restful blue. Furthermore, the large bay numbers and clear signage make it easy for users to find their way around. This recently built car park is

always busy, not only on account of its proximity to the palace, but also because it provided direct access to the national garden show - BUGA 2011 – and because it is conveniently located for the city centre. Consequently one of the key criteria when it came to selecting the materials and contractors was sustainability. Contemporary, energy-saving LED lighting is installed here, as is a modern and highly durable PMMA Surfacing System that also acts as waterproofing.



Wecryl Primer 276 is applied to the shot-blasted concrete surface



Details on gullies and floor drains are waterproofed wet in wet with Weproof 264 and strips of WestWood Fleece



This involves applying an initial layer of PMMA resin, embedding the strips of fleece and removing any air bubbles, then saturating the fleece with the same resin



Weproof 269 in green, a waterproofing product for main areas, is applied using notched trowels and spiked rollers



Stainless steel trowels are used to apply hard-wearing Wecryl textured surfacing



The bays are measured out and masking tape is applied exactly in line with the layout



The parking bays are sealed with low-maintenance Wecryl Finish 288 in shades of green and blue



Stencils are used for applying the bay numbers...



... and arrows, with white Wecryl Finish 288



PMMA Delivers

Variety of Applications

Of course WestWood also provides comprehensive refurbishment services. Get to know us better at training courses and seminars devoted to theory and practice. We can also support you with regard to site surveys and working out refurbishment solutions. We offer a specification, design, sampling and information service. We have been operating successfully for over 15 years in the areas detailed below. We look forward to your challenges.



Balcony Dependable waterproofing · Timeless elegance
The refurbishment of balconies requires both technical and design skills.



Parking Rapid refurbishment · Business as usual
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Roof Absolutely waterproof · Permanently resistant
The refurbishment of flat roofs is focused on a single objective: impermeability.



Special Solutions without limits
The refurbishment of special projects makes varied demands in terms of impermeability, resistance and durability.



Agriculture Rapid refurbishment · Lasting resistance
Agricultural businesses can be refurbished rapidly, in a way that is economically efficient and offers lasting protection.

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