



**vebrodeck: we've
got car parks covered**
protective polymer car park deck
wearing & waterproofing systems

vebropolymers

vebrodeck

from the top deck to the basement,
we've got you covered...

Multi-storey parking structures have a number of unique features that distinguish them from other buildings, including maximum spans and minimum supporting columns in order to maximise the number of vehicle parking spaces.

They are also highly exposed to the elements. This fundamental design requirement leads to a far greater risk of problems than in other buildings including...



Vebro Polymers' **vebrodeck** car park decking systems range has been expertly engineered to deal with the wide range of stresses and pressures imposed on all decks of multi-storey car parking structures.

key performance benefits

-  **vebrodeck** includes waterproofing systems for top decks that protect the decks below against water ingress
-  **vebrodeck** includes solutions that offer dynamic crack-bridging capabilities up to B4.2 standards
-  **vebrodeck** has an excellent fire-safety classification and meets the criteria set out by B_{fl}-S1
-  **vebrodeck** MMA systems cure on quickly to reduce downtime and accelerate construction schedules

-  **vebrodeck** offers solutions for decks subject to hydrostatic pressure from the surrounding water table
-  **vebrodeck** offers excellent durability, withstands heavy loads and offers HD versions for ramps and turning circles
-  **vebrodeck** is resistant to oils, fuel, de-icing salts and other chemicals and protects against rubber tyre marks
-  **vebrodeck** is available in a range of vibrant traffic colours and includes a complementary linemarking products

the vebrodeck range

Application	System	Thickness	Crack-Bridging EN 1062-7	Certification EN 1504-2	Slip Resistance EN 13036-4	Fire Resistance ISO 13501
 Top Deck	vebrodeck Vitesse	5.5 mm	0.8 mm B4.2 at -20°C	OS10	<R12	C _{fl} -S1
	vebrodeck MMA ED	4.0 – 5.5 mm	0.3 – 0.6 mm B3.2 at -20°C	OS11a	<R13	C _{fl} -S1
 Over Occupied Premises	vebrodeck ID OOP	4.0 – 5.0 mm	<0.6 mm B3.2 at -20°C	OS11a	<R12	B _{fl} -S1
 Intermediate Deck	vebrodeck MMA ID	2.0 mm	Static crack- bridging grade available (A2)	OS8	<R13	C _{fl} -S1
	vebrodeck ID	2.0 mm	Static crack- bridging grade available (A2)	None	<R12	B _{fl} -S1
 Basement Deck	vebrodeck ID BL	1.5 – 3.0 mm	None	OS8	<R12	B _{fl} -S1

looking for linemarker?

vebrodeck PU Linemarker and **vebrodeck** MMA Linemarker are available for application with **vebrodeck** systems.

For more information, visit vebropolymers.com



basement & underground decks

top deck

intermediate decks

over occupied premises

ramps & turning circles

multi-storey car park decking frequently asked questions

Why are crack-bridging capabilities important on deck membranes?

Car parks are constructed with large clear spans with a minimum number of supporting columns in order to achieve the maximum number of vehicle parking spaces. Vehicular traffic movement throughout multi-storey car parks can create dynamic loading, which imparts vibrations through the decks into the structure.

Dependent on the design of the car park and placement of movement joints, this can lead to cracking of the concrete surface. As such, flexible elastomeric crack-bridging decking systems are recommended to negate this risk on the top deck of new build structures. In refurbishment scenarios, existing cracks can be banded prior to the installation to prevent further damage.

The crack bridging ability of car park deck wearing systems are tested and certified according to EN 1062-7.

What is EN 1504-2?

EN 1504-2 is a European Standard regarding 'Surface Protection Systems for Concrete Surfaces', devised as part of a series covering the basics of concrete repair and structural strengthening.

Part 2 of the standard specifies the requirements for the identification, performance (including durability aspects) and safety of products and systems to be used for surface protection of concrete, to increase the durability of concrete and reinforced concrete structures, as well as for new concrete and for maintenance and repair work.

What is EN 1062-7?

EN 1062-7 is the European Standard regarding the 'Determination of Crack Bridging Properties'.

This European Standard specifies two methods for determining the crack bridging properties of coating materials. Method A measures the continuous opening of the crack, whereas Method B evaluates the cyclical opening of the crack.

Method A results run from Class A1-A5 and Method B results run from B1 – B4.2. **vebrodeck** Vitesse records the highest dynamic crack bridging performance possible within the test parameter at B4.2.

What are the main functions of protective deck waterproofing and wearing systems?

Multi-storey or underground car parking facilities are highly trafficked structures that must ensure sufficient deck protection to meet service life requirements, safely maintain their functional purpose and provide a secure and welcoming environment for vehicle owners and users. Deck waterproofing and wearing surface systems used within car parking facilities must protect the structure, safeguard visitors and vehicle users as well as enhance the building's ambience and create a welcoming, safe environment.

vebrodeck systems for top decks

what challenges do top decks present?

Exposed top decks of multi-storey car parks are used to accommodate additional vehicle parking rather than used for roofing.

As such, they are totally exposed to weather conditions. As a result, they need to be equipped to cope with large quantities of rainfall. If water leaks through the top deck into the parking levels below it can result in slippery, unhygienic conditions, but if it gets into the underlying concrete then it can seriously affect the building's structural integrity.

Top decks also experience more thermal movement than other levels, as the heat from the sun will cause everything to expand, including the building's concrete. If the floor coating doesn't move and flex with the concrete, then it will crack. Needless to say, in hotter climates it is particularly important to make sure that the punishing sunlight won't damage the protective surface.

looking for linemarkers?

Compatible linemarkers are available for each system in the **vebrodeck** range. For more information, visit vebropolymers.com



vebrodeck Vitesse (B4.2)

vebrodeck Vitesse is a fast-cure polyurea deck wearing system with dynamic crack bridging capabilities (Class B4.2) up to 0.8 mm designed for use on top decks of multi-storey parking structures.



- 1 **vebro** EP Primer RC
- 2 **vebrodeck** UR Flex Membrane
- 3 **vebrodeck** UR Topcoat RC

Light Grey RAL 7035	Agate Grey RAL 7038	Traffic Grey A RAL 7042	Dusty Grey RAL 7037	Graphite Grey RAL 7024
Grass Green RAL 6010*	Golden Yellow RAL 1004*	Tomato Red RAL 3013*	Traffic Blue RAL 5017*	

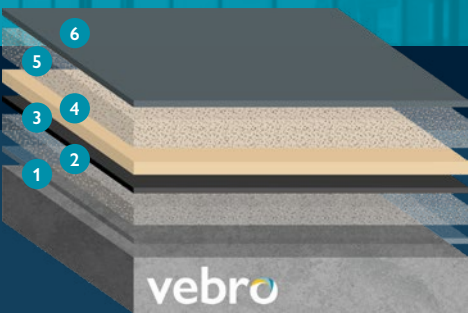
best for reduced installation processes & crack-bridging capabilities

5.5 mm

vebrodeck MMA ED (B3.2)

vebrodeck MMA ED is a fast-cure, methyl-methacrylate deck wearing system with dynamic crack bridging capabilities (Class B3.2) between 0.3 – 0.6 mm designed for use on top decks of multi-storey parking structures.

vebro MMA Catalyst at 2% on binder weight is recommended throughout the system build-up. A heavy-duty version for use on ramps and turning circles is also available.



- 1 **vebro** MMA Damp Primer
- 2 **vebro** Natural Quartz
- 3 **vebrodeck** MMA Membrane
- 4 **vebro** MMA Flex Binder with **vebro** MMA Filler
- 5 **vebro** Natural Quartz
- 6 **vebrodeck** MMA Topcoat

Traffic Grey A RAL 7042	Dusty Grey RAL 7037	Graphite Grey RAL 7024	Leaf Green RAL 6002	Golden Yellow RAL 1004	Tomato Red RAL 3013	Gentian Blue RAL 5010
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best for fast cure

4.0 – 5.5 mm

vebrodeck systems for intermediate decks over occupied premises



what challenges do intermediate decks over occupied premises present?

One of the most challenging aspects of car park design and construction are decks located directly over occupied premises such as office facilities or retail outlets.

In these instances, where the risk of water ingress or structural damage could prove costly, disruptive and potentially dangerous – and where it is often not possible to inspect the deck soffit prior to installation – it is considered prudent to over-engineer the solution with a reinforced crack-bridging deck membrane.

looking for linemarkers?

Compatible linemarkers are available for each system in the **vebrodeck** range. For more information, visit vebropolymers.com

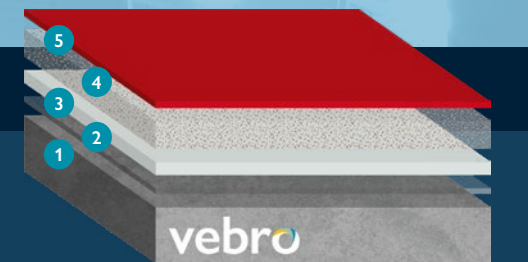
vebrodeck ID OOP (B3.2)

vebrodeck ID OOP is an OS11a certified, hybrid resin car park decking system with enhanced dynamic crack bridging properties (Class B3.2).

Light Grey RAL 7035	Agate Grey RAL 7038	Dusty Grey RAL 7037	Graphite Grey RAL 7024
Grass Green RAL 6010*	Golden Yellow RAL 1004*	Tomato Red RAL 3013*	Traffic Blue RAL 5017*

best for EN 1504-2, DIN V18026, Class OS11a & BAST listed OSFa

4.0 – 5.0 mm (nominal)



- 1 vebro EP Primer mixed with vebro Natural Quartz
- 2 vebrodeck UR Flex Membrane
- 3 vebrodeck PU CB Coating mixed with vebro Natural Quartz
- 4 vebro Natural Quartz
- 5 vebro EP CB Seal (Gloss)

vebrodeck systems for intermediate parking decks



what challenges do intermediate decks present?

While intermediate decks are less exposed to the elements, there are still factors and considerations that need to be taken into account.

For example, intermediate decks are likely to experience the heaviest levels of traffic and the most structural movement.

looking for linemarkers?

Compatible linemarkers are available for each system in the **vebrodeck** range. For more information, visit vebropolymers.com

vebrodeck MMA ID

vebrodeck MMA ID is a fast-cure, OS8 certified, methyl-methacrylate decking system designed for use on driveways and parking bays of intermediate level decks of multi-storey parking structures.

vebro MMA Catalyst at 2% on binder weight is recommended throughout the system build-up. A static crack-bridging grade as well as a heavy-duty version for use on ramps and turning circles are available.



- 1 **vebro MMA Damp Primer**
- 1 **vebro Natural Quartz**
- 1 **vebro MMA Binder** with **vebro MMA Filler**
- 1 **vebro Bauxite**
- 1 **vebrodeck MMA Topcoat**

Traffic Grey A RAL 7042	Dusty Grey RAL 7037	Basalt Grey RAL 7012	Leaf Green RAL 6002	Golden Yellow RAL 1004	Tomato Red RAL 3013	Gentian Blue RAL 5010
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best for fast return to service 2.0 mm

vebrodeck ID

vebrodeck ID is a durable, economical, hybrid resin deck wearing system, designed for use on driveways and parking bays of internal or basement level decks of multi-storey parking structures.

A static crack-bridging grade as well as a heavy-duty version for use on ramps and turning circles are available.



- 1 **vebro PU SC**
- 2 **vebro Natural Quartz**
- 3 **vebro EP Universal**

Light Grey RAL 7035	Agate Grey RAL 7038	Dusty Grey RAL 7037	Graphite Grey RAL 7024
Grass Green RAL 6010*	Golden Yellow RAL 1004*	Tomato Red RAL 3013*	Traffic Blue RAL 5017*

best for economical intermediate deck coating 2.0 mm

vebrodeck systems for basement decks

what challenges do basement decks present?

While basement decks are less exposed to the elements, their underground position brings a host of unique challenges which should be taken into account.

In order to protect against long term structural damage, the coatings in basement levels need to prevent moisture ingress from the surrounding water table from rising up into the car park's structure.

looking for linemarkers?

Compatible linemarkers are available for each system in the **vebrodeck** range. For more information, visit vebropolymers.com



vebrodeck ID BL

vebrodeck ID BL is a vapour permeable, water-emulsified, OS8 certified, epoxy resin decking system designed for use on intermediate or basement level decks of multi-storey or underground parking structures subject to hydrostatic pressures from the surrounding water table.

Light Grey RAL 7035	Agate Grey RAL 7038	Dusty Grey RAL 7037	Graphite Grey RAL 7024
Grass Green RAL 6010*	Golden Yellow RAL 1004*	Tomato Red RAL 3013*	Traffic Blue RAL 5017*

best for resisting water ingress in underground decks

1.5 – 3.0 mm

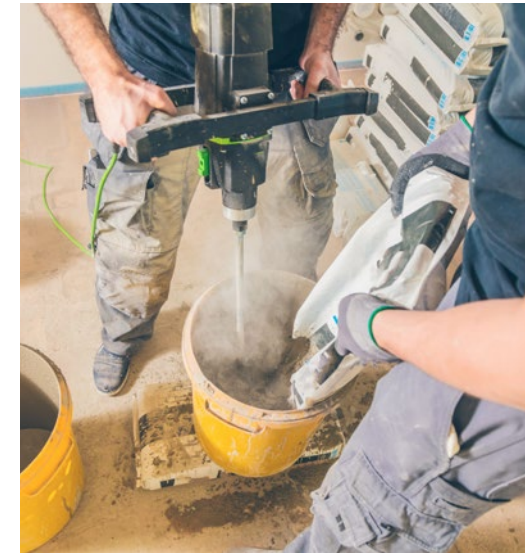


- 1 **vebro** EP WB Primer with optional **vebro** Natural Quartz
- 2 **vebro** EP Sealer (Gloss or Matt)
- 3 **vebro** Natural Quartz
- 4 **vebro** EP Sealer (Gloss or Matt)

linemarking & demarcation

Complementary PU & MMA linemarking products as well as asphalt linemarkers and road markers are available to create demarcation and signage that regulates traffic movement throughout the car park and denotes specialist bays, areas and instructions.

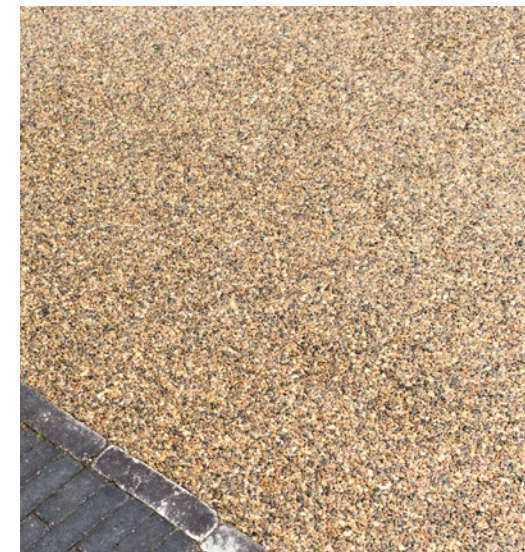
complementary systems



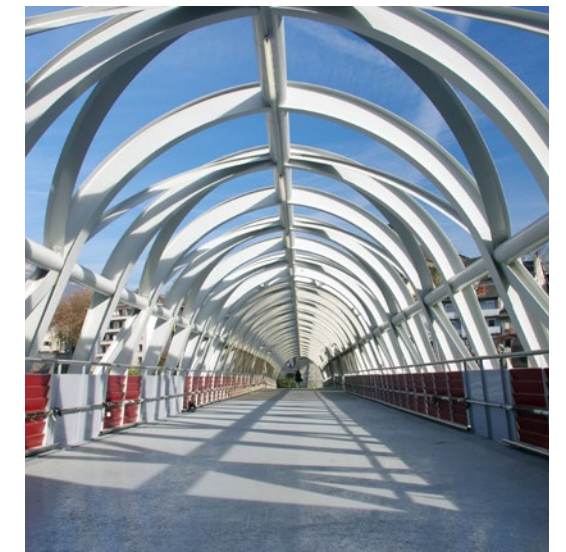
Rapid-drying heavy-duty screed additives



Cementitious wearing surfaces for pedestrian areas



External resin-bound pathways and landscaping



Decorative flake floor coating systems

technically speaking...

Looking for technical information?
Full technical profiles can be found in the **vebrodeck** technical datasheets.

For the most recent **vebrodeck** datasheets and standard system specifications, please visit vebrodeck.com



vebro polymers.com

Please note: the information in this guide is subject to change and the most recent technical data should be sought for accurate, up-to-date product or system information. Errors & omissions excepted. The applied colours may differ from the examples shown within this guide. Actual samples should always be viewed before making a final decision, especially if colour accuracy or matching is key to your decision.

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