

RAILmodul Modular Platform System



RAILBETON[®]

LEONHARDT & HAAS KG
BETONWERKE CHEMNITZ



Installation by two-way excavator

Station Lauchringen

RAILmodul modular platform system

- short construction times
- complete laying by two-way excavator possible
- highly flexible

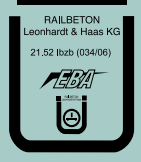
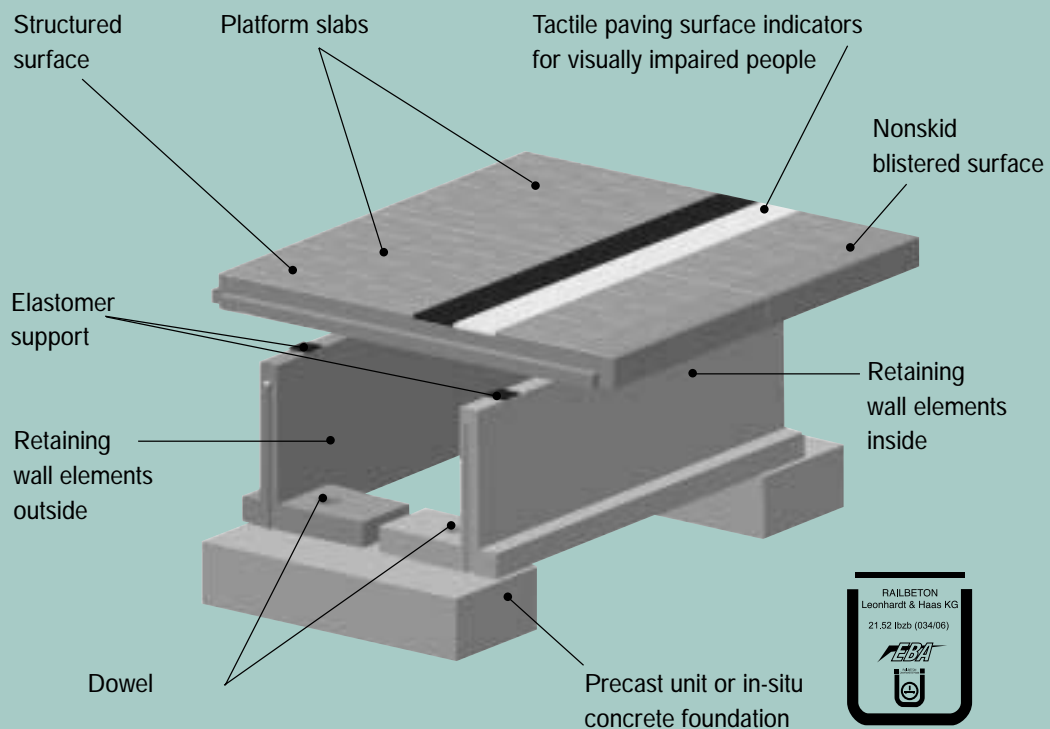
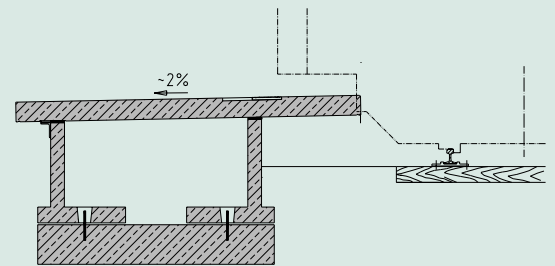
Side platform variant

The appearance of passenger transport facilities with the platform being their heart is often considered the showcase of public transport. Such facilities are supposed to meet the increasing demands when it comes to convenience and the requirements of mobility-impaired passengers but also be economically efficient for the transport company with respect to maintenance.

The modular platform system, **RAILmodul**, meets all of the above requirements. The structure consisting of high-quality precast reinforced concrete units has been designed for mainline and commuter rail systems. The existing designs of the DB module group 813 have been simplified, the construction times cut and the service area upgraded architecturally.

Contractual agreement with Deutsche Bahn AG:
Contract 0011/RA9/92115925

Side platform widths between 2.50 m to 5.00 m, can be extended as desired in the area of the shelter.





Station Balgheim



Station Brigachtal

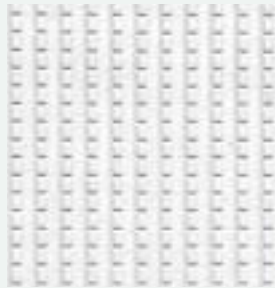


Station Kestert

Surfaces of platform slabs



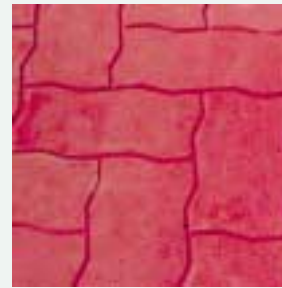
Nonskid
blistered surface



Fibrous white coloured
concrete, tactile surface



Fibrous anthracite coloured
concrete, plane surface



Interlocking
paving structure



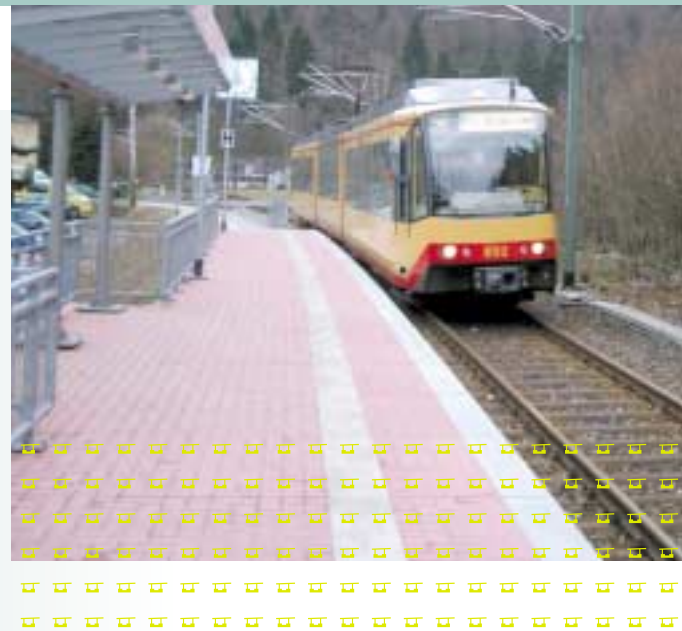
Large-block paving
30 × 30

The platform system **RAILmodul** comprises three types of easy-to-install precast reinforced concrete units

- **Platform slab**
1.50 m long, 3.00 m or 4.00 m wide
- **2 retaining wall elements**
inside/outside 3.00 m long, height depends on platform elevation
- **Precast unit foundation**
2.10 m × 0.80 m × 0.40 m
- **EBA type approval**
21.52 lbzb (034/06)
- **Quality-controlled workshop fabrication**
- **Certified in accordance with**
DIN EN ISO 9001: 2000

Basic concept and dimensional coordination of side platform variant

- The prefab units feature the following design details:
- The platform side showing to the rail track is closed.
 - Safety area below the platform is available.
 - Fixing systems for add-on equipment can be provided everywhere.
 - Cut-outs can be provided.
 - The platform surfaces meet the requirements; treads have the required roughness and structured surface in accordance with DIN 32984 and Module 813.02 of Deutsche Bahn AG.



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System advantages

- For installation – maximum unit weight 2,600 kg – it is sufficient to use a two-way excavator (e.g. ATLAS 1304 K). So, installation is possible even in the presence of overhead wires.
- Foundation is outside the pressure zone of the rail track – no longitudinal rail planking necessary.
- The workshop fabrication of the platform slabs provides for tactile guiding systems and other built-in units thus cutting the construction time of platforms short.
- Different platform widths available.
- It can be used for bends where the radius is maximally 300 m.

Applications

The system is dimensioned based on standard loads of 5 kN/m² and point loads of 13 kN as specified by DS 804. Special load-bearing capacities for potential vehicular traffic (industrial trucks etc.) may be considered on a case-to-case basis. The platform system is suitable for speeds of up to 160 km/h. When it comes to electrified railway facilities the precast units have an earthing system complying with the relevant regulations. Any metal platform equipment is connected to this earthing system.

Flexibility – alteration of platforms

A subsequent alteration, such as modification of platform level, horizontal adaptation of platform edge when track distances are to be changed, and a damage-free dismantling and re-use of units, are possible. Platform equipment can be changed at any time and installed subsequently. Power can be safely supplied through the safety areas below the platform slabs. Closures and obstructions of railway traffic during such alterations can be reduced to a minimum.

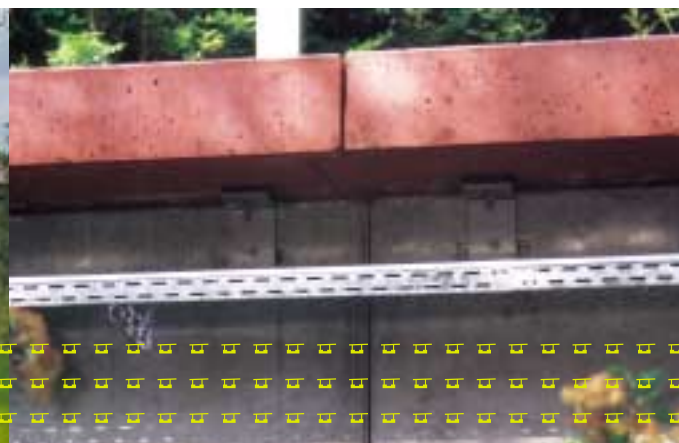
Application advantages

- Small excavation pits.
- Residual material is used for placement purposes.
- A high degree of prefabrication resulting accelerates installation and reduces closure times.
- Easy to use because of handling friendly element sizes.
- Supporting structure outside the hazardous areas, less expenditure for rail track protection with firm fencing.



vement
cm

Blister paving

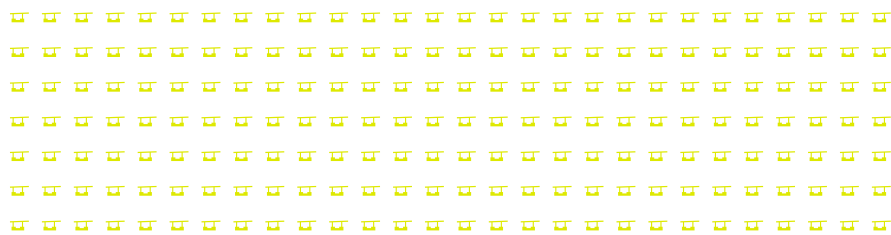




End of platform

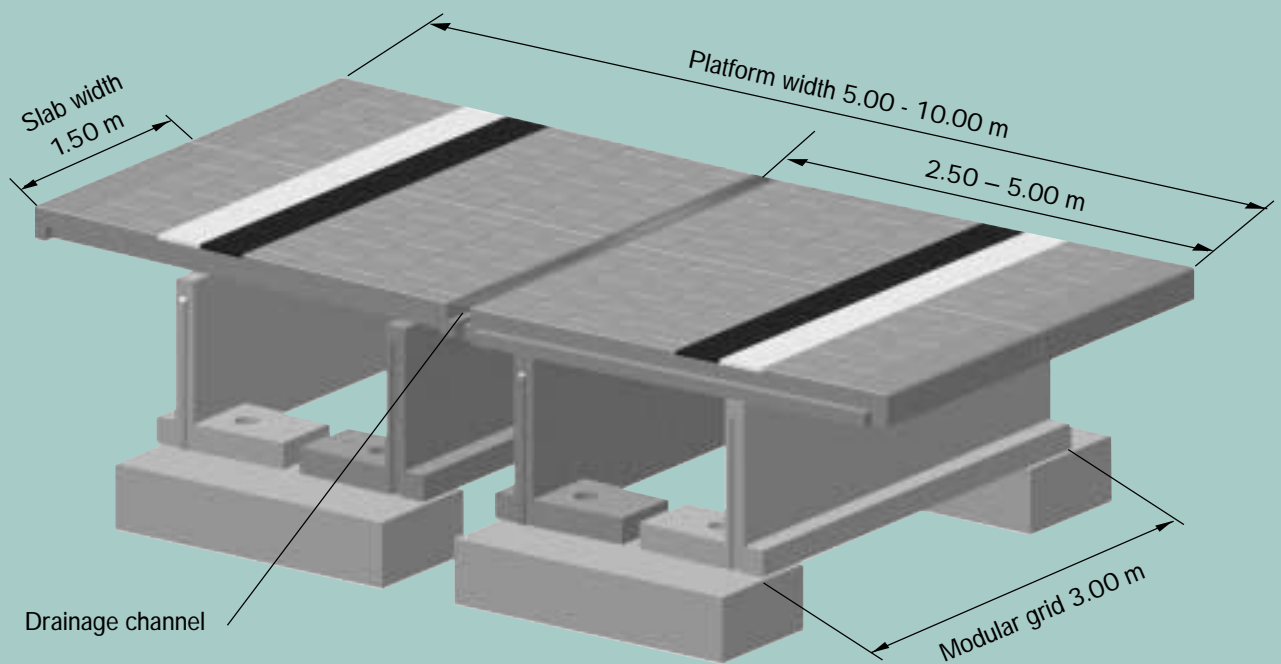
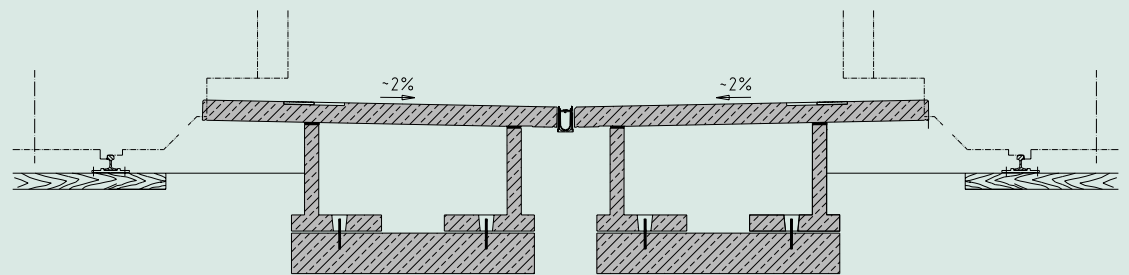


widening of the platform width in the weather shelter area



Island platform variant

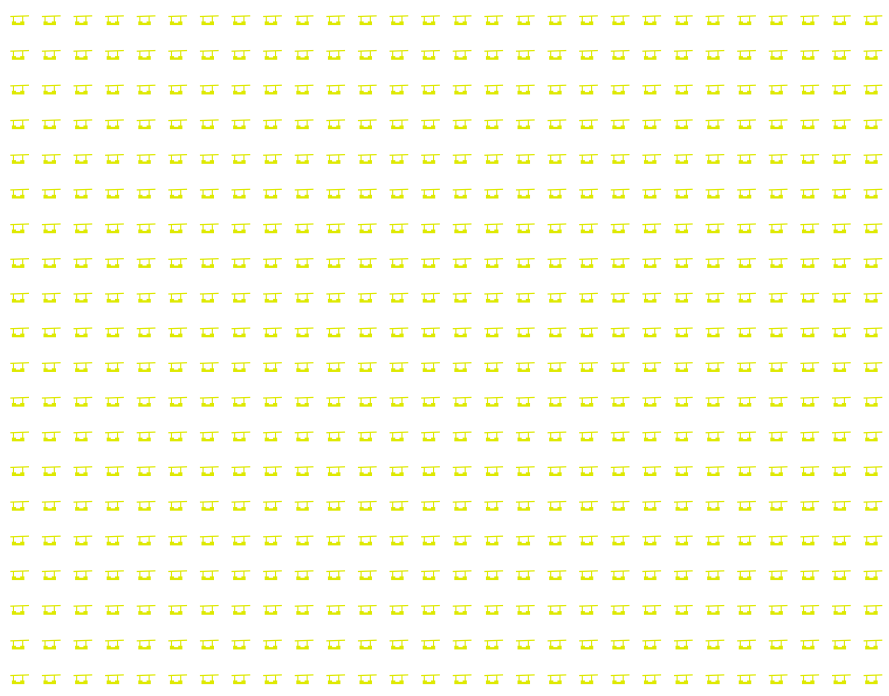
Island platform widths
5 m bis 10 m





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Let's build together the roads of the future!

Precast concrete components for track construction



Our headquarters in **Chemnitz**
RAILBETON Leonhardt & Haas KG

RAILBETON Leonhardt & Haas KG has been making precast reinforced concrete units for over **70 years**. As a system provider we fabricate under the brand name **RAILBETON** our own designs and standardized precast units for railbound traffic structures for city and other railways:

- standardized DB precast units (ducts, pits etc.)
- sleepers (gauge ≤ 1 m)
- track cover slabs
- track curbs
- cavity filler bodies
- platform edges (DB, local public transport)
- modular platform system RAILmodul
- tram stop curbs
- surface-mounted guiding systems for the visually impaired
- angular walls
- special-purpose structures etc.

Our experienced consultants and engineers give expert advice when it comes to planning, estimating or at site. Our long years' cooperation with German railroad companies has led to a large number of new developments and customized design solutions. Our in-house design department does the necessary **stress calculations** and takes over **complete planning and design jobs**.

We have the required approvals by the Federal Railway Authority (EBA). Our entire production is monitored by PÜZ Bau GmbH Munich. We were classified by DB AG as **Q1 supplier**. The company is certified and works according to the requirements of **DIN EN ISO 9001:2000**.

We would be pleased to send you our **detailed RAILBETON catalogue**.

