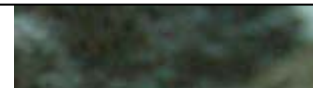


# Railroad Bed Construction

with SOFTBETON<sup>®</sup>



## Borkum Railroad Bed

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### Conditions

- A 20 years old railroad track on the island of Borkum is to be replaced
- Frequent partial flooding throughout the season are possible
- Partially instable soil is to be bridged

### Conditions of a SOFTBETON<sup>®</sup> Slab Track

- Accelerated test track construction (700 m in 3 days)
- Test track partially constructed as monolithic rigid rail with direct superstructure or briefly: slab track construction



## Borkum Railroad Bed

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### Construction Details

- 3 test track construction versions were built (A,B and C)
- Versions A and B feature a 25 cm SOFTBETON<sup>®</sup> base with the tracks laid on top
- Version C features a slab track with a 30 cm SOFTBETON<sup>®</sup> base

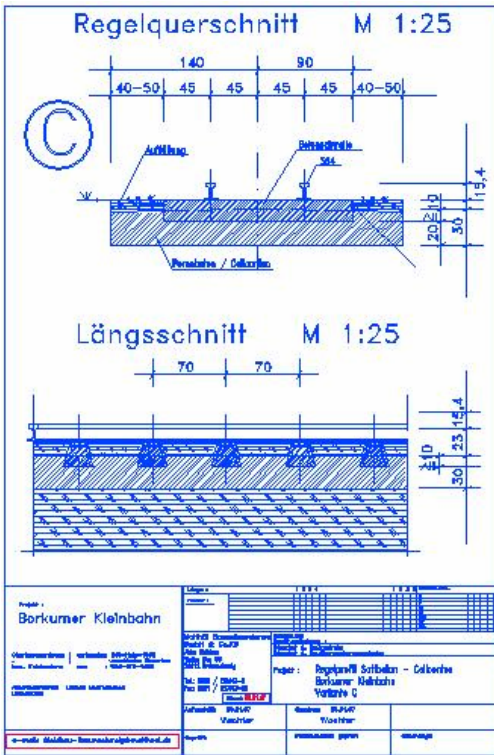
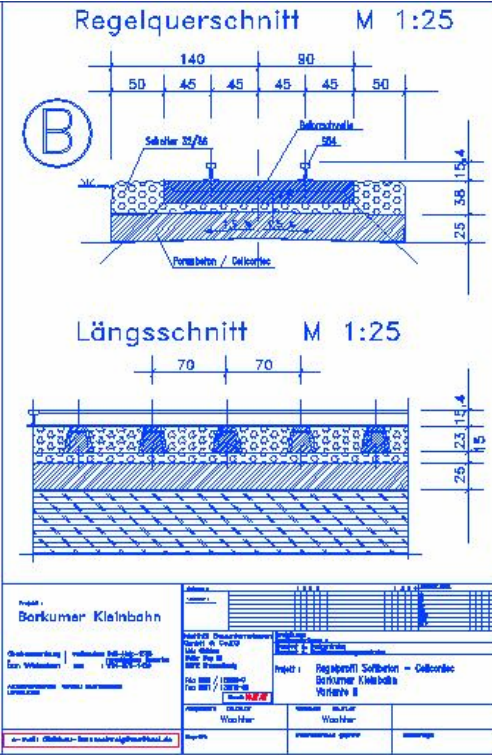
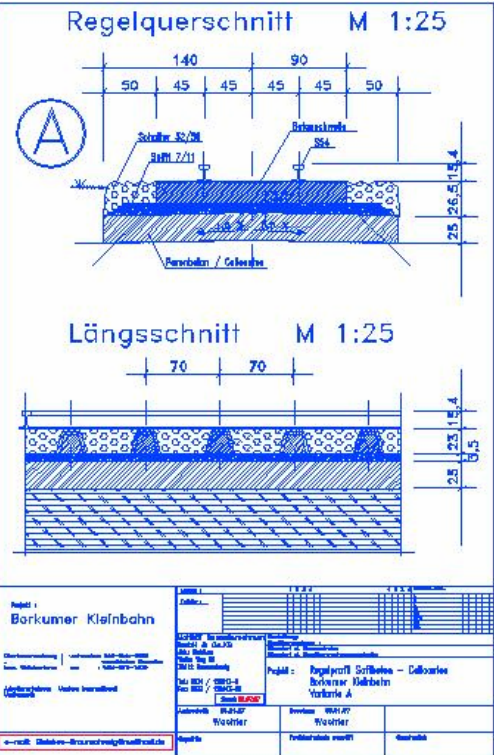
### Material

- Water/ cement slurry (CEM I 42.5)
- Polypropylene fibre & foaming agent < 1 %
- Compression strength: 6,0 N / mm<sup>2</sup>, weight (per m<sup>3</sup>): 0,95 t



Borkum Railroad Bed

Construction Versions A, B, and C



## Preperation



**SOFTBETON<sup>®</sup> Application**



Base Layer for version A and B Finished



Slab Track (Version C) Preparation for SOFTBETON<sup>®</sup> Application





Slab Track (Version C) Preparation for SOFTBETON<sup>®</sup> Application



The Traffic keeps on Rolling on the Parallel Track



Slab Track (Version C) Preparation for SOFTBETON<sup>®</sup> Application



Slab Track: SOFTBETON<sup>®</sup> Application



Slab Track: SOFTBETON® Application



Slab Track: SOFTBETON® Application without Formwork



Slab Track: SOFTBETON<sup>®</sup> Application Finished



SOFTBETON® Application Finished – Gravel Cover Applied





The Toughest Section - Done



Grand Opening

