Specifications FloorBridge® RC 20/30
- New construction -

General Preliminary Remarks

Preliminary Remarks:
The tendering contractor is to obtain information about the scope of the works to be performed, taking into account the local circumstances before submitting an offer/tender. Concerns about the nature of the works proposed in the tender should be shared with the client in written form. Only one system is to be used. The replacement of individual system parts with those of another system is not permitted. Regulations for accident prevention are to be observed.

Equal quality:
The items list bellow show products as examples to ensure a uniform floor design and that quality, from a building and processing standpoint, exceed the relevant minimum requirements. Beyond the properties of the materials, the equivalence also consists of manufacturers' proof of quality control (ISO 9001 certificate) as well as the examinations of colour design, buildings surveys and associated experts reports. In the case of unfilled bidder slots the examples provided are to be considered offers.

Technical building requirements:
Prior to beginning, all surfaces to be glued must be inspected for workability and suitability. At increased chloride values of the concrete components in the joint area, these defective areas must be treated separately before bonding of FloorBridge joint profiles. This includes the bond strength measurement, compression strength, surface levels and residual moisture content. The residual moisture content for bonding the joint profile should be max. 4 %, with increased residual moisture content a suitable adhesive must be used, and the joint profile must be bonded at falling substrate temperatures. The minimum temperature thresholds listed must not be fallen below. If the temperature falls below the dew point bonding and coating works must be stopped. The application must adhere to the curing times stated in the technical data sheets. The concrete subsurface must comply with the site-specific requirements and reach the following minimum values following substrate preparation: tensile bonding strength at least 1.5 N/mm, compressive strength at least 30 N/mm². If the surface is to be re-profiled, the repair mortar must meet the site-specific requirements and have a minimum compressive strength of 60 N/mm². The substrates must meet technical building standards and requirements, be stable, firm, sufficiently rough, free of cement laitance, dirt, fats, oils, wax, water repellent material or other layers that can prevent or reduce bonding. Generally, following the required substrate preparation the concrete adhesion strength values must reach a minimum of 1.5 N/mm².

Technical requirements reaction resin:
When working with reaction resin-based two- or more component materials the minimum temperatures, relative humidity, moisture content of the substrate, mixing-ratio, pot-live, over-coating times etc. must be observed and adhered to, exactly to the figures stated in the manufacturer's technical leaflets.

Demolition waste removal, disposal of empty containers and packaging:
The waste removal from the construction site and the proper disposal of accumulated waste from renovation and restoration measures in accordance with the relevant national waste removal directives and is to be included in the unit price. Removing all empty containers and packaging by transferring them to a legitimate, approved waste removal system. These activities must be demonstrated with the appropriate documentation. These costs are to be included in the unit price.

Movement in the floor plate:
There should be no vertical movement of the floor plate in the joint area. Should the floor plate bounce in the joint area this must be repaired by way of an anchor, mandrel etc. or surface compression (cement paste injections or the like) prior to joint repairs.

Dishing in the joint area:
When the concrete dishes in the joint area it must be grinded down to the correct height before applying FloorBridge®. Furthermore, there can be no vertical movement in this area.

New construction:
On site recess for **FloorBridge® RC 20/30**, width: ca. 26 cm, depth: ca. 18 mm.
If water tightness is required: If a sealing membrane is installed under the joint profile, the recess must have a depth of ca. 23 mm (instead of ca. 18 mm).

Installing the joint profile: FloorBridge® RC 20/30

01.0001.
Setting up the construction site
Arrangement of the construction site and technical support as well as all material transport and one-time arrival and departure of operatives and clearing the construction site. Necessary electricity costs will be provided on site.

001.0002.
Substrate pre-treatment of joint area
Substrate pre-treatment of on-site recessed joint area by sanding, chiseling, shot peening etc. The substrate has to be prepared by grinding with a diamond rotary grinder, chiselling or shot peening in such way as to reach a bond strength value of at least 1.5 N/mm². A vacuum device is to be allowed for. Waste material has to be disposed.

01.0002a. Contingency item
Making the cavity for FloorBridge®
Making the cavity for the installation of the joint profile by milling or chipping the existing concrete (including any existing floor coverings, resin layers, etc.) in the joint area. The material removed is to be properly disposed of. The substrate is to be prepared in such way as to reach a bond strength value of at least 1.5 N/mm² and must be dust free.

01.0003. Contingency item
Substrate reprofiling with epoxy mortar
If there are larger defects (> 10 mm deep) in the substrate, these areas must be treated with a bonding coat of solvent-free primer. A solvent-free epoxy reaction resin mortar will be immediately applied fresh on fresh onto the primer. The mix ratio and the aggregate grading are to be determined based on the depth of the defects. The compressive strength of the built-in reprofiling mortar must meet the site requirements and have a minimum strength of 60 N/mm².

01.0003a. Contingency item
Additional layers of epoxy mortar
Additional layers of epoxy mortar (as in the previous item), for additional layer thickness required, priced every 5 mm for additional layers.

01.0004. Option for water tightness
FloorBridge® SM 150 - sealing system
Supply and installation of FloorBridge® SM 150, bonded high-performance sealing membrane for sealing existing expansion joints (product data sheet and installation instructions must be strictly observed).
Sealing membrane: FloorBridge® SM 150
Adhesive: FloorBridge® Connect 03
Membrane width: ca. 15 cm
Elongation at break: > 700 % (DIN EN ISO 527-3)

01.0004a. Option for water tightness
Vertical bonding FloorBridge - FloorBridge® SM 150 - sealing system
Install sealing membrane as per previous item, vertical bond up to 20 cm on walls, pavements, fenders, etc.

01.0005.
Joint profile FloorBridge® RC 20/30

FloorBridge® RC 20/30, prefabricated polymer floor joint profile in carbon fiber composite technology, sandable, highly resilient and viscoelastic; supply and install (according to manufacturer's specifications).
Installation and glueing FloorBridge® RC 20/30 with proven two component epoxy resin adhesive FloorBridge® Connect 03. If necessary, alignment of the joint area between the joint profile and the concrete surface with proven two component epoxy resin adhesive FloorBridge® Connect 03.

Characteristics: metal-free, therefore non-corrosive
Expansion coefficient: similar to resin floors
Joint profile width: ca. 250 mm
Joint profile thickness: ca. 20 mm
Horizontal joint movement total: 25 mm (-5/+20 mm)
Sandable: max. 2 mm
Bonding adhesive: FloorBridge® Connect 03
Compression strength: 80 N/mm² (ONR 23303)
Bending tensile strength: 60 N/mm² (DIN EN 196-1)
Load: wheel load 6000 kg per 10 cm² bearing surface
Colour: grey

01.0005a.
Producing a tight, friction-locked transition to the resin floor
Following installation of the joint profile the covering flange of the joint profile is sanded and covered with a thick layer of the surface coating. There must be made a friction-locked connection to the resin floor, in this transition region no jointing or the like may be made.

01.0005b. Option
Support pillars
Surcharge for difficulty in support pillar area. The **FloorBridge®** joint profile is to be adapted to the shape of the support pillar.

01.0005c. Option
Mitre cuts
Surcharge for making mitre cuts in areas with a change in direction.

01.0005d. Option
FloorBridge® RC 20/30, - Surcharge for T-shaped part
Surcharge for producing and installing a T-shaped part

01.0005e. Option
FloorBridge® RC 20/30, - Surcharge for angle-shaped part (90° angle)
Surcharge for producing and installing an angle-shaped part (L-shaped part)

01.0005f. Option
FloorBridge® RC 20/30, - Surcharge for cross-shaped part
Surcharge for producing and installing a cross-shaped part

01.0006.
Transparent or coloured sealing
A transparent or coloured reactive resin sealing is applied to the prepared joint profile surface. The sealer must match both the neighbouring surface coating (necessary slip and abrasion resistance, etc.) and FloorBridge®.
Please note: it is important to ensure that the sealer is removed from the grout. The grout must be cleared in order to not restrict the maximum elongation. In general, the specifications given by the manufacturer are to be observed.