

## Embedding of CIPP liner systems to manholes

### APPLICATION ADVICE

#### Prerequisite:

- Aim: embedding of CIPP liner systems in manholes / accessible sewer constructions
- The guidelines of the technical data sheet of Konudur Flexfit / Konudur Flexfit CS have to be observed!
- Mixing of entire twin packs only, mixing of partial quantities is not allowed!
- Homogenous mixing of the components (e.g. cordless screwdriver with circular mixer) without colour differences at Konudur Flexfit
- Embedding of liner after possible shrinkage has been completed (observe manufacturer's instructions)
- Infiltrations in transition area must be sealed in advance (e.g. MC-Fastpack Injekt LE)
- Disturbing outbreaks must be reprofiled in advance (ombran W, ombran R, ombran MHP rapid – reworkable after 1 - 3 h)
- Usage only on load-bearing, clean, grease-free and dry or mattdamp surfaces
- Synthetic surfaces must be roughened and dried
- Glazes, preliners and liner foils must be removed, if they are in direct contact to the material
- Only at mineral substrates slightly damp boundary conditions are allowed (free of wastewater, no closed water film, humidity only in pores)

#### Preparation:

- In the run-up to the liner connection, an application area is created around the liner. The following minimum application depths acc. to following table 1 for the resin must be observed:

Liner diameter (mm)	Min. application thickness (mm)
≤ 300	20
> 300 to 400	25
> 400 to 500	30
> 500 to 800	40
> 800	50

- Cut CIPP liner ends at start and end manhole approx. 20 - 50 mm vertically in front of the manhole wall (see table above)
- Undercut the liner in the sole area by the same amount
- In front of the liner place the first anchoring groove with width  $\geq 10$  mm and depth acc. to table above
- Place a second identical anchoring groove in front of fit at a distance of 30 – 50 mm
- Roughen the surface of the channel in the intermediate area or remove burnt surface layers

#### Application:


- The area outside the channel on the outer sides of the liner must be filled fully, meaning a fillet with minimum flank length according to the table above
- Richly filling of the roughened channel area and anchoring grooves, minimum layer thickness 5 mm
- Levelled connection on channel area and liner end, thin layered overlaps must be avoided
- Smoothing only with vegetable oil, not with water / wastewater

## After application:

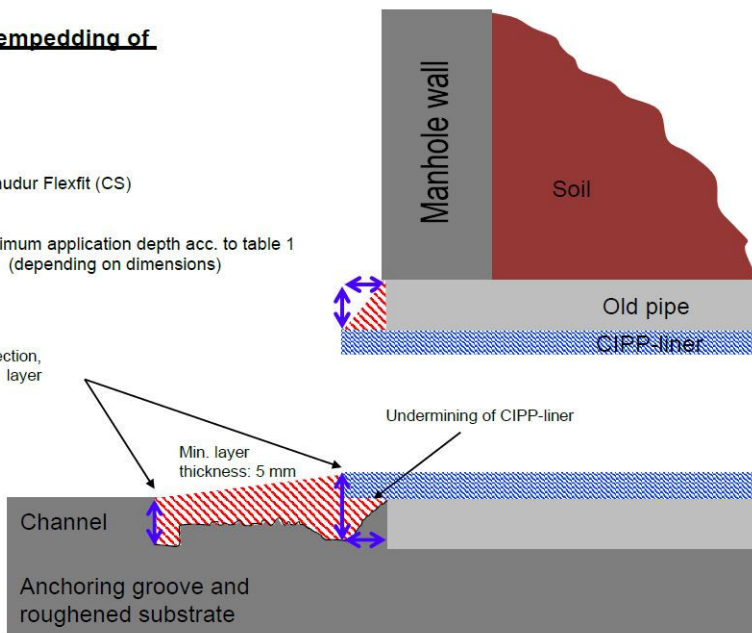
- Water retention can first be lifted, if material begins to become stiff (can be still sticky)
- Resin surface mechanical fully loadable after one week

### Sketch of empedding of CIPP liner

 = Konudur Flexfit (CS)

 = Minimum application depth acc. to table 1 (depending on dimensions)

Levelled conection, without thin layer overlapping



Anchoring grooves:

- Distance: 30 to 50 mm
- Width: min. 10 mm
- Depth: min. application

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2300018915]