

# Technical Data Sheet

## Boldan 3D Liner 3,5 mm

DN 30 - 50, DN 45 - 70, DN 50 - 70, DN 60 - 90, DN 63 - 100,  
DN 70 - 100, DN 90 - 125, DN 95 - 150, DN 100 - 150



### APPLICATION AREA

- Suitable for repairing rainwater and waste sewages and pipes
- Flexi FR Tube 3D is PU coated felt pipe or so called liner, that has been reinforced with longitudinal seam for CIPP-usage
- Liner can be cured with steam, hot water or air, according to the instructions of Boldan's application manual

### STRUCTURE

- Max. temperature in steam or hot water hardening: 60°C / 140°F
- Liner must be protected from radial expansion (inspection hatches etc.)
- Liner must be protected from leakage water with preliner
- For size modification, we suggest using a calibration hose
- Allows resurfacing even with 90° angles, with almost wrinkle-free final result
- Installation pressure: 0,4 - 0,8 bar / 5,8 - 11,6 psi
- Hardening pressure: 0,4 - 0,6 bar / 5,8 - 8,7 psi
- Maximum pressure: 1,5 bar / 21.76 psi
- Gap between calibration rollers: 7,6 mm
- Epoxy consumption approx.:
 

|           |             |              |
|-----------|-------------|--------------|
| 30 - 50   | 0,30 kg / m | 0.20 lb / ft |
| 45 - 70   | 0,55 kg / m | 0.37 lb / ft |
| 50 - 70   | 0,50 kg / m | 0,34 lb / ft |
| 60 - 90   | 0,60 kg / m | 0.40 lb / ft |
| 63 - 100  | 0,80 kg / m | 0.54 lb / ft |
| 70 - 100  | 0,80 kg / m | 0.54 lb / ft |
| 90 - 125  | 0,90 kg / m | 0.60 lb / ft |
| 95 - 150  | 1,20 kg / m | 0.80 lb / ft |
| 100 - 150 | 1,20 kg / m | 0.81 lb / ft |
- Calculated length reduction with a larger proportion approx. - 10 % of the length, whereby the liner retains its original wall strength even in a bigger section
- The values given above are affected by the epoxy used, the pipe size, and the temperature of the epoxy and the environment

### RESIN COMPABILITY

This liner can be impregnated with the following manufacturers' resin systems:

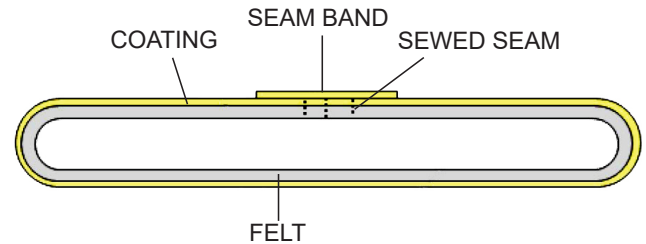
Boldan Oy

- BDA/BD 15, BDA/BD 30, BDA/BD 45, BDA/BD 60
- BDA+ 15, BDA+ 30, BDA+ 60
- BX 10, BX 15, BX 30, BX 60, BX 180
- BE 15, BE 30, BE 60, BE 180
- BC 15, BC 30, BC 60
- B1 15, B1 30

SewerTronics™ Ep 1k epoxy resin



### STRUCTURE OF LINER



### PRODUCT INFORMATION

|                    |                     |
|--------------------|---------------------|
| Country of origin  | Finland             |
| Base material      | 100 % polyester     |
| Liner coating      | Polyurethane        |
| Material thickness | 3,5 mm with coating |

### COATING

- Compability of this liner is tested positively with these resin systems
- If this liner is about to be used with other resin systems, the compability must be tested first
- All rights reserved

### SHIPPING, STORAGE, HANDLING

- Material has to be protected from chemical or mechanical attacks such as UV-light, moisture and climate changes
- Store in dry and cool place max. + 5°C – + 25°C / 41°F - 77°F
- Liner storage time is 12 months (if the storage time exceeds, we are not responsible of possible damages occurred)