TECHNICAL DATA SHEET

MAXLINER®

Max FLEX 4D™

Polyester Felt Liner for Transitioning Pipe Diameters and Bends up to 90°

DESCRIPTION

Max FLEX 4D is a non-woven, needle punched PE felt liner with a unique elastic and impermeable PU coating. This specially designed stitched skived seam and extruded taped joint, make it capable of transitioning up to four diameters (4D) while maintaining finished thickness and negotiating bends up to 90°.

TECHNICAL DATA

- **Coating:** PU
- **Carrying Material:** Polyester Felt
- **Seam:** Linear triple stitch with skived overlap and extruded taped joint
- **Installation:** Inversion
- **Recommended Curing Temperature:** Ambient, heat or LED light cure
- **Resin Compatibility:** Use with MaxPox®, VertiPox® Epoxy Resin Systems, MaxLight® UV LED Resin Systems or approved equal

APPLICATIONS

- Open-End (Blindshot) with Calibration Tube
- Closed-End
- Ideal for transitioning sizes / change in diameter.
- May be used on sweeping bends up to 90° with slight wrinkling.
- Custom sizes are available.

THICKNESS RANGE

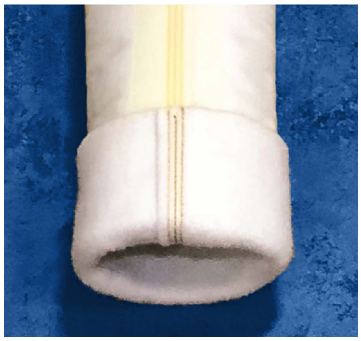
- 4.5 mm

AVAILABLE MANUFACTURER LENGTHS

- 164′ and 328′ stock lengths (+/-)
- Custom longer lengths available

DIAMETER RANGE

- 3″ and larger
- 3″ expands to 4″, 4″ expands to 6″, 6″ expands to 8″, 8″ expands to 10″. Larger diameter sizes and lengths are available.



INSTALLATION

Refer to Field Installation Sheet for resin calculations.

- **Vacuum:** -0.5 bar. | -15 to -20 Hg
- **Calibration Roller recommended gap setting:** Thickness of liner x 2 + 1mm for standard, thickness of liner x 2 + 2mm for transitions
- **Installation air pressure:** 7 to 10 psi (may need additional pressure to invert around bends).
- **Curing pressure:** 6 to 8 psi. Consult with MaxLiner regarding dimensional changes and curing methods.
- **Heat curing:** 120–185°F | 48.9–85°C without CalTube, must use CalTube when steam curing.

Vacuum level shall meet or slightly exceed inversion and curing Pressure. Always use a vacuum with proper vacuum gauge and regulator. Always use a guide tube to contain unsupported liners from radial expansion.

STORAGE/HANDLING

Avoid Extremes of Temperature
- Freezing may cause the coating structure to degrade locally, especially areas where the coating is in tension or compression — at bends and edges, and immediately adjacent to seam welds.
- Recommended storage temperature 40°F – 95°F | 4°C – 35°C.
- Shelf life at this temperature: in excess of 1 year.

Avoid Extremes of Humidity
- Very high relative humidity (especially at high temperatures such as tropical countries) will accelerate the degradation, consequently reducing the shelf life.
- Recommended storage humidity 25% rh – 65% rh.
- Shelf life at 65%, 95°F | 35°C: in excess of 1 year.

Avoid Prolonged Wet Storage
- As with high humidity, the coating is more susceptible to degradation at higher temperatures, and even further susceptible if temperature of liquid in contact is significantly above or below 45°F | 7°C. Wet storage is not recommended.

Avoid Direct Sunlight
- Prolonged exposure to the sun's ultraviolet light will accelerate the degradation of the coating. Store away from direct sunlight, preferably in dark conditions.

MECHANICAL DAMAGE SHOULD BE AVOIDED
- Ensure that liner is not placed directly onto grit or gravel floor — sweep and cover floor first.
- Ensure personnel are instructed not to walk on or smoke around the liner.
- Handle with care and ensure safe transport at all times.
- Ensure any rollers are clean, and the liner is not in contact with any sharp edges or snags anywhere during use.

CHEMICAL ATTACK
Avoid prolonged contact with solvents and chemicals.

TECHNICAL SUPPORT
Call technical support with additional questions at (877) 426-5948.

DISCLAIMER
The information contained herein is offered without charge for use by technically qualified personnel at their discretion and risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and no warranty of any kind is made with respect thereto. Exact coating type and thickness depend on the specific types of resin being used. Always read, understand, and comply with hazard warnings described in the products' Safety Data Sheet(s) before use.