

UNITED **BLUE**™

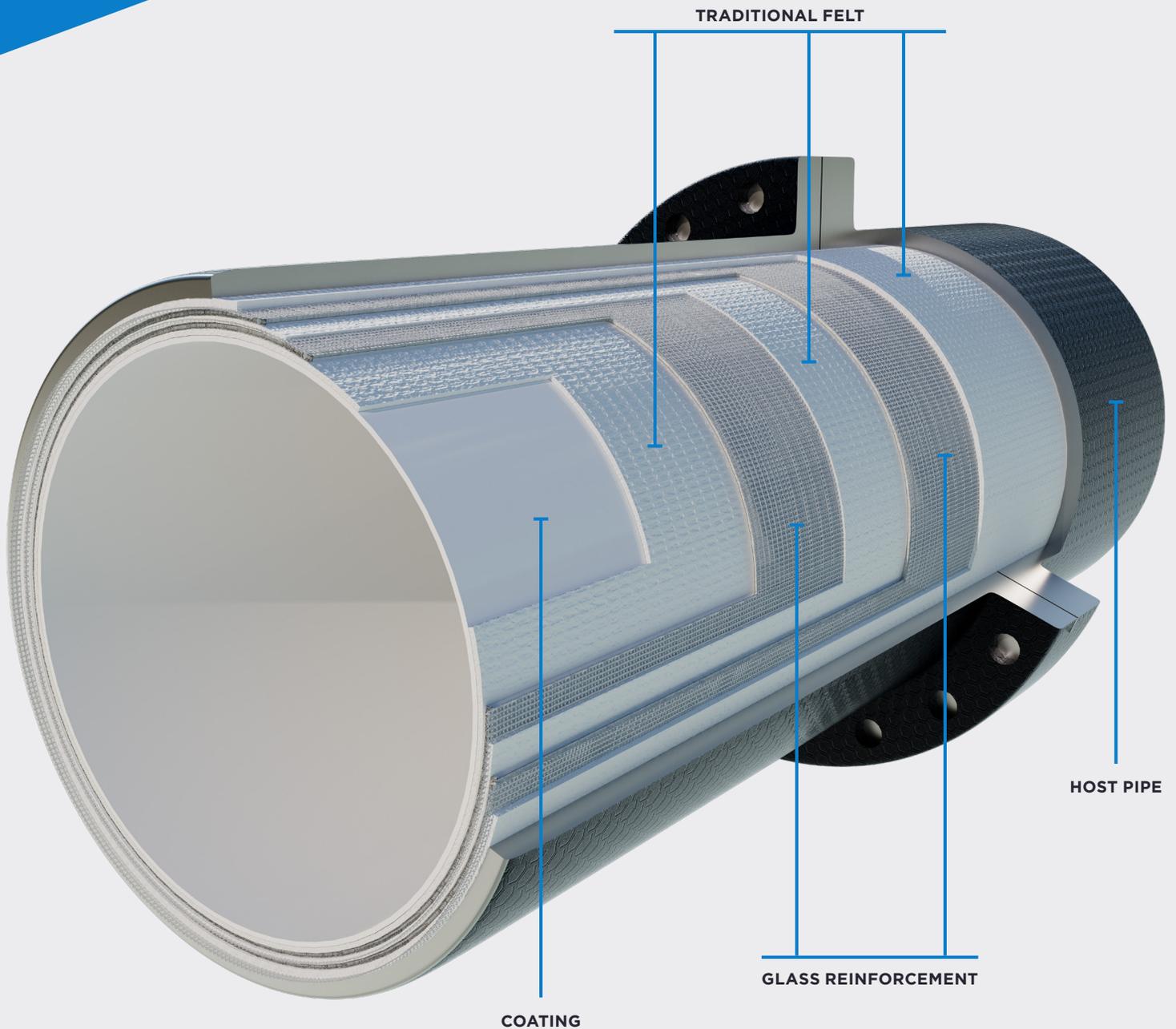
PROVEN CIPP TECHNOLOGY FOR
THE RENEWAL OF WATERMAINS

UNITED **BLUE** DELIVERS
FIBERGLASS STRENGTH WITH
TRADITIONAL FELT LINER
PERFORMANCE TO PROVIDE
THE MOST INNOVATIVE CIPP
CUSTOM SOLUTIONS FOR
POTABLE WATER APPLICATIONS.



THIRD PARTY
TESTING VERIFIES
**100-YEAR
DESIGN LIFE**
PER ASTM D2990

IN RESPONSE TO **GROWING DEMAND**, UNITED FELTS OFFERS THE NEWEST INNOVATION IN CIPP LINERS FOR POTABLE WATER APPLICATIONS. **UNITEDBLUE** WAS DEVELOPED IN PARTNERSHIP WITH THE **WORLD'S LEADER IN CIPP TECHNOLOGY** TO INCORPORATE QUALITY LINERS WITH YOUR NSF-CERTIFIED SYSTEM.





UnitedBLUE™

In order for our liners to perform to your high standards, they must be custom designed to exacting specifications and installation requirements. With potable water applications, **diligence in assessing each unique CIPP project** and providing custom liners that are value-engineered for each specific installation is more important than ever. We will work with you to understand variables such as internal operating and testing pressure requirements, resin selection, appropriate layers of glass reinforcement and many other key factors in manufacturing your custom UnitedBLUE Liner. Why do we do this? **Because your success is our success.**

FEATURES

- Constructed for potable water applications that comply with NSF 61, BNQ and other applicable standards.
- Fiberglass reinforcement provides dynamic, selfsupporting properties.
- Can be engineered to perform in pressure systems as a stand-alone AWWA Class IV pipe.
- Maximum pressure will depend on size and design criteria, but typically pressures exceeding 150 PSI can be accommodated.
- Uses trusted Industry leading designs and construction methods, so impregnation and installation is quick and easy.
- Manufactured in partnership with the world's leader in CIPP solutions.

PRODUCT SPECIFICATIONS

MATERIAL	Multi-layer polyester felt/fiberglass hybrid liner with impermeable coating conforming to ASTM F1216, and certified by NSF 61 and BNQ Standards
OPERATING PRESSURE RATING*	up to 200 psi (1.38 MPa)
DIAMETER RANGE	6 to 48 inches 152.4 to 1219.2 mm
WALL THICKNESS	3.3 mm or greater
COATING OPTIONS	TPO
INSTALLATION METHOD	Air or water inversion
RESIN TYPE/COATING TYPE	Thermosetting resins meeting the requirements of NSF 61

SAMPLE PRODUCT DESIGN

HOST PIPE DIAMETER	24 inches 609.6 mm
WALL	0.35 inch 9 mm
HOOP TENSILE PROPERTY	16,000 PSI 110 MPa**
LONG-TERM TENSILE STRENGTH	8,000 PSI 55 MPa
INTERNAL PRESSURE RATING	125 PSI 0.87 MPa 8.7 Bar
SAFETY FACTOR	2
DESIGN METHOD	ASTM F1216

Note: Design parameters including buckling, vacuum and empty conditions, among others, should be provided to assist us in recommending the most appropriate solution for your CIPP pressure pipe needs.

* Representative mechanical properties, not to be construed as specifications.

** Pressure is a function of diameter.

276-656-1904

450 COLLEGE DRIVE

MARTINSVILLE, VA 24112

WWW.UNITEDFELTS.COM

ABOUT UNITED FELTS

As the world's largest independent manufacturer of 100% vertically integrated quality liners, United Felts is accredited with ISO 9001:2015 and every phase of manufacturing — including our 33-step QA/QC testing system — is done in one location, ensuring confidence that United Felts' quality liners will stand the test of time.

A pioneer in Cured-In-Place pipe technology, United Felts has been used successfully for more than 35 years in quality installations that could circle the earth — twice — all without disrupting roads or other existing infrastructure.

More than 1 million feet of United **BLUE**[™] liner has been installed around the world.

**For technical assistance, pricing, and custom design calculations
for your unique project, please contact us today.**