

FIRESTOP WATER RESISTANCE TESTER



Firestop Water Resistance Tester — ToronFT™ FS-WR

ToronFT™ FS-WR Firestop Water Resistance Tester is a purpose-built test system designed for the water resistance qualification of fireproof sealing materials. By immersing fireproof sealing specimens in a standardized water bath for the required test duration and evaluating post-immersion material integrity, the ToronFT™ FS-WR verifies that sealing materials maintain their physical and structural properties after exposure to water — an essential qualification for penetration sealing products installed in environments subject to water ingress, humidity, or periodic flooding.

The water resistance tester provides all the hardware required for the complete water resistance test protocol: a normal-temperature water tank, standardized test mold, small hand saw for specimen preparation, and stainless steel plates for specimens that cannot be cured in the standard mold geometry.

APPLICATIONS

Firestop Water Resistance Tester — ToronFT™ FS-WR Applications

- Fireproof sealing material manufacturers: water resistance qualification for penetration sealing products installed in wet or humid environments
- Third-party certification and testing laboratories: water resistance testing per international building fire protection and penetration sealing standards
- Construction and fire protection product manufacturers: verification of sealing material water resistance for below-grade, mechanical room, and exterior installation applications
- Quality assurance departments: incoming inspection and production-lot water resistance sampling
- R&D departments: evaluation of new sealing material formulations for water resistance improvement



Standards

The ToronFT™ FS-WR supports water resistance testing of fireproof sealing materials in compliance with internationally recognized fire protection and building material standards, including:

- EN 1366-3: Fire resistance tests for service installations — Seals
- ASTM E814: Standard test method for fire tests of through-penetration fire stops
- UL 1479: Standard for fire tests of through-penetration firestops
- ISO 834-1: Fire resistance tests — Elements of building construction — General requirements
- ASTM D471: Standard test method for rubber property — Effect of liquids

FEATURES

Firestop Water Resistance Tester — ToronFT™ FS-WR Key Features

- Complete water resistance test kit: normal-temperature water tank, standard test mold, small hand saw, and stainless steel plates — all hardware included
- Normal-temperature water tank: simple stainless steel box construction, 100 mm × 100 mm × 100 mm: providing a standardized, clean immersion volume
- Standard test mold: 200 mm × 20 mm × 20 mm, stainless steel material: standard specimen geometry for curable sealing materials
- Small hand saw: included for specimen preparation: cutting specimens to standard test dimensions
- Stainless steel plates: 50 mm × 50 mm × 2 mm, 3 pieces: for testing fireproof sealants that cannot be cured in the standard test mold
- All wetted components in stainless steel construction: corrosion-resistant for long-term water exposure without contamination
- Compact test kit for efficient bench-top use in production quality assurance and certification testing environments

THEORY & METHOD

Theory and Method

Water resistance testing evaluates whether a fireproof sealing material retains its dimensional stability, bond strength, surface integrity, and functional effectiveness after prolonged immersion in water at ambient temperature. Specimens are prepared using the small hand saw to the dimensions specified by the applicable standard and cast or formed in the standard test mold (200 mm × 20 mm × 20 mm, stainless steel). For sealing materials that cannot be cured in the standard mold, the stainless steel plates (50 mm × 50 mm × 2 mm, 3 pieces) provide alternative specimen substrates.

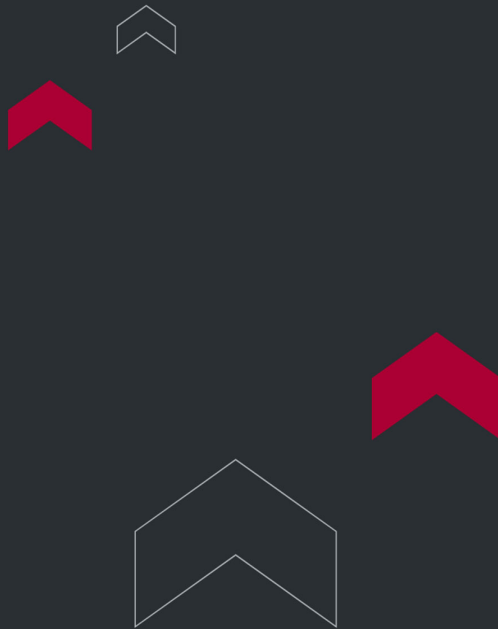
Specimens are placed in the normal-temperature water tank (100 mm × 100 mm × 100 mm stainless steel box, welded construction) and immersed for the standard-specified duration. After immersion, specimens are removed, inspected for dimensional change, surface degradation, delamination, or other water-induced damage, and evaluated against the acceptance criteria of the applicable standard. The complete, self-contained test kit eliminates the need for separate specimen preparation and immersion equipment.

TECHNICAL SPECIFICATIONS

Firestop Water Resistance Tester — ToronFT™ FS-WR Technical Specifications

Parameter	Specification
Model	ToronFT™ FS-WR
Test Application	Water resistance testing of fireproof sealing materials
Normal Temperature Water Tank	Stainless steel, welded; 100 mm × 100 mm × 100 mm

Parameter	Specification
Standard Test Mold Dimensions	200 mm × 20 mm × 20 mm (stainless steel)
Stainless Steel Plates	50 mm × 50 mm × 2 mm, 3 pieces (for non-curable sealants)
Specimen Preparation Tool	Small hand saw (included)



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

