



CLASS A/B FIRE EXTINGUISHER TESTER

Class A/B Fire Extinguisher Tester — ToronFT™ FE-AB

ToronFT™ FE-AB is a standardized fire extinguishing performance tester designed for evaluating the fire suppression effectiveness of portable fire extinguishers against Class A and Class B fires. This test system provides the structural framework and test fuel configuration required to establish and conduct reproducible fire test scenarios under controlled laboratory conditions, enabling objective performance classification of extinguishers against the defined fire test criteria used in internationally recognized portable extinguisher standards.

The apparatus is built around a metal bracket assembly constructed from 40 mm × 40 mm stainless steel square tube, providing a stable, corrosion-resistant support structure for the wooden strip fuel arrangement used in Class A fire tests and the oil pan configuration used in Class B fire tests. The bracket system accommodates seven ignition trays — six of the standard ISO 7165 specification plus one oil pan configuration at 1,170 mm × 1,170 mm × 100 mm — giving the apparatus the geometry and fuel load capacity needed to conduct both fire classes within the same test platform.

APPLICATIONS

Class A/B Fire Extinguisher Tester — ToronFT™ FE-AB Applications

The ToronFT™ FE-AB serves fire safety testing laboratories, certification bodies, fire extinguisher manufacturers, and regulatory compliance facilities conducting Class A and Class B fire extinguishing performance evaluations:

- Class A Fire Performance Testing: evaluating extinguisher effectiveness against solid combustible material fires using the wooden strip crib arrangement on the bracket structure
- Class B Fire Performance Testing: evaluating extinguisher effectiveness against flammable liquid fires using the oil pan configuration within the bracket system
- Product Certification and Listing: conducting standardized fire tests required for portable extinguisher certification submissions to regulatory bodies in North American and international markets

- Product Development Testing: characterizing the fire suppression performance of new extinguisher designs, agents, and valve configurations prior to formal certification submission
- Manufacturing QC and Batch Verification: periodic production sampling tests to confirm that manufactured extinguishers meet defined performance acceptance criteria across both fire classes
- Research and Comparative Testing: comparative evaluation of different extinguisher types, agent formulations, and discharge configurations against the same standardized fire test setup



FEATURES

Class A/B Fire Extinguisher Tester — ToronFT™ FE-AB Key Features

Bracket Structure

- Metal bracket constructed from 40 mm × 40 mm stainless steel square tube for corrosion resistance and structural stability
- Bracket height: 400 mm ± 10 mm above ground level — standardized fuel positioning for both Class A and Class B fire tests
- Seven ignition tray positions: six standard configuration trays plus one oil pan position

Class A Test Configuration

- Wooden strip support structure accommodates standard crib fuel arrangement for Class A fire tests
- Tray spacing configured per standard ignition tray geometry requirements

Class B Test Configuration

- Oil pan specification: 1,170 mm × 1,170 mm × 100 mm
- Accommodates flammable liquid fuel load for Class B fire test scenarios

THEORY & METHOD

Theory and Method

Class A Fire Test Configuration

Class A fire tests evaluate extinguisher performance against burning solid combustible materials. The ToronFT™ FE-AB bracket system supports wooden strips arranged in a crib pattern — the standard fuel geometry specified in applicable test standards. The 40 mm × 40 mm stainless steel square tube construction supports the wooden strip arrangement at a bracket height of 400 mm ± 10 mm above ground level, positioning the fuel load at the reference height defined in the applicable test method. Seven ignition tray spaces within the bracket structure accommodate the standard six-tray configuration plus the oil pan position, allowing both fire classes to be tested on the same apparatus without structural reconfiguration.

Class B Fire Test Configuration

Class B fire tests evaluate extinguisher performance against flammable liquid fires. The oil pan position within the bracket system accommodates a pan of 1,170 mm × 1,170 mm × 100 mm — the standard Class B test fire geometry. The flammable liquid fuel is loaded into the pan and ignited under controlled conditions per the applicable test method, and the extinguisher under test is discharged against the fire according to the standardized application technique and timing defined in the standard.

Test Measurement and Documentation

Performance outcomes for both fire classes are assessed against the pass/fail criteria defined in the applicable standard — primarily whether the extinguisher fully suppresses the test fire within the specified discharge parameters. Test documentation records extinguisher model, agent type and fill weight, discharge duration, fire suppression outcome, and any residual burning observations required by the standard.

TECHNICAL SPECIFICATIONS

Class A/B Fire Extinguisher Tester — ToronFT™ FE-AB Technical Specifications

Parameter	Specification
Applicable Fire Classes	Class A (solid combustibles) and Class B (flammable liquids)
Bracket Construction Material	40×40 mm stainless steel square tube
Bracket Height	400 mm ± 10 mm above floor
Number of Ignition Tray Positions	7 (6 standard + 1 oil pan)
Oil Pan Specification (W×L×H)	1,170×1,170×100 mm
Fuel Type — Class A	Wooden strips (crib arrangement)
Fuel Type — Class B	Flammable liquid in oil pan



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

