

TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Legal Name of Accredited Laboratory: **FM APPROVALS LLC.**

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To ensure compliance with the *Official Languages Act*, the Standards Council of Canada (SCC) translated proprietary content from English to French when it was not available in French. In case of discrepancies between the English and French versions, in case of discrepancies between the English and French versions, the original version of the method prevails.

SCC File Number:	15630
Accreditation Standard(s):	ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories
Fields of Testing:	Chemical/Physical Electrical/Electronic Mechanical/Physical Thermal & Fire Resistance
Initial Accreditation:	2004-12-01
Most Recent Accreditation:	2024-10-16
Accreditation Valid to:	2028-12-01

CONSTRUCTION

Construction Materials (excluding textile products):

Fire Resistant

FM 4911	Wafer Carriers for Use in Clean Rooms
FM 4411	Cavity Walls and Rainscreens
FM 4450	Class I Insulated Steel Deck Roofs
FM 4470 ***	Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for use in Class 1 and Non-combustible Roof Deck Construction
FM 4471	Class 1 Panel Roofs
FM 4880	Approval Standard for Class 1 Fire Rating of Building Panels or Interior Finish Materials
FM 4881	Class 1 Exterior Wall Systems
FM 4882	Class 1 Interior Wall and Ceiling Material or Systems for Smoke Sensitive Occupancies
FM 4910	Clean Room Materials Flammability Test Protocol
FM 4922	Fume Exhaust Ducts or Fume and Smoke Exhaust Ducts
FM 4950	Welding Pads, Welding Blankets and Welding Curtains for Hot Work Operations

Flammability

FM 4996	Classification of Pallets and Other Materials Handling Products as Equivalent to Wood Pallets
FM 6930	Flammability Classification of Industrial Fluids

Miscellaneous Construction Materials

FM 4020	Steel Tanks for Fire Protection
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Roof Coverings

FM 4435	Edge Systems Used with Low Slope Roofing Systems
FM 4473	Specification Test Standard for Impact Resistance Testing of Rigid Roofing Materials by Impacting with Freezer Ice Balls

ELECTRICAL PRODUCTS AND ELECTRONIC PRODUCTS

CAN/CSA C22.2 No. 139	Electrically Operated Valves
CAN/CSA C22.2 No. 14 ***	Industrial Control Equipment - Limit: 600V Max. Except for: 6.7 - Current Withstanding - Burnout - Short Circuit Calibration of Test Circuits - Short Circuit - Overload Relays - Controllers - Group Fusing - Instantaneous trip circuit breakers

Equipment. Miscellaneous:

Hazardous Location Equipment

CAN.CSA C 22.2 No.60079-9	Electrical Apparatus for Explosive Gas Atmospheres - Increased Safety "e"
CAN/CSA C22.2 No. 139	Electrically Operated Valves
CAN/CSA C22.2 No. 14	Industrial Control Equipment - Limit: 600V Max. Except for: 6.7 - Current Withstanding - Burnout - Short Circuit Calibration of Test Circuits - Short Circuit - Overload Relays - Controllers - Group Fusing - Instantaneous trip circuit breakers
CAN/CSA C22.2 No. 130.03	Requirements for Electrical Resistance Heating Cables and Heating Device Sets Except for: Cl. A.2 - Weather Resistance Cl. B.1 - Toxicity Test Cl. B.2.2 - Ammonia Hydroxide
CAN/CSA C22.2 No. 137 **	Electric Lighting Fixtures for Use in Hazardous Locations
CAN/CSA C22.2 No. 145 **	Motors and Generators for Use in Hazardous Locations Class I Groups C and D, Class II Groups E, F and G

CAN/CSA C22.2 No. 157 **	Intrinsically Safe and Non-incendive Equipment for Use in Hazardous Locations
CAN/CSA C22.2 No. 159 **	Attachment Plugs, Receptables and Similar Wiring Devices for Use in Hazardous Locations Class I, Groups A, B, C and D, Class II, Group G and Coal Dust and in Gaseous Mines
CAN/CSA C22.2 No. 174 **	Cables and Cable Glands for Use in Hazardous Locations
CAN/CSA C22.2 No. 213 **	Non-Incendive Electrical Equipment for use in Class 1, Division 2 Hazardous Locations
CAN/CSA C22.2 No. 25 **	Enclosures for Use in Class II Groups E, F, G Hazardous Locations
CAN/CSA C22.2 No. 30 **	Explosion-Proof Enclosures for Use in Class I Hazardous Locations Except for: C1. 6.10 - Gas-Tight Joints
CAN/CSA C22.2 No. 60079-0 **	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
CAN/CSA C22.2 No. 60079-1 **	Electrical Apparatus for Explosive Gas Atmospheres - Construction and Verification Test of Flameproof Enclosures for Electrical Apparatus
CAN/CSA C22.2 No. 60079-11 **	Electrical Apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"
CAN/CSA C22.2 No. 60079-15 **	Electrical Apparatus for Explosive Gas Atmospheres - Part 15: Electrical Apparatus with Type of Protection "n"
CAN/CSA C22.2 No. 60079-18 **	Electrical Apparatus for Explosive Gas Atmospheres – Encapsulation "m" Except for: Cl. 23.4.7.5 - Resistance to Light
CAN/CSA C22.2 No. 60079-2 **	Electrical Apparatus for Explosive Gas Atmospheres - Electrical Apparatus: Type of Protection "p"
CAN/CSA C22.2 No. 60079-31 **	Electrical Apparatus for Use in the Presence of Combustible Dust - Part 31: Equipment Dust Ignition Protection by Enclosure "t"
CAN/CSA C22.2 No. 60079-6 **	Electrical Apparatus for Explosive Gas Atmospheres - Oil- Immersed Apparatus "o"
CAN/CSA C22.2 No. 60079-7 **	Electrical Apparatus for Explosive Gas Atmospheres - Increased Safety "e"
CAN/CSA C22.2 No. 60079-5 **	Electrical Apparatus for Explosive Gas Atmospheres - Powder Filling "q"
EN IEC 62443-3-3 *	Industrial communication networks – Network and system security - Part 3-3: System security requirements and security levels
EN IEC 62443-4-1 *	Security for industrial automation and control systems – Part 4-1: Secure product development lifecycle requirements

EN IEC 62443-4-2 *	Security for industrial automation and control systems – Part4-2: Technical security requirements for IACS components
EN ISO 80079-36 **	Explosive Atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements
EN ISO 80079-37 **	Explosive Atmospheres – Part 37: Non-electrical equipment for explosive atmospheres – Non-electrical type of protection constructional safety “c”, control of ignition sources “b”, liquid immersion “k”
IEC 60079-25 **	Explosive Atmospheres – Part 25: Intrinsically Safe Electrical Systems
IEC 60079-26 **	Explosive Atmospheres – Part 26: Equipment with Separation Elements or combined Levels of Protection (EPL Ga)
IEC 60079-27 **	Fieldbus Intrinsically Safe Concept
IEC 60079-28 **	Explosive Atmospheres – Part 28: Protection of Equipment and Transmission Systems Using Optical Radiation
IEC 60079-30-1 **	Explosive Atmospheres – Part 30-1: Electrical Resistance Trace Heating – General and Testing Requirements
IEC 61241-0	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures ‘tD’
IEC 61241-4	Electrical apparatus for use in the presence of combustible dust — Part 4: Type of protection ‘pD’
IEC 61241-11	Electrical apparatus for use in the presence of combustible dust — Part 11: Protection by intrinsic safety ‘iD’
IEC 61241-18	Electrical apparatus for use in the presence of combustible dust — Part 18: Protection by encapsulation ‘mD’
IEC 62086-1	Electrical resistance trace heating - Part 1: General and testing requirements
NFPA 496 **	Standard for Purge and Pressurized Enclosure for Electrical Equipment

Other

FM Approvals Standard 7260	Electrostatic Finishing Equipment/ Electrostatic Neutralizing Equipment
FM 7151, 7156, 7157 ***	Liquefied Petroleum Gas Vaporizers, Gas-Air Mixers and Vaporizer Mixers

Scientific Instruments (for biological, chemical electrical, mechanical optical and physical examination):

Laboratory Equipment

CAN/CSA C22.2 No. 60529 **	Degree of Protection Provided by Enclosure (IP Mode)
CAN/CSA C22.2 No. 61010.1 **	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use, Part 1: General Requirements Except for: Cl. 12.2.1 - Ionizing Radiation Test Cl. 12.4 - Microwave Radiation Cl. 12.5 - Sonic Detection and Ultrasonic Pressure test Cl. 12.6 - Laser Radiation Test Cl. 13.3 - Implosion Test of High Vacuum Devices as per IEC 65
CAN/CSA-C22.2 NO. 61010-2-030-12 (R2016) **	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-030: Particular requirements for testing and measuring circuits Except for: Ionizing Radiation Test, UV Radiation, Microwave Radiation, Sonic Detection and Ultrasonic Pressure test, Laser Radiation Test, Implosion Test of High Vacuum Devices as per IEC 65
CAN/CSA-IEC 61010-2-201:14 **	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-201: Particular requirements for control equipment Except for: Ionizing Radiation Test, UV Radiation, Microwave Radiation, Sonic Detection and Ultrasonic Pressure test, Laser Radiation Test, Implosion Test of High Vacuum Devices as per IEC 65
IEC 60529 **	Degrees of Protection Provided by Enclosure (IP Mode)

ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY

Occupational Health and Safety:

Fire Protection

CAN/CSA-B137.3	Rigid PVC Pipe for Pressure Applications
FM 2008	ESFR Automatic Sprinklers
ANSI Z21.21-2005/CSA 6.5	Automatic Valves for Gas Appliances

CAN/CSA-B137.0	Definitions, General Requirements, and Methods of Testing Thermoplastic Pressure Piping, Plumbing Products, and Materials
CSA CAN/CSA-C22.2 No. 60079-29- 1 **	Explosive atmospheres - Part 29-1: Gas detectors - Performance requirements of detectors for flammable gases - Second Edition
CSA CAN/CSA-C22.2 No. 60079-29- 4 **	Explosive atmospheres - Part 29-4: Gas detectors - Performance requirements of open path detectors for flammable gases - First Edition
CAN/ULC S520	Standard for Fire Hydrants
CAN/ULC-S504 (UL 299) **	Dry Chemical Fire Extinguishers
CAN/ULC-S508 (UL 711) **	Rating and Fire Testing of Fire Extinguishers
CAN/ULC-S514 ***	Dry Chemical for Use in Hand and Wheeled Fire Extinguishers
CAN/ULC-S522	Standard for Fire Extinguishers and Booster Hoses
CAN/ULC-S529 **	Standard for Smoke Detectors for Fire Alarm Systems
EN 45544-Part 1 **	Workplace Atmospheres - Electrical Apparatus Used For The Direct Detection and Direct Concentration Measurement of Toxic Gases and Vapours - Part 1 General Requirements
EN 45544-Part 2 **	Workplace Atmospheres - Electrical Apparatus Used For The Direct Detection and Direct Concentration Measurement of Toxic Gases and Vapours - Part 2 Performance Requirements For Apparatus Used For Measuring Concentrations in the Region of Limit Values.
EN 45544-Part 3 **	Workplace Atmospheres - Electrical Apparatus Used For The Direct Detection and Direct Concentration Measurement of Toxic Gases and Vapours - Part 2 Performance Requirements For Apparatus Used For Measuring Concentrations Well Above Limit Values.
EN50104 **	Electrical apparatus for the detection and measurement of oxygen – Performance requirements and test methods
EN50271 ***	Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen. Requirements and tests for apparatus using software and/or digital technologies
EN 60079-29-1; IEC 60079-29-1 **	Explosive Atmospheres – Part 29-1: Gas Detectors – Performance Requirements of Detectors for Flammable Gases
EN 60079-29-4, IEC 60079-29-4 **	Explosive Atmospheres – Part 29-4: Gas Detectors – Performance requirements of Open Path Detectors for Flammable Gases

EN 61779-1; IEC 61779-1	Electrical Apparatus for Detection and Measurement of Flammable Gases Part 1 General Requirements and Methods
EN 61779-4; IEC 61779-4	Electrical Apparatus for Detection and Measurement of Flammable Gases Part 4 Performance Requirements for Group II Apparatus Indicating a Volume Fraction up to 100% Lower Explosive Limit
EN 61779-5; IEC 61779-5	Electrical Apparatus for Detection and Measurement of Flammable Gases Part 5 Performance Requirements for Group II Apparatus Indicating a Volume Fraction up to 100% Gas
FM 2000	Automatic Control Mode Sprinklers for Fire Protection
FM 5420 ***	Carbon Dioxide Extinguishing Systems
FM 5560 (May 2005) *	Water Mist Systems
NFPA 10	Portable Fire Extinguishers
NFPA 11	Foam Extinguishing Systems
NFPA 12 ***	Carbon Dioxide Extinguishing Systems
UL 1285	Pipe and Couplings; (PVC for Underground Fire Service)
UL 1486	Quick Opening Devices for Dry Pipe Valves for Fire Protection Service
UL 162	Foam Equipment and Liquid Concentrates
UL 203	Pipe Hanger Equipment for Fire Protection Service
ULC/ORD-C193	Guide for the Investigation of Alarm Valves for Fire-Protection Service
ULC/ORD-C213	Rubber Gasketed Fittings for Fire Protection Service
ULC/ORD-C260	Guide for the Investigation of Dry Pipe, Deluge, and Pre- Action Valves for Fire Protection Service
ULC/ORD-C262	Gate Valves for Fire Protection Service
ULC/ORD-C312	Check Valves for Fire Protection Service
ULC/ORD-C448 ***	Guide for the Investigation of Pumps for Fire Protection Service
ULC/ORD-C536	Flexible Metal Hose
ULC/ORD-C668	Guide for the Investigation of Hose Valves for Fire Protection Service
ULC-S386 **	Flame Detectors
ULC-S511	Standard for Lined Fire Hose for Interior Standpipes and Municipal and Industrial Fire Protection Services

ULC-S525	Standard for Audible Signal Devices for Fire Alarm Systems Except for: Cl. 7.3 - Output Sound Pressure
ULC-S526	Standard for Visual Signal Devices for Fire Alarm Signaling
ULC-S527	Standard for Control Panels for Fire Alarm Systems
ULC-S530	Standard for Heat Actuated Fire Detectors for Fire Alarm Systems Except for: Cl. 7.10.2 - Determination of Stress Cracking Test
ULC-S541	Standard for Speakers for Fire Alarm Systems Except for: Cl. 7.3 - Frequency response and Sound Pressure Level
ULC-S548	Standard for Alarm Initiating and Supervisory Devices for Water Type Extinguishing Systems

Safety

UL 558 ***	Standard for Safety – Industrial Trucks, Internal Combustion Engine-Powered
UL 583 **	Standard for Safety – Electric-Battery-Powered Industrial Trucks

Number of Scope Listings: 114

Notes:

Some tests from this Scope of Accreditation may be performed entirely or in part at the following address: FM APPROVALS LLC, 743 Reynolds Road, West Glocester, RI 02814, USA.

Exceptions are noted as follows:

* Testing conducted at Norwood Laboratory

** Testing conducted at both locations

*** Some or all testing conducted at external locations such as customer sites

The following is a Scope of Accreditation for which this testing laboratory has been accredited to ISO/IEC17025:2017. Note that the parent organization is also accredited as a certification body.

The parent organization's Scope of Accreditation for certification activities may be broader than the listing of standards and test methods that appear above. Refer to the parent organization's Scope of Accreditation granted by the SCC for certification activities found at: [SCC Requirements and](#)

[Guidance - Product, Process and Service Certification Body Accreditation Program | Standards Council of Canada](#), where standards, such as product standards, are listed below, the laboratory is considered accredited only for the testing elements in those standards.

ISO/IEC 17025:2017: General Requirements for the Competence of Testing and Calibration Laboratories

ANSI: American National Standards Institute

CAN/CSA: CSA Group (formerly the Canadian Standards Association)

CAN/ULC: Underwriters' Laboratories of Canada

EN: European Standard

FM: FM Approvals test method

IEC: International Electrotechnical Commission

ISA: International Society of Automation

NFPA: National Fire Protection Association

UL: Underwriters' Laboratories

This document forms part of the Certificate of Accreditation issued by the Standards Council of Canada (SCC). The original version is available in the Directory of Accredited Laboratories on the SCC website at www.scc-ccn.ca.

Elias Rafoul
Vice-President, Accreditation Services
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