UL's Fire Barrier Management programs

April 2020 Ruben Sandoval Jr. Business Manager, UL Field Engineering



Empowering Trust™

Bio



Ruben Sandoval, Jr.

Business Manager, UL

- 20 years of experience in safety engineering
- · Bachelors of Science in Engineering
- ASHE, CASHE, FCIA, NFCA, and AZBO





UL Founder William Henry Merrill

William Henry Merrill 1866 – 1923

He was a skilled and highly trained Boston electrical inspector hired by the Chicago Underwriters Bureau to resolve problems with automatic fire alarms in the city of Chicago in 1893.





Building materials and suppression



UL has a rich history in fire suppression.

- The first UL Test Standard was issued in 1903 for Tin Clad Fire Doors
- UL 72 Record Protection 1918
- UL 263 Fire Test of Building Construction 1929
- UL 10B Fire Doors 1942
- UL 723 Surface Burning Characteristics 1950
- UL 790 Fire Tests of Roofing 1958



UL operates in more than

143 COUNTRIES



and across more than

20
INDUSTRIES

UL HAS ENHANCED TRANSACTION SECURITY FOR:



500+ banks

20+ payment schemes

60+ mobile network operators

50+ governments/ transport operators



standards defining safety, security, quality and sustainability



Science and global expertise

ORGANIZATIONS in **OVER 10 INDUSTRIES**



UL'S SUSTAINABILITY CERTIFICATIONS are referenced in

900+

sustainable product specifications or purchasing guidelines around the globe

UL SERVES

1 OUT OF **3**

Fortune 500 companies



WORKING FOR A SAFER WORLD since **1894**

UL reaches more than

2 BILLION

GLOBAL CONSUMERS

annually with safety messages



88%

of U.S. BUILT ENVIRONMENT **AUTHORITIES** trust and accept the UL Mark



Brand presence and leadership

UL has supported a



from electricity to nanotechnology

UL MARKS APPEAR on more than

22 BILLION

products globally

3 of 4 0 0 0 0

U.S. consumers are FAMILIAR with THE UL MARK



UL WORKS TO PROTECT THE MARKET FROM COUNTERFEIT GOODS from life jackets to hoverboards, we assisted in seizures of more than 2.2 MILLION PRODUCTS bearing a counterfeit UL Mark

Contents

- I. Qualified Firestop Contactor Program
- II. Master Audit Certificate of Compliance (MACC)
- III. UL Special Inspections





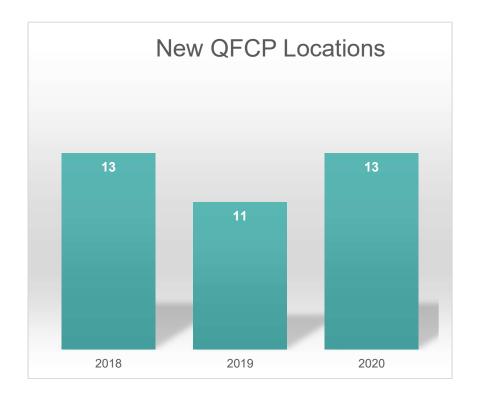
Qualified Firestop Contractor Program



For more information visit www.ul.com/firestopcontractor or Ruben.Sandovaljr@ul.com 480.290.6987

UL Qualified Firestop Contractor Program

- 13 new contractors for YTD
- 91 total locations





UL Qualified Firestop Contractor Program

The UL Qualified Firestop Contractor Program is an independent, 3rd party credential.

Program requirements

- Pass the UL Firestop Exam (DRI)
- Knowledge of FCIA MOP
- Knowledge of the UL Fire Resistance Directory of UL Listed systems
- Management system requirement
 - Establish and effectively maintain a management system that meets the UL Program Requirements



Why become a UL QFCP?

- An independent, 3rd party credential that differentiates contractor firms
- This credential allows contractors to:
 - Bid projects that specify a UL or ULC Qualified Firestop Contractor
 - · Increase efficiencies in operations
 - Increase confidence for customers, architects, specifiers, manufacturers and general contractors





Underwriters Laboratories®

Laboratoires des Assureurs

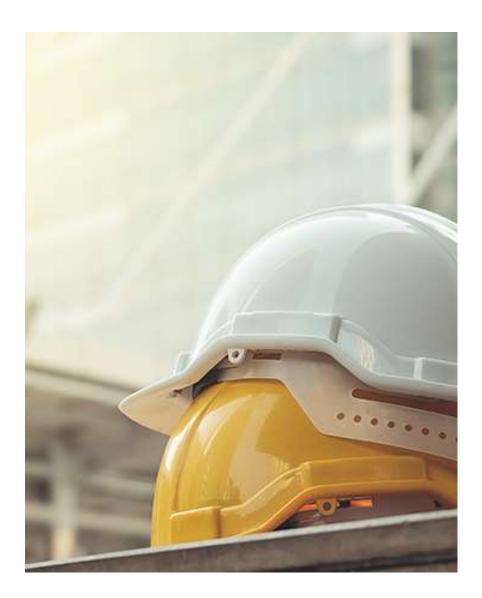
Qualified Firestop Contractor Program



What are the requirements?

- 1. Firestop industry knowledge
 - Employ at least one Designated Responsible Individual (DRI)
 - Knowledge is demonstrated and assessed through an exam
 - Must score 80% or better on the UL Firestop Exam
- 2. Firestop Contractor Management System
 - a. Establish, effectively implement and maintain a management system that meets UL QFCP program requirements
 - b. Assessment of the management system is through:
 - · Initial and annual firestop contractor office audit
 - Firestop project site audit





Value of a management system



Management system principles provide a framework for how companies operate and results in:

- Consistent and effective control of key processes and project management
- Promotion and standardization of good working practices
- Planned training and qualification of employees
- Enhanced communication, leadership, effective remote site management, accountability, contractual control and control of suppliers



Development of your management system

Critical key steps

- · Identify processes needed
- Determine process sequence and interaction
- Determine effectiveness of processes
- Provide resources to support process operation and monitoring
- Create a Management System Manual to document processes including responsibilities and authorities of key staff
- Maintain control of any outsourced processes that could affect the conformity of selection and installation of firestop systems with requirements
- Monitor, measure and analyze to continually improve processes



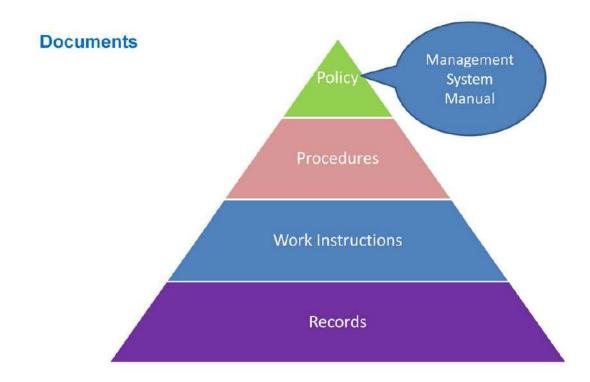


10 Elements of the management system

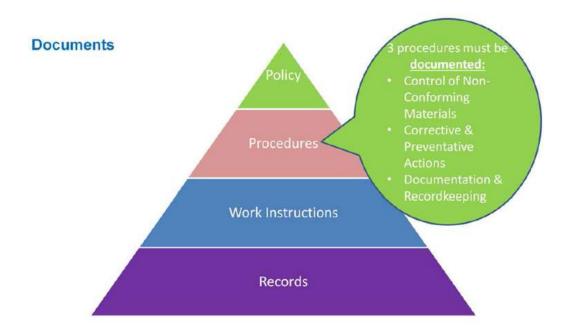


- 1. Construction document requirements and review
- 2. Procurement of firestop materials
- 3. Storage, handling, preservation and delivery of firestop materials
- 4. Installation and quality assurance procedures
- 5. Inspection and testing
- 6. Control of non-conforming materials
- 7. Training and qualifying staff
- 8. Corrective and preventative actions
- 9. Management system monitoring and improvement
- 10. Documentation and record keeping

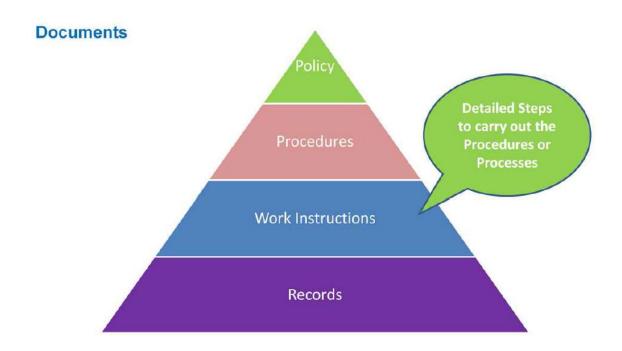




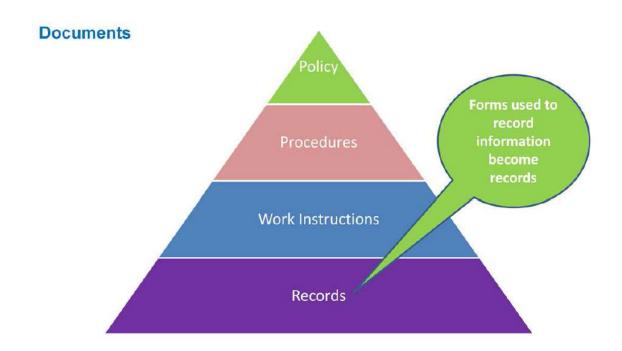














What to expect during your audit?

- Complete quality audit at your office
- Job-site audit





Certificate



Certificate Number:1000

QUALIFIED FIRESTOP CONTRACTOR CERTIFICATE

Issued: January 31, 2018

Expires: December 31, 2019

Company Name: Underwriters Laboratories Inc. File number: R12345

Address: 333 Pfingsten Rd.

Telephone: 480.290.6987

Email Address: Ruben.SandovalJr@UL.com

This company has demonstrated that it complies with UL's Qualified Firestop Contractor Program Requirements. This certificate is not transferable and expires on December 3] at the following Year This certificate may be displayed copied and shared with others but must be used in its entirety.

Only those companies listed in UL's online Directory for the Qualified Firestop Contractor Program at www.ul.com/contractor are considered eligible for this program and to use this Certificate and the UL Qualified Firestop Contractor Program Marking (shown here) in its advertising and promotional material in accordance with marking guidelines provided at www.ul.com/contractor.



Underwriters Laboratories reserves the right to void this certificate at any point. This certificate does not indicate compliance with any UL product certification program.

For additional information regarding the Qualified Firestop Contractor Program, please visit www.ul.com/contractor

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Certificate Number: 1000

QUALIFIED FIRESTOP CONTRACTOR CERTIFICATE

Company Name: Underwriters Laboratories Inc. File number: R12345

Issued: 1-01-2007

Expires: 12-31-2019

Address: 333 Pfingsten Rd.

Telephone # 480.290.6987 Fax #: 777.123.4567

777.123.4567 Email Address Ruben.Sandovaljr@UL.com

This company has demonstrated that it complies with UL's Qualified Firestop Contractor Program Requirements for Canada. Under this programme, the Contractor has demonstrated knowledge of selection and installation of firestop system) as evidenced by the successful performance in a written examination by a "Designated Responsible Individual" (DRI). The Contractor has also established of Management System specifically focused on the proper selection and installation of ULC Listed Firestop Systems.

This certificate is not transferable and expires on December 31st of the following year. This certificate may be displayed, copied and shared with others but must be used in its entirety. Only those companies listed in ULC "Colline-Certifications Directory for the Qualified Firestop Contractor Program at www.ulc.ca/contractor are considered eligible for this program and to use this Certificate and the ULC marking (shown here) in its advertising and promotional material in accordance with the marking guidelines provided with this Certificate.



Underwriters Laboratories of Canada® reserves the right to void this certificate at any point. This certificate does not indicate compliance with any ULC Product Certification Program. For additional information regarding the Qualified Firestop Contractor Program, please visit www.ulc.ca/contractor.

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For more information visit www.ul.com/macc or Ruben.Sandovaljr@ul.com 480.290.6987



- A jobsite specific certificate
- Project scope specific
- Renewable yearly (1 year expiration)
- Complies with the 2018 International Fire Code for annual maintenance for building owners



- Should be requested at the completion of any new construction project
- A copy should be provided to local jurisdictional personnel and building owners after the completion of any new construction or annual assessment
- Annual assessments certificate copy should be given to the fire marshal
- · Certificate should be given to building insurer







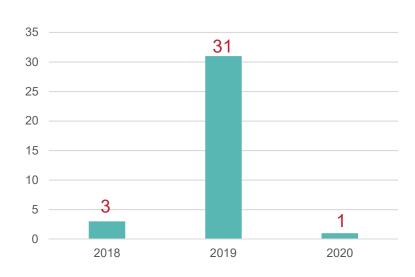
Benefits include:

- A jobsite-specific management system audit and improved documentation
- A renewable jobsite/annual assessment-specific certificate
- Annual assessments per the 2018 International Fire Code



YoY MACCs

MACC growth affected by COVID-19





MACC Map





* Some cities have multiple MACCs

MACC Map

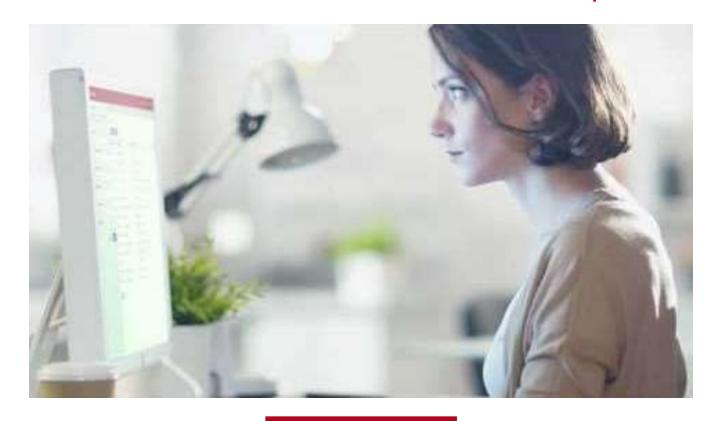




* Some cities have multiple MACCs



Where to locate QFCP's, MACCs, and Firestop Resources





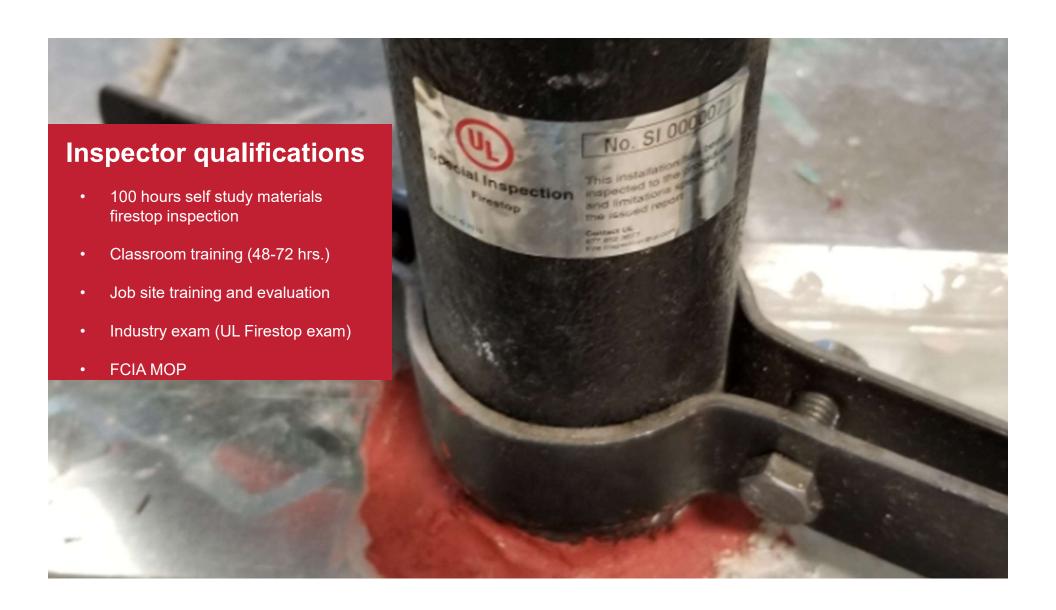
UL Product **iQ**™

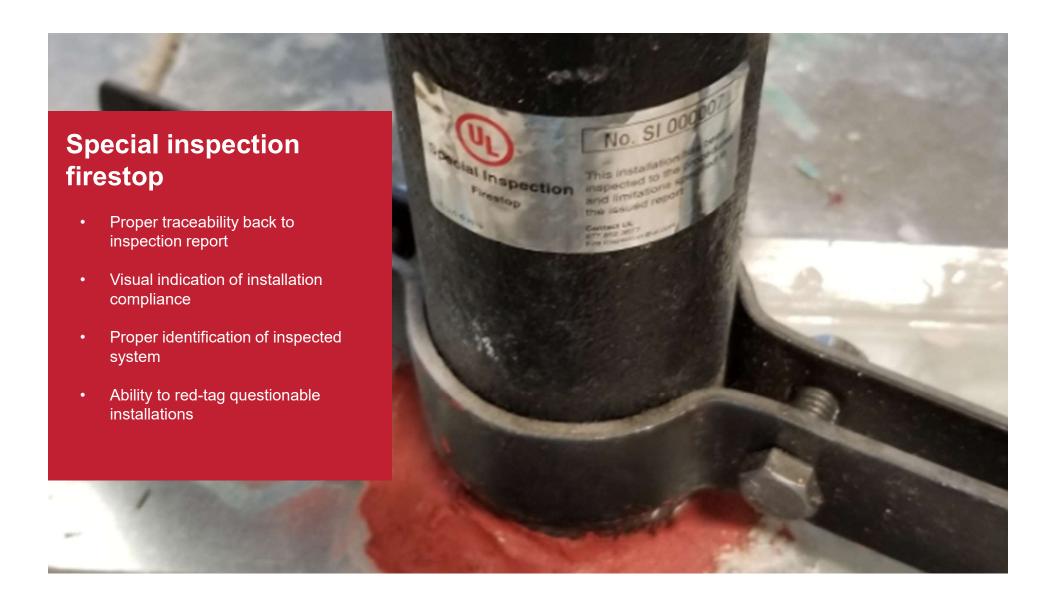
Special Inspection Firestop





For more information, email fire.inspection@ul.com or call 480.290.6987.







Questions?

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