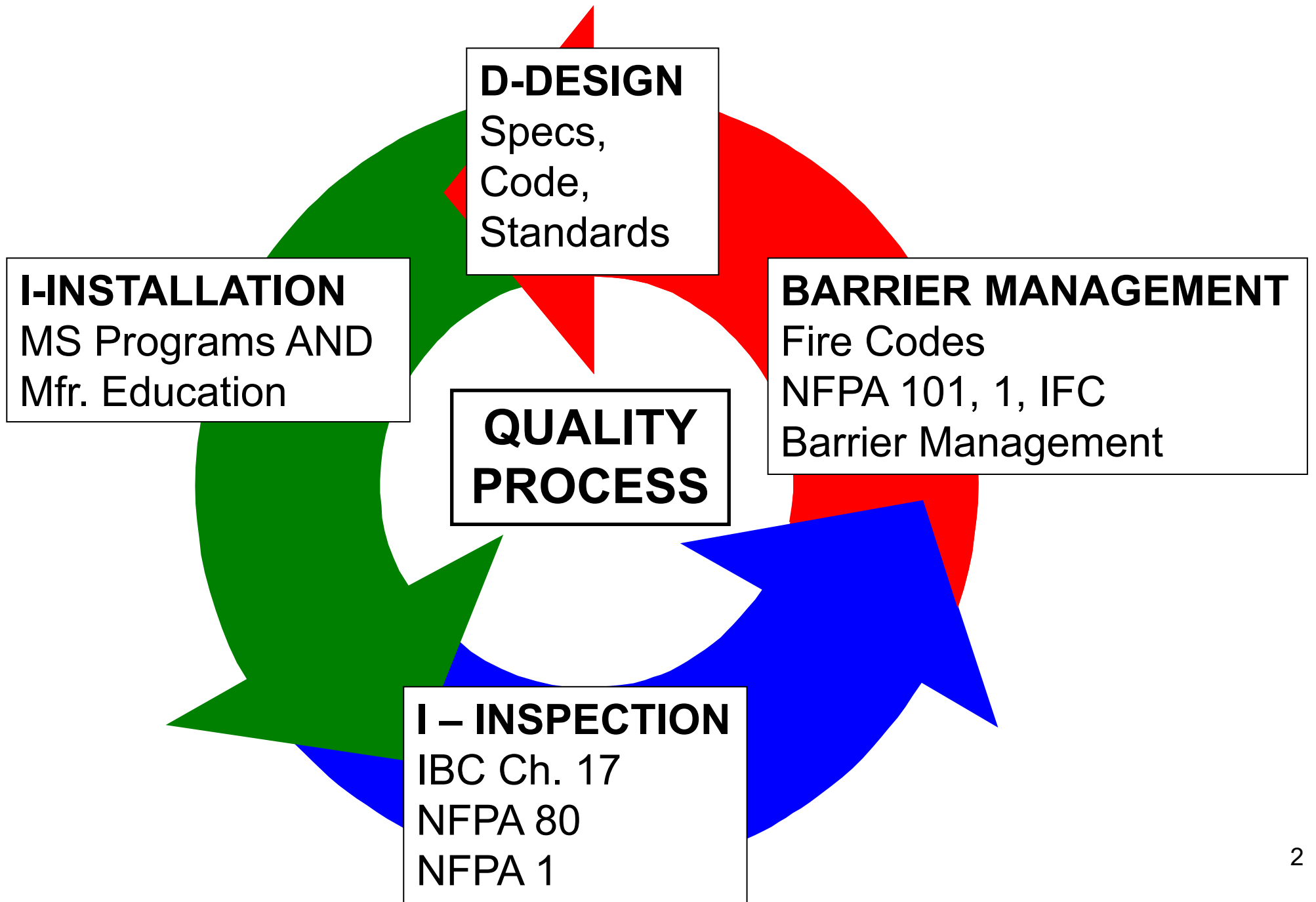


Maintaining Protection: Fire-Resistance Testing

- **Design**
- **Installation**
- **Inspection**
- **Maintenance & Management**

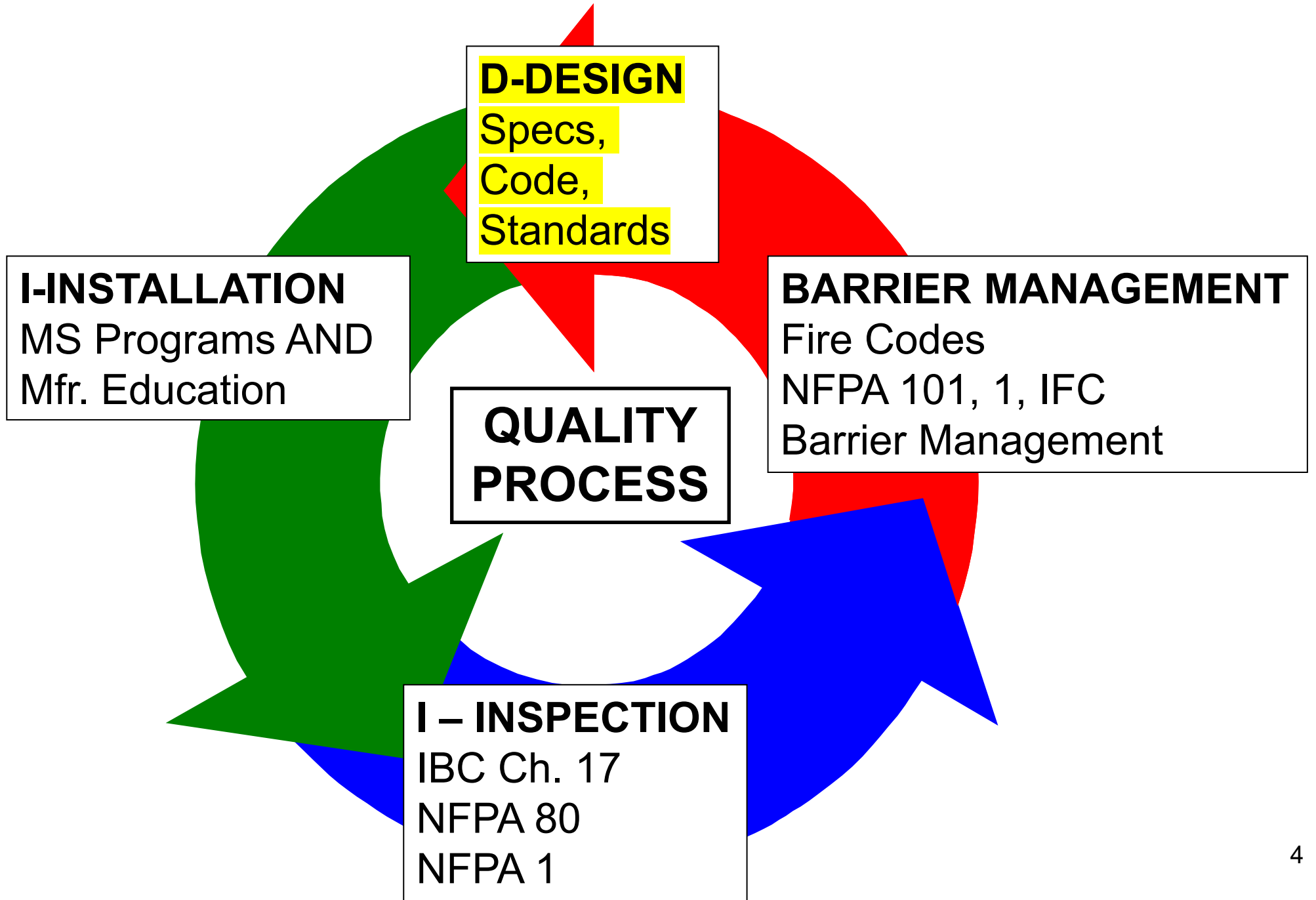
FCIA Virtual 'DIIM' Symposium Canada

Rich Walke, Consultant to FCIA



“DIIM”

- Fire Resistance & Smoke Resistant Systems
 - Properly **Designed** and Specified Firestopping FCIA – 07-84-00 – Specification – **RSW, CCS**
 - **Tested and Listed Systems** – CAN/ULC-S101, S115, S104, S106, S112, ASTM E2307, E2837.... Smoke (L), Water (W), Movement (M)
 - Professional **Installation** – FCIA Member, ULC Qualified Contractors, FM 4991 Approved
 - Properly **Inspected** – to....ASTM E2174 / E2393 Protocol by IAS AC 291 Accredited Inspection Agencies, ULC, IFC, FM Firestop Exams
 - **Maintained** – Annually – by FCIA Members – **National Fire Code of Canada** <http://www.constructioncanada.net/firestopping-and-effective-compartmentation/>



Barrier Continuity SYSTEMS

- **Products Become Systems – Test Standards**
 - **Structural Elements & Assemblies – CAN/ULC-S101**, ASTM E119 / UL 263
 - **Fire & Smoke Barriers – Fire Separations – CAN/ULC-S101**, ASTM E119 / UL 263
 - **Firestopping – CAN/ULC-S115**, ASTM E814 / UL 1479, UL 2079 / E1966, E2307, E2837, E3037, ...test methods...”
 - **Swinging/Rolling Fire Doors – CAN/ULC-S104, S105 Frames, S113 for 20 minute wood doors**, UL 10B, UL 10C, NFPA 252
 - **Fire Rated Glazing – CAN/ULC-S106, S101**, UL 9, ASTM E119 / UL 263
 - **Fire/Smoke/Ceiling Dampers – CAN/ULC-S112, S112.1, S112.2**, UL 555, UL 555S
- **SYSTEM Testing = Suitability Statement**

Fire-Resistance-Rated Construction

Establishing
Fire-Resistance
Ratings



Fire-Resistance

- Expressed as an Hourly Time Period
- Ratings range from 1/2 to 4 hours
- Contain Fire to Room or Floor of Origin and Maintain Structural Integrity



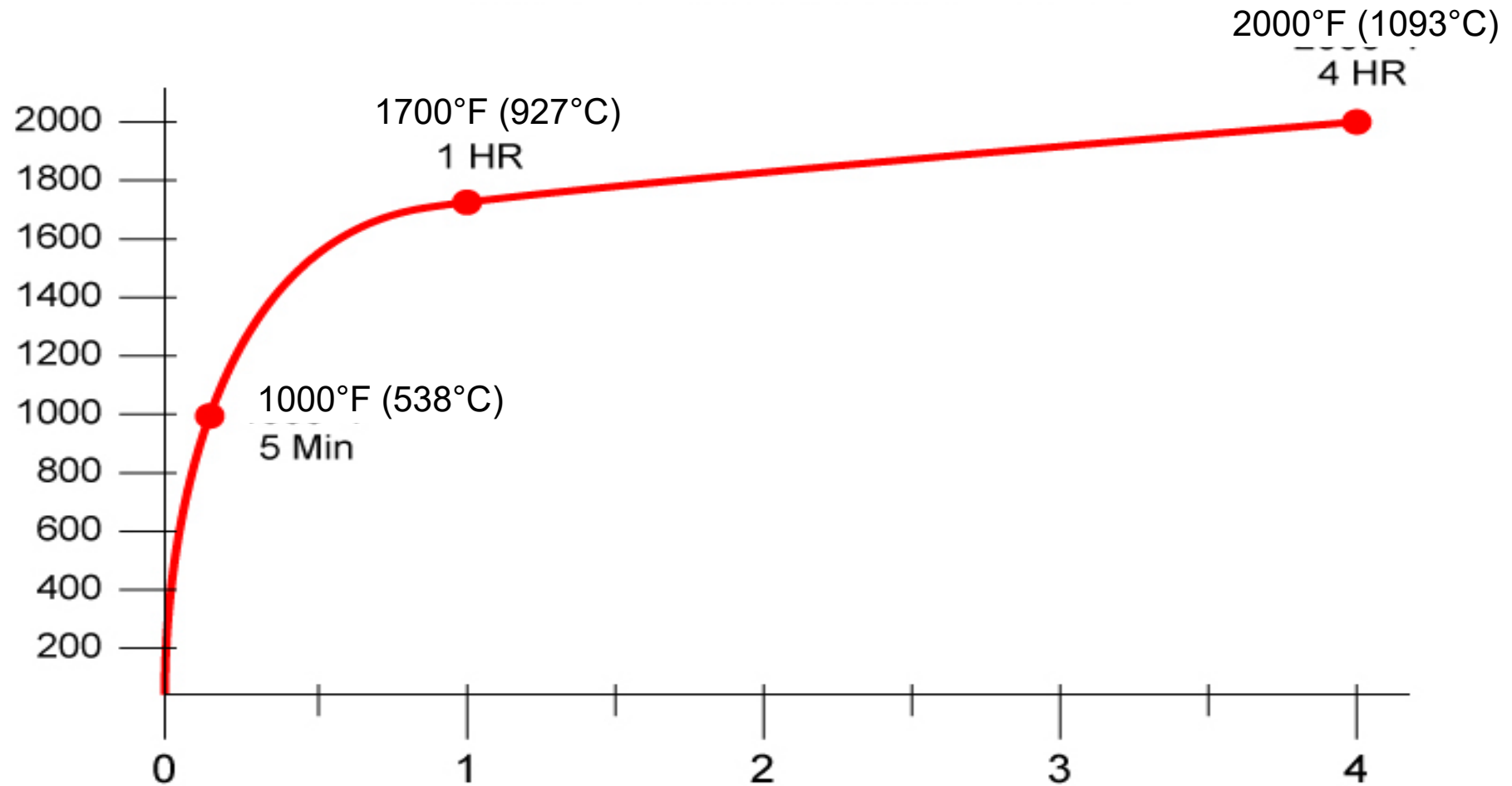
Standards

- **CAN/ULC-S101**
 - UL 263
 - ASTM E119
 - NFPA 251 (Withdrawn)

Building Components

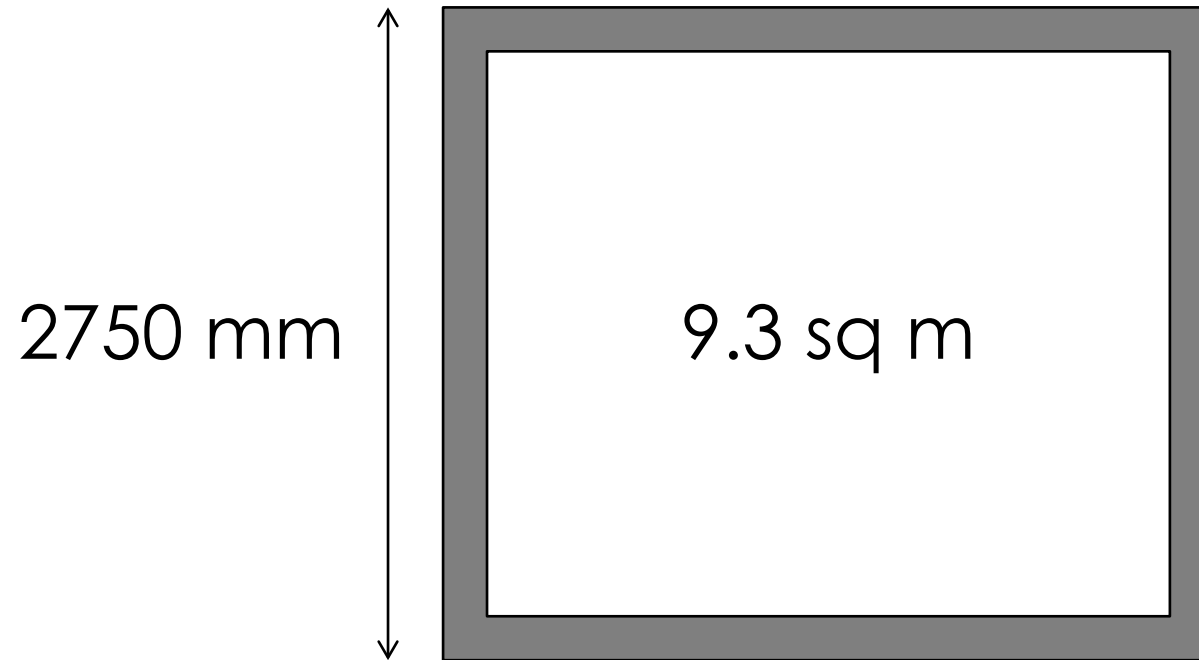
- Columns
- Beams
- Floor/Ceilings or Roof/Ceilings
- Walls

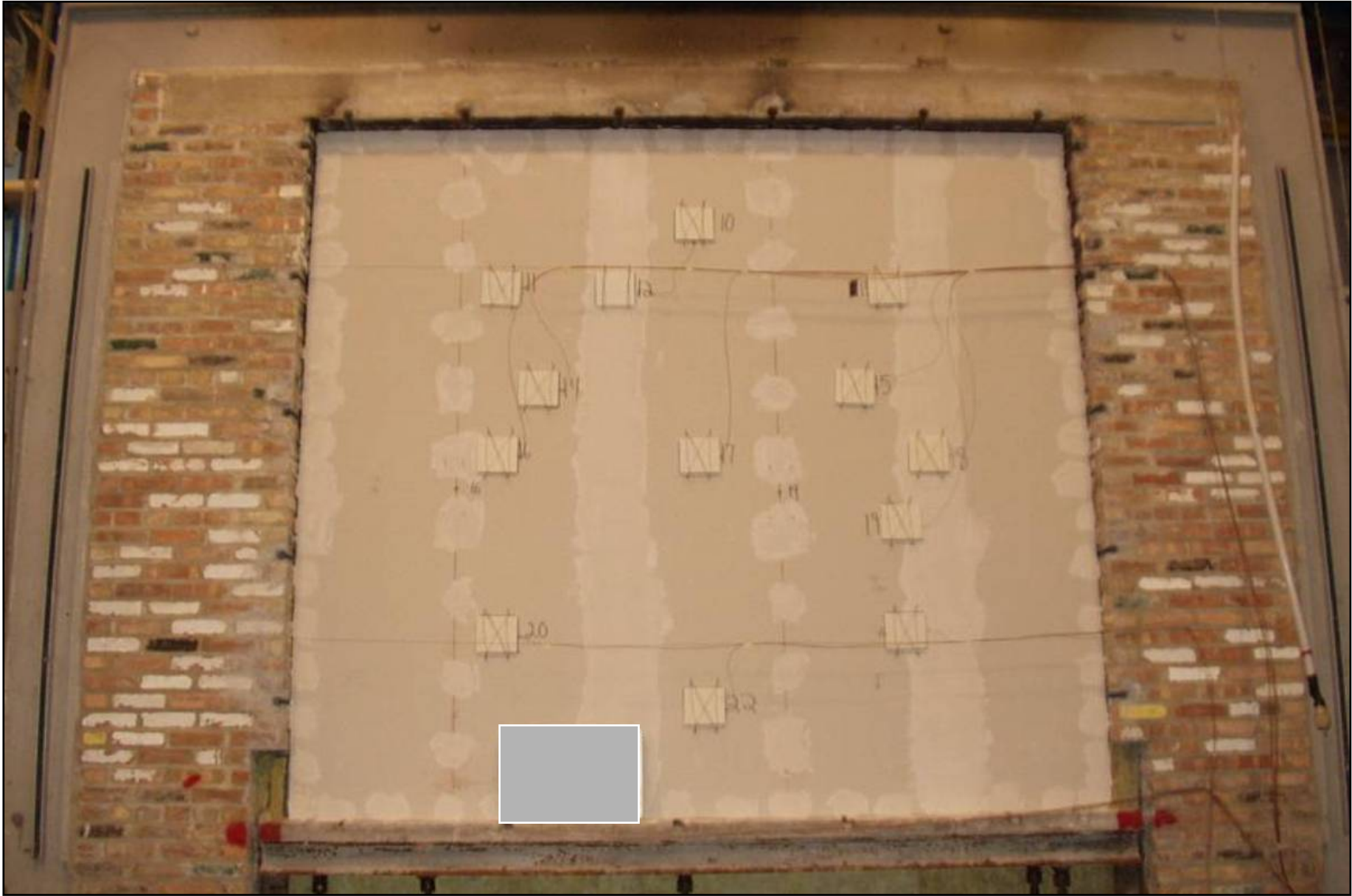
Time - Temperature Curve



Walls

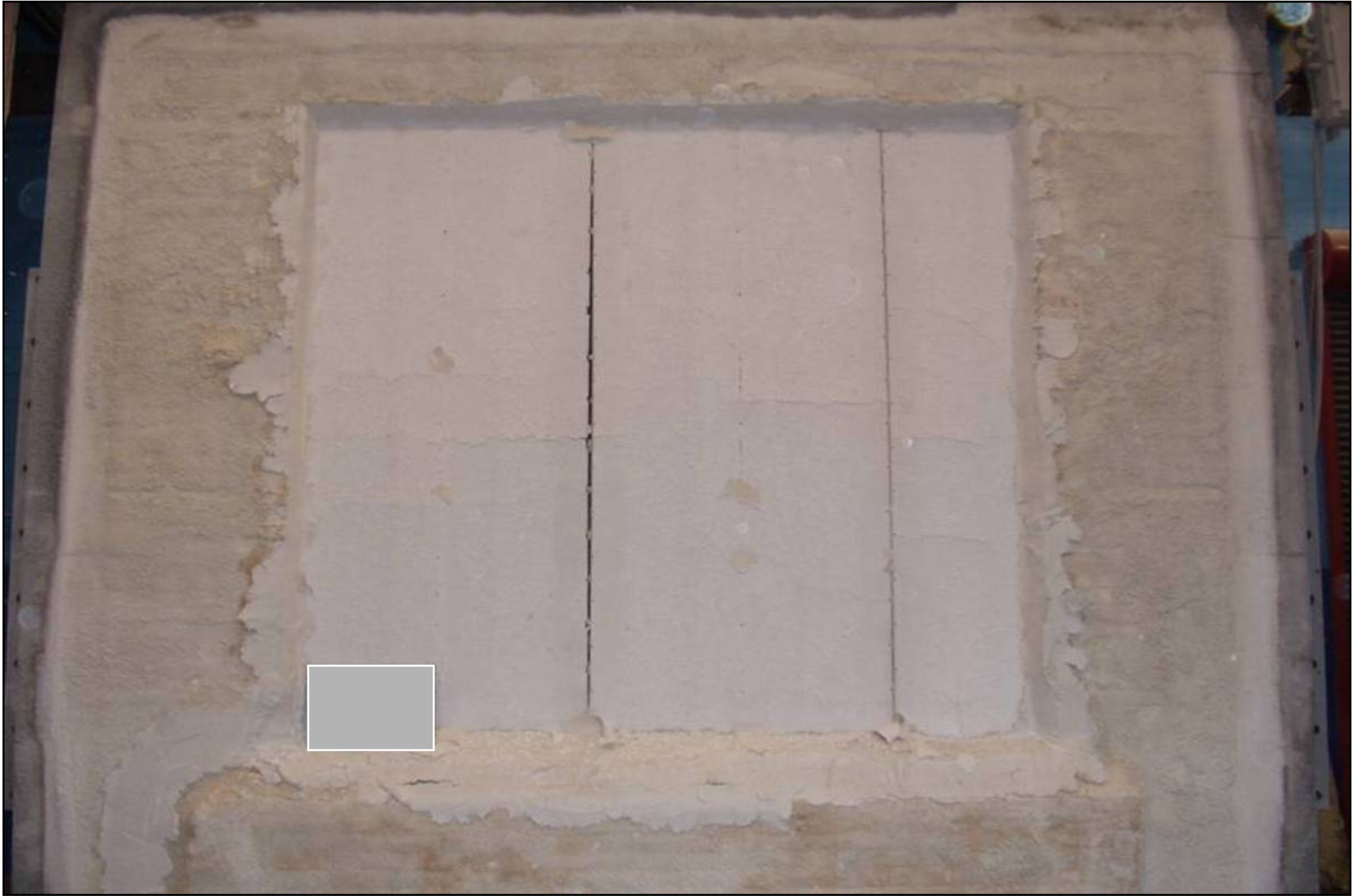
- Sample size – 9.3 sq m / 2750 mm
- Load applied – Per design















Conditions of Acceptance – Walls

- Flame passage
- 140°C / 180°C
- Support load
- Hose stream



Breaches in Fire-Resistance-Rated Construction

Firestop Systems

Penetration Firestop Systems

Joint Firestop Systems

Perimeter Joint Firestop Systems

Opening Protectives

Ducts and Air Transfer Openings



Requirements for Protecting Breaches

- Each type of breach has a unique fire test standard and a smoke leakage test standard associated with it which compliments CAN/ULC-S101

Requirements for Protecting Breaches

- **Penetrations**
 - Fire / Hose Stream Test Standards
 - CAN/ULC-S115
 - Smoke Leakage Standard
 - CAN/ULC-S115

Requirements for Protecting Breaches

- **Joints**

- Fire / Hose Stream Test Standards

- CAN/ULC-S115 (Construction Joints), ASTM E2307 (Perimeter Fire Containment), ASTM E2837 (Cont. HW Joints)

- Smoke Leakage Standard

- CAN/ULC-S115

Requirements for Protecting Breaches

- **Opening Protectives**

- Fire / Hose Stream Test Standards

- CAN/ULC-S104 (Fire Doors), CAN/ULC-S113 (20 min Wood Fire Doors), CAN/ULC-S105 (Fire Door Frames), CAN/ULC-S106 (Fire Windows, FPR Glazing, Glass Blocks), CAN/ULC-S101 (FRR Glazing)

- Smoke Leakage Standard

- UL 1784

Requirements for Protecting Breaches

- **Duct and Air Transfer Openings**
 - Fire / Hose Stream Test Standards
 - CAN/ULC-S112 (Fire and Combination Dampers), CAN/ULC-S112.2 (Ceiling Firestop Flap Assemblies)
 - Smoke Leakage Standard
 - ULC-S112.1 (Smoke and Combination Dampers)

Firestopping for Continuity

Products become **SYSTEMS** Based on Testing

- **‘Field Erected Construction...Tested to...’**
 - Standards – CAN/ULC-S115, ASTM E2307, ASTM E2837
 - F Rating – Flame
 - FT Rating – Flame & Temperature
 - FH Rating – Flame & Hose
 - FTH Rating – Flame, Temperature & Hose
 - L Rating – Smoke
 - W Rating – Water
 - M Rating – Movement



3M Photo

Conditions of Acceptance

F Rating

- Passage of Flame

Conditions of Acceptance

FT Rating

- Passage of Flame
- 180°C (325°F) Temperature Rise

Conditions of Acceptance FH Rating

- Passage of Flame
- Hose Stream

Conditions of Acceptance

FTH Rating

- Passage of Flame
- 180°C (325°F) Temperature Rise
- Hose Stream

L Rating

- Air Leakage Rate at Ambient Temperature
- Air Leakage Rate at 204°C (400°F)

W Rating

- Optional program, applicable to incidental water
- 0.91 M WC (3 Ft WC) Pressure Head / 72 Hr Exposure
- Firestop subjected to water exposure, followed by standard fire and hose stream tests
- Firestop systems assigned a W Rating

M Rating

- Optional program, applicable to movement of penetrating item
- Penetrating item move perpendicular and/or in plane of barrier in accordance with ASTM E3037
- After movement, firestop system subjected to standard fire and hose stream tests
- Firestop systems assigned a M Rating
 - Rating within plane based on percentage of annular space
 - Rating perpendicular to barrier based on dimension

Building & Fire

Worldwide Code Requirements

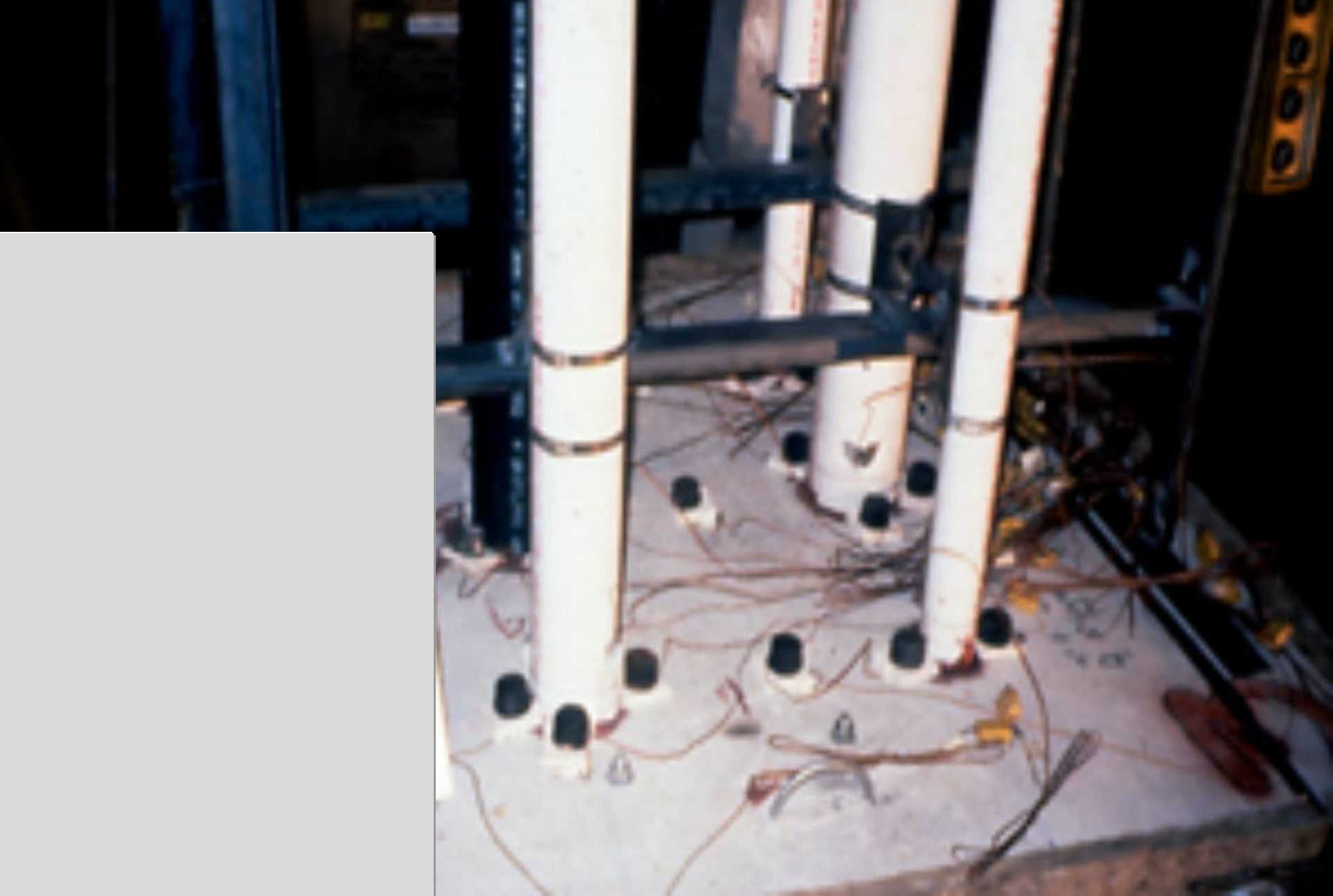
- *Chemical, Biological, Radiation, Explosion, Germ, etc.*
 - Standards?
 - C – Which Chemicals? Check with manufacturer
 - B – Which Agents? Check with manufacturer
 - R – Nuclear Power Plant Standards? Check with manufacturer.
 - E – Blast Strength? Check with manufacturer
 - G – Germ – Check with manufacturer & industrial hygienist
 - How to Regulate for Unexpected Events?
 - Due Diligence - Review Required by code?

Fire-Resistance-Rated Construction

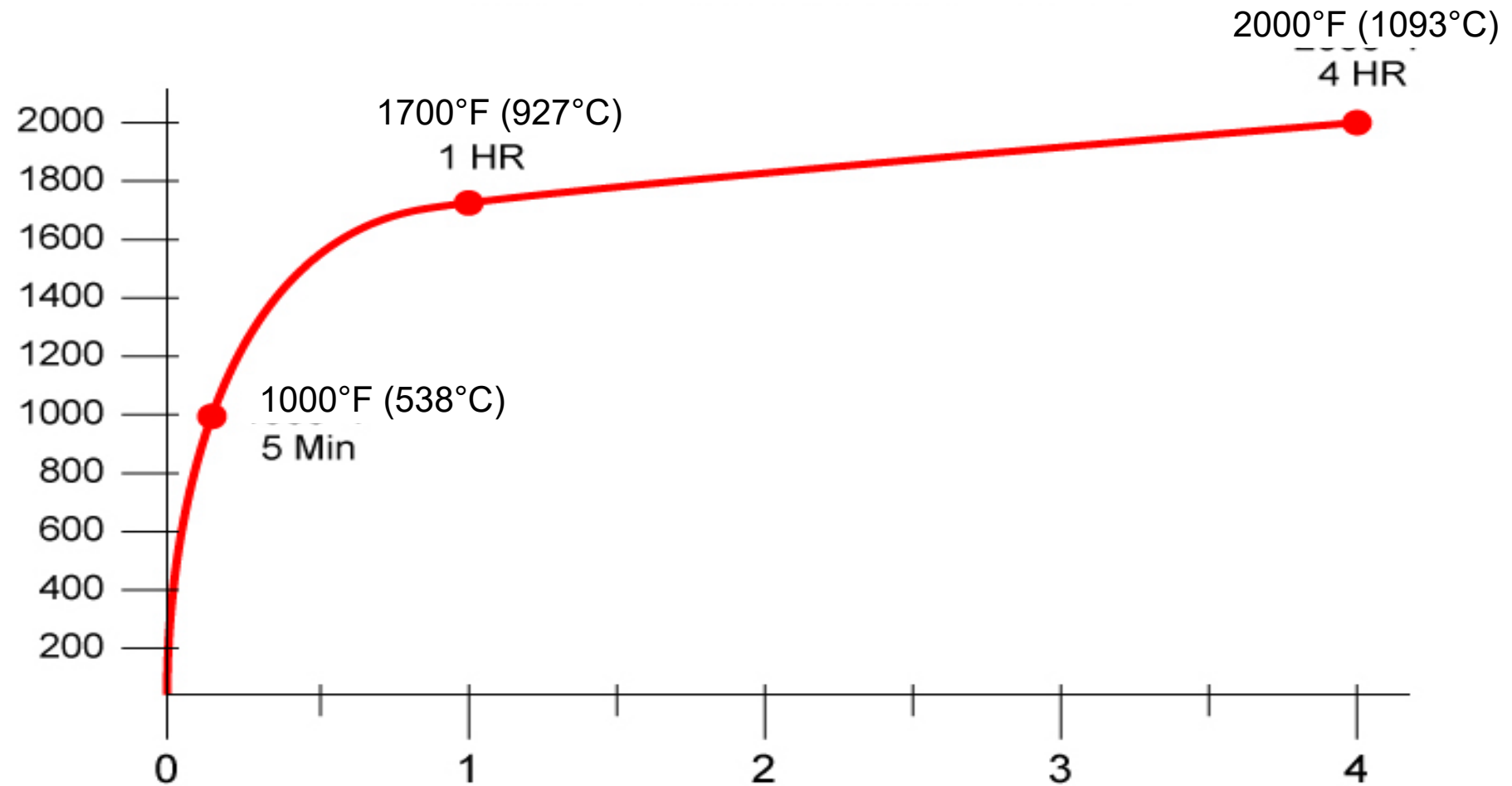
Establishing
Penetration Firestop
System Ratings



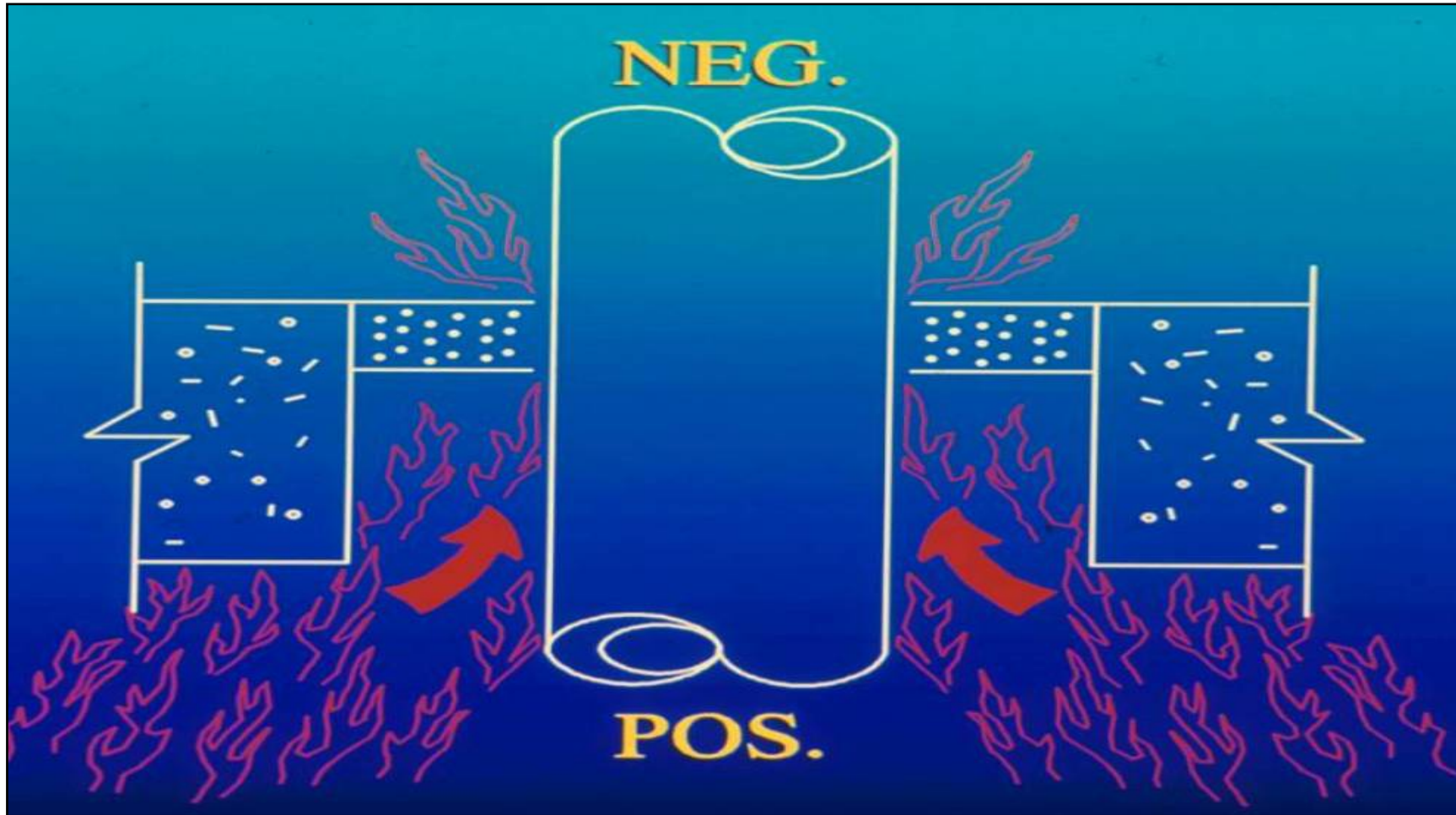
Pre-Test View of Top of Concrete Slab

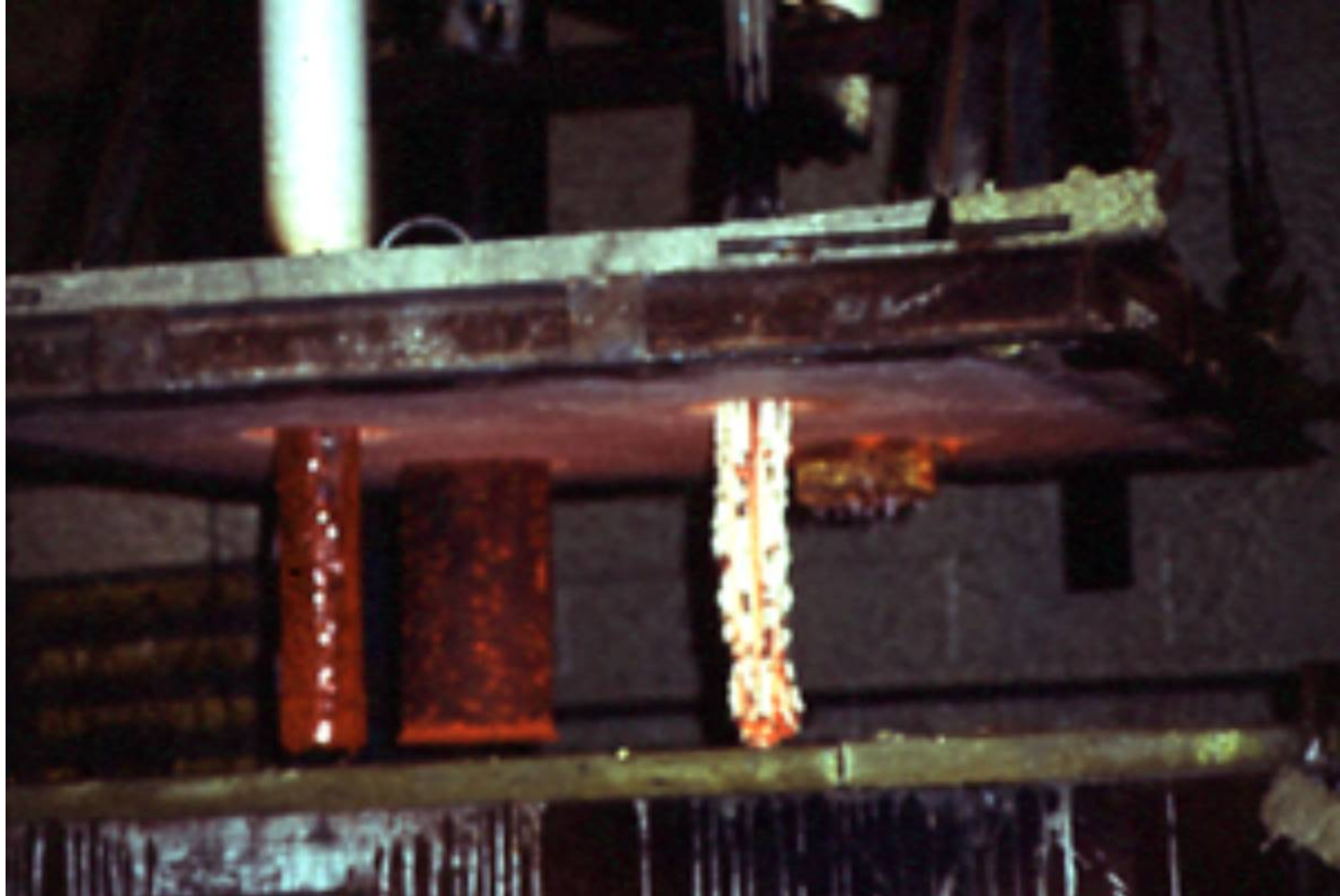


Time - Temperature Curve



Positive Furnace Pressure





Post-Test View of Bottom of Slab

Hose Stream Test



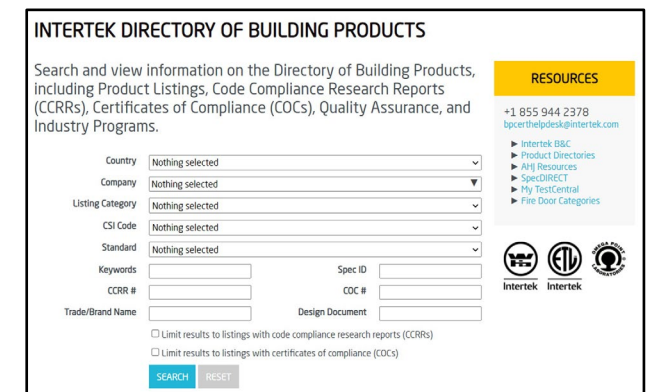
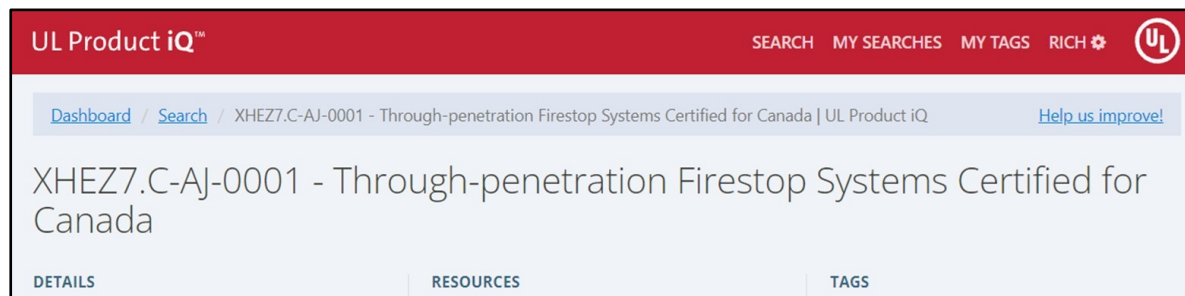
UL Photo

Barrier Continuity Products become SYSTEMS

- Online Directories –
 - FM Approval Guide
 - Intertek Listed Products Directory
 - UL/ULC Product iQ Online Directory



Systems Selection & Analysis...Not as easy as it looks...



UL Product iQ – www.ul.com




Scroll to the bottom of the page

UL Product iQ – www.ul.com

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Featured tools



TOOL

Product iQ™


Engineers, product developers and other professionals can use Product iQ to verify UL certification of products and components, locate UL guide information and search for alternative products they can trust.



TOOL

Prospector®


Whether you're looking for technical data, product documentation, global supplier contact lists or wanting to request product samples, Prospector has you covered.



DATABASE

SPOT Product Database

As one of the world's leading databases to identify credible and sustainable products, SPOT® makes it easy to source the right products for your next project.

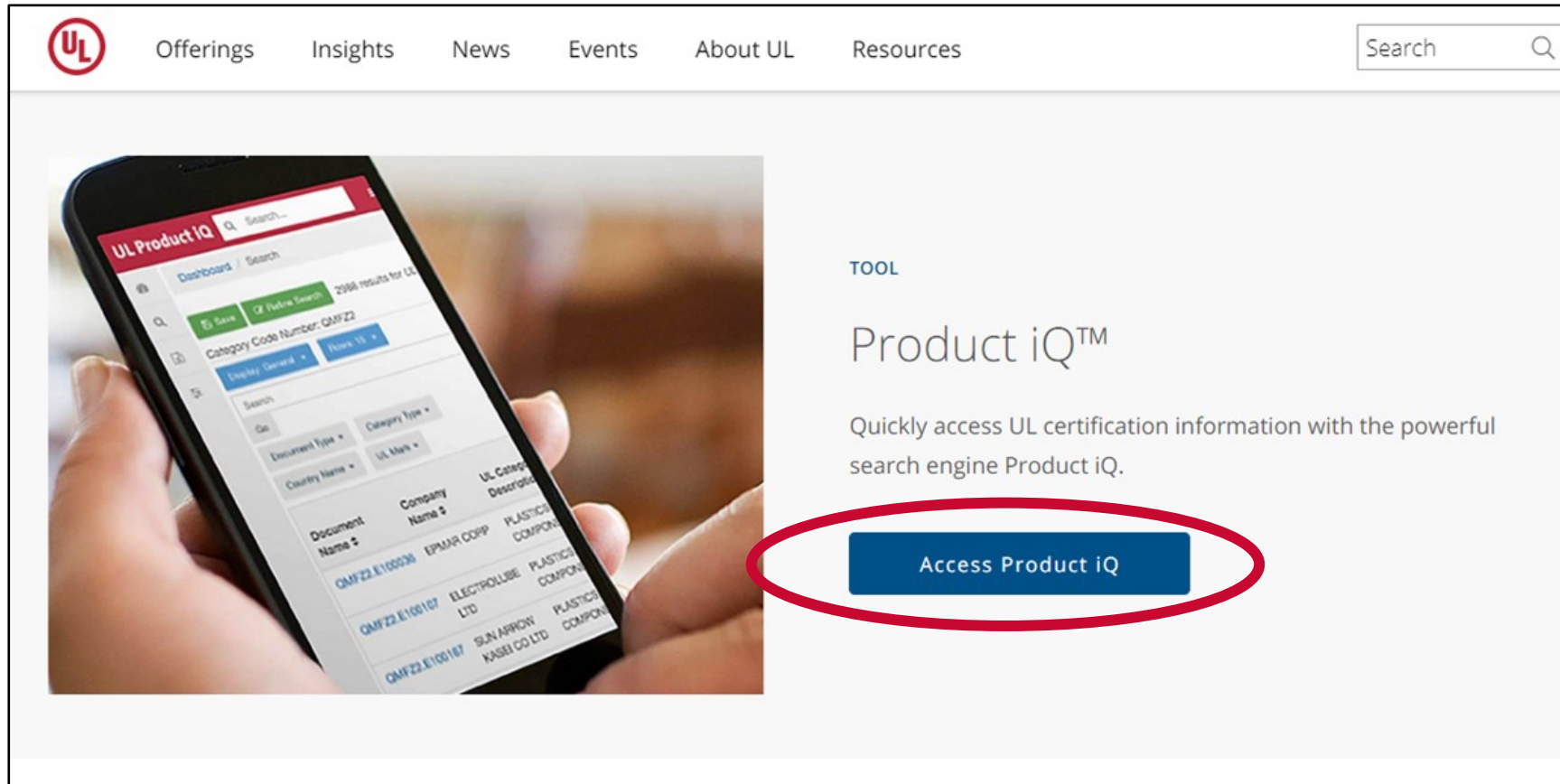


TOOL

myUL™ Client Portal

myUL is a secure, self-service tool designed to provide increased visibility into your UL projects and services. The myUL Client Portal is replacing myHome.

UL Product iQ – www.ul.com



UL Offerings Insights News Events About UL Resources Search

UL Product iQ

Dashboard / Search

2988 results for UL

Category Code Number: QMF22

Document Type + Category Type +

Country Name + UL Mark +

Document Name #	Company Name #	UL Categ. Description
QMF22.E100036	EPMAR CORP	PLASTIC COMPON
QMF22.E100107	ELECTROLUBE LTD	PLASTIC COMPON
QMF22.E100167	SUN ARROW KASEI CO LTD	PLASTIC COMPON

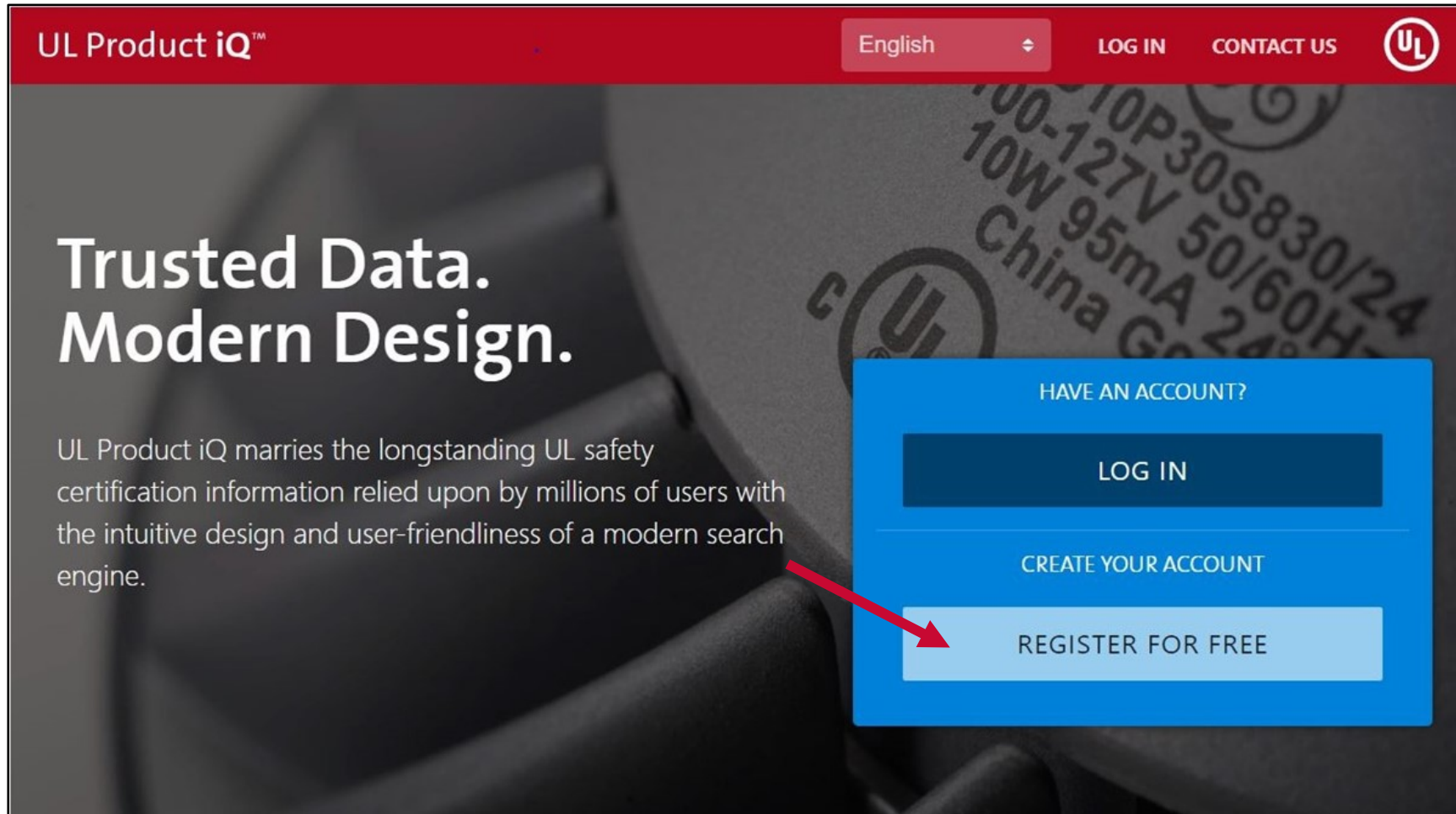
TOOL

Product iQ™

Quickly access UL certification information with the powerful search engine Product iQ.

[Access Product iQ](#)

UL Product iQ – www.ul.com/PiQ



The image shows a screenshot of the UL Product iQ website. The top navigation bar is red and contains the text "UL Product iQ™" on the left, "English" with a dropdown arrow in the center, and "LOG IN" and "CONTACT US" on the right. The UL logo is in the top right corner. The main content area has a dark background with a close-up of a UL-certified component. The text "Trusted Data. Modern Design." is prominently displayed. Below it, a paragraph describes the service. A blue overlay box on the right contains the text "HAVE AN ACCOUNT?" and three buttons: "LOG IN", "CREATE YOUR ACCOUNT", and "REGISTER FOR FREE". A red arrow points to the "REGISTER FOR FREE" button.

UL Product iQ™

English

LOG IN CONTACT US

UL

Trusted Data. Modern Design.

UL Product iQ marries the longstanding UL safety certification information relied upon by millions of users with the intuitive design and user-friendliness of a modern search engine.


HAVE AN ACCOUNT?

LOG IN

CREATE YOUR ACCOUNT

REGISTER FOR FREE

UL Product iQ Cont.

UL Product iQ English 

Product iQ is a commercial platform for product information, including UL's safety certifications. This registration form is tailored to industry professionals. If you are a non-commercial user, please read the information prompts for help completing certain fields. [Additional information regarding free accounts.](#)

Upon submission of this form, you will receive an email with an activation link. Click the link and receive immediate access to Product iQ. If you do not receive the email within a few minutes, please check your spam folder.

CREATE YOUR ACCOUNT

First Name * **Last Name ***

Company Email * ?

Company Name * ?

Job Title * ?

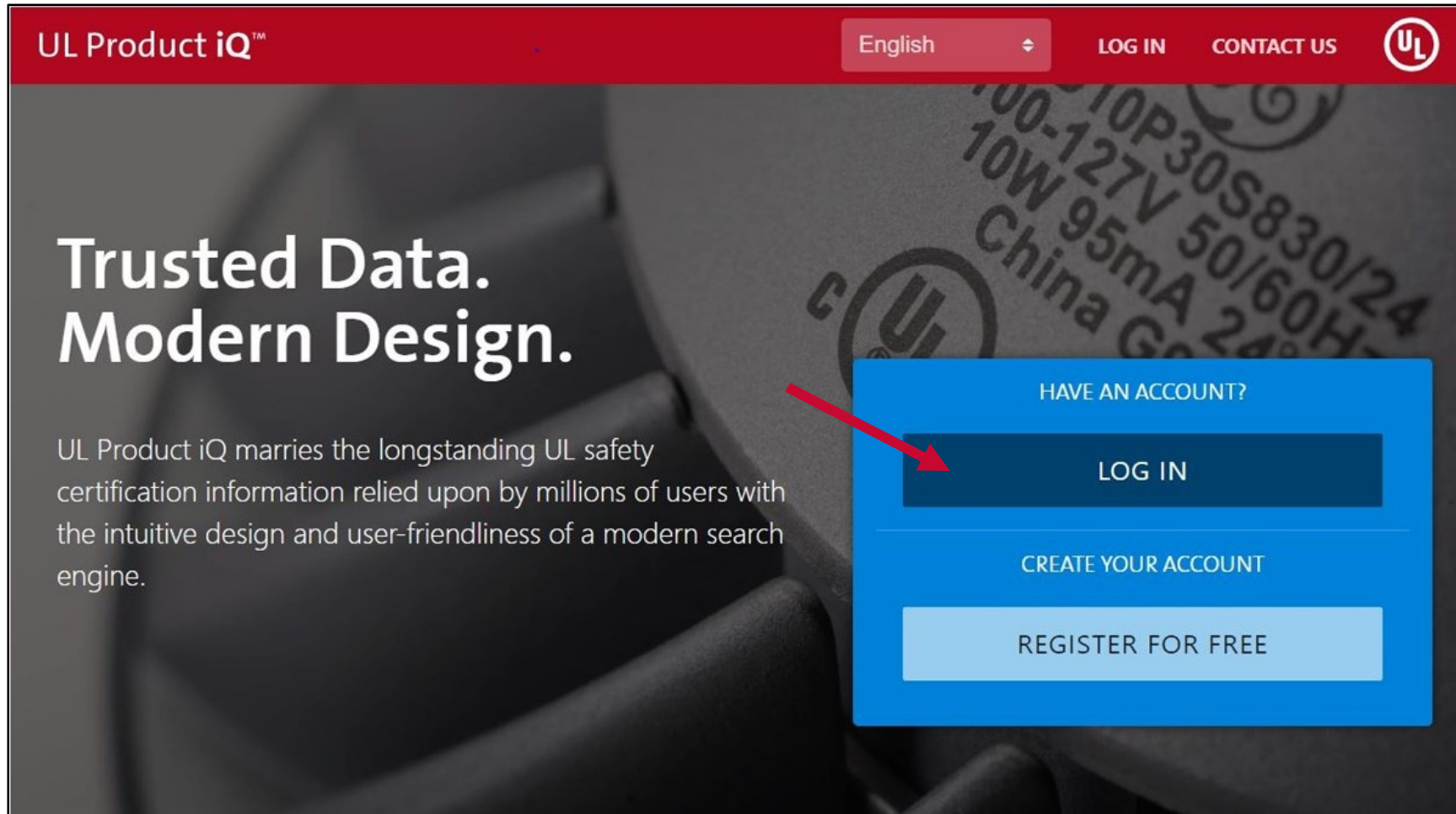
Helpful Hints

Read the information prompts for help completing certain fields.

After submitting this form, check your inbox for an email with your activation link to access this site.

If you are missing the activation email, look in your email spam folder.

UL Product iQ Cont.



The image shows a screenshot of the UL Product iQ website. The top navigation bar is red and contains the text "UL Product iQ™" on the left, a language dropdown menu set to "English" in the center, and "LOG IN" and "CONTACT US" on the right. The UL logo is in the top right corner. The main content area has a dark background with a close-up image of a UL safety certification label. The label text includes "100-10P30S830/24", "100-127V 50/60Hz", "10W 95mA 24V", and "China".

Trusted Data. Modern Design.

UL Product iQ marries the longstanding UL safety certification information relied upon by millions of users with the intuitive design and user-friendliness of a modern search engine.

HAVE AN ACCOUNT?

[LOG IN](#)

[CREATE YOUR ACCOUNT](#)

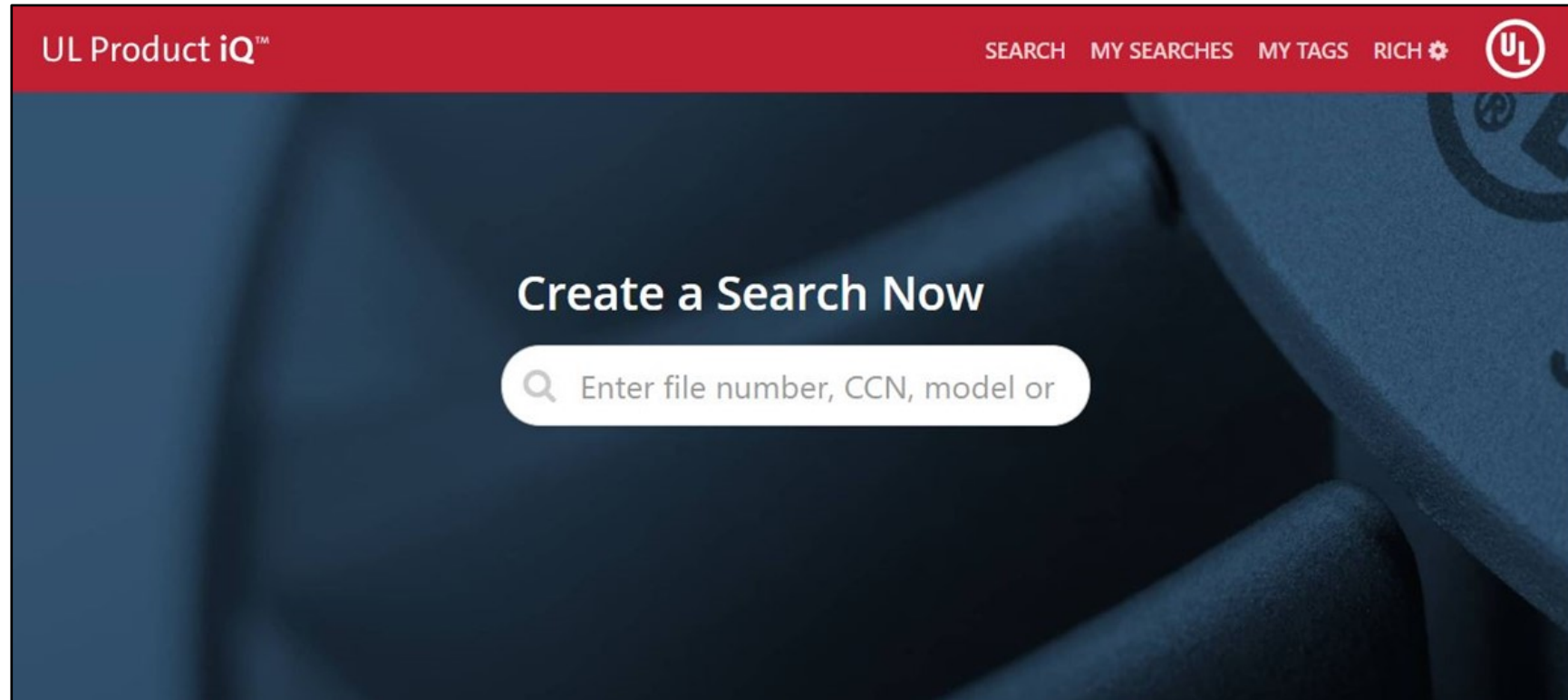
[REGISTER FOR FREE](#)

A red arrow points from the "LOG IN" button in the modal to the "LOG IN" link in the top navigation bar.

UL Product iQ Cont.



UL Product iQ Cont. Smart Search



UL Product iQ Cont.

iQ Plus Search

UL Product iQ™

SEARCH MY SEARCHES MY TAGS RICH ⚙️ UL

iQ™ Family of Databases
For enhanced search functionality.

UL Architectural Services
Find enhanced information related to fire rated walls, floors, roofs, beams, columns, joints and firestops.

Feedback

IQ PLUS SEARCH TOOLS ⓘ

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- Building Materials, Systems and Installation Codes >
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- Gaskets >
- Other >

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UL Product iQ Cont.

The screenshot displays the UL Product iQ website interface. At the top, a red navigation bar contains the text "UL Product iQ™" on the left and "SEARCH MY SEARCHES MY TAGS RICH ⚙️" on the right, followed by the UL logo. The main content area is divided into a left sidebar and a main body. The sidebar features two promotional boxes: "UL Architectural Services" with a dark blue background and white text, and "Product iQ tip Confirmation Letters" with a light blue background and a "LEARN MORE" button. The main body is titled "Building Materials and Systems" with a green building icon and a dropdown arrow. Below the title is a search prompt: "Search for designs, systems, assemblies, and products that include, or are related to, hourly fire-resistance ratings." The page lists several sub-categories with brief descriptions: "Dampers", "Electrical Circuit Protective Systems (FHIT)", "Fire Door and Fire Window Related Certifications", "Fire Rated Roofs, Walls, Floors, Beams and Columns", "Fire-rated Grease Duct Assemblies", and "Fire-resistance Ratings of Structural Steel Used in Petrochemical Facilities".

UL Product iQ™

SEARCH MY SEARCHES MY TAGS RICH ⚙️

UL

UL Architectural Services
Find enhanced information related to fire rated walls, floors, roofs, beams, columns, joints and firestops.

Product iQ tip Confirmation Letters
Shareable document confirming a Product iQ listing
[LEARN MORE](#)

Building Materials and Systems

Search for designs, systems, assemblies, and products that include, or are related to, hourly fire-resistance ratings.

Dampers
The category Dampers for Fire Barrier and Smoke Applications covers fire dampers, smoke dampers (leakage-rated dampers), combination fire and smoke dampers (fire and leakage-rated dampers), and corridor dampers.

Electrical Circuit Protective Systems (FHIT)
Electrical Circuit Protective Systems consist of components and materials that are intended for installation as protection for specific electrical wiring systems, with respect to the disruption of electrical circuit integrity upon exterior fire exposure.

Fire Door and Fire Window Related Certifications
Fire door assemblies and window assemblies are construction details and the fire ratings for fire door assemblies and fire window assemblies that are more complex than those typically associated with these assemblies.


Fire Rated Roofs, Walls, Floors, Beams and Columns
This category covers floor-ceilings, roof-ceilings, beams, columns, walls and partitions investigated for an hourly fire-resistance rating.

Fire-rated Grease Duct Assemblies

Fire-resistance Ratings of Structural Steel Used in Petrochemical Facilities
This category covers hourly fire-resistance ratings of steel columns intended for use in petrochemical facilities investigated using a rapid rise fire exposure.

UL Product iQ Cont.

UL Product iQ™

SEARCH MY SEARCHES MY TAGS RICH ⚙️ 

[Firestop Systems](#)
This category covers firestop systems, which are specific constructions consisting of a wall or floor assembly, a penetrating item passing through an opening in the wall or floor assembly, and the materials designed to prevent the spread of fire.

[Firestop Systems for Canada](#)
This category covers firestop systems, which are specific constructions consisting of a wall or floor assembly, a penetrating item passing through an opening in the wall or floor assembly, and the materials designed to prevent the spread of fire.

[Installation Code Search](#)
Search for UL Certified products by installation code. Select your model installation code and section to locate UL Certified products for Code compliant installations.

[Joint Systems](#)
This category covers joint systems, which are specific constructions consisting of adjacent fire-resistance-rated wall and/or floor assemblies and the materials designed to prevent the spread of fire through a linear opening between the wall and/or floor

[Perimeter Fire Containment Systems](#)
A perimeter fire containment system is a specific construction consisting of a floor with an hourly fire endurance rating, an exterior curtain wall with no hourly fire endurance rating, and the fill material installed between the floor and the curtain wal

[Qualified Firestop Contractors \(RFTI\)](#)

[Roof Deck Constructions](#)
This category covers roof deck constructions investigated as to the spread of fire on the underside and/or resistance to wind uplift forces.

[Sprinkler Identification Number](#)

UL Product iQ Cont.

The screenshot displays the UL Product iQ website interface. At the top, a red navigation bar contains the text "UL Product iQ™" on the left and "SEARCH MY SEARCHES MY TAGS RICH ⚙️" on the right, followed by the UL logo. The main content area is divided into three sections, each with a blue header and a descriptive paragraph:

- Thermal Barrier Systems (XCLF)**: This category covers thermal barrier systems consisting of components and materials intended for installation as protection for electrical wiring systems specified in the individual systems. These systems are investigated with respect to heat transmission.
- UL Evaluation Reports**
- Ventilation Duct Assemblies**: This category covers the fire-resistive performance of ventilation duct assemblies. These assemblies are investigated with respect to their ability to resist the spread of fire from one compartment to another without the aid of fire dampers.
- Windstorm Rated Building Products**: This category covers windstorm-rated exterior building products intended to protect the exterior envelope of structures in the event of hurricanes or tornadoes.

Below these sections is a blue button with a list icon and the text "Other" followed by a right-pointing chevron. At the bottom, a dark blue header reads "PIQ DATABASE INFO". Below this header are three white boxes, each containing an icon, a large number, and a label:

- Icon of two overlapping documents: **229327** Document Count
- Icon of a circular arrow: **15 Jan, 2019** Last Update
- Icon of a grid of dots: **68474** Companies Listed

UL Product iQ Cont.

UL Product iQ™

SEARCH MY SEARCHES MY TAGS RICH ⚙️ 

Firestop Systems
This category covers firestop systems, which are specific constructions consisting of a wall or

Firestop Systems for Canada
Covers firestop systems certified to Canadian requirements, which consist of a wall or floor assembly, a penetrating item passing through an opening in the assembly, and the materials designed to prevent the spread of fire through the openings.

Installation Code Search
Search for UL Certified products by installation code. Select your model installation code and section to locate UL Certified products for Code compliant installations.

Joint Systems
This category covers joint systems, which are specific constructions consisting of adjacent fire-resistance-rated wall and/or floor assemblies and the materials designed to prevent the spread of fire through a linear opening between the wall and/or floor

Perimeter Fire Containment Systems
A perimeter fire containment system is a specific construction consisting of a floor with an hourly fire endurance rating, an exterior curtain wall with no hourly fire endurance rating, and the fill material installed between the floor and the curtain wal

Qualified Firestop Contractors (RFTI)

Roof Deck Constructions
This category covers roof deck constructions investigated as to the spread of fire on the underside and/or resistance to wind uplift forces.

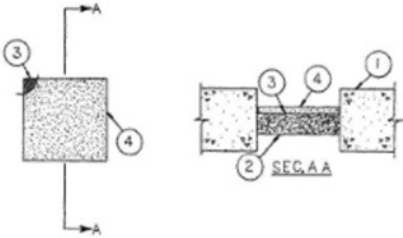
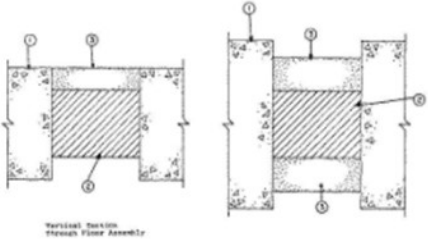

Sprinkler Identification Number

UL Product iQ

[Dashboard](#) / [Search](#) [Help us improve!](#)

6830 Results :: *Base Template: Firestop Systems for Canada :: No Search Criteria*

Action ▾ Display: Images ▾ Rows: 100 ▾ < 1 2 3 4 5 >

Document Name ↕	UL CCN Description ↕	Related Images ↕	My Tags ↕
XHEZ7.C-AJ-0001	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0002	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0004	Through-penetration Firestop Systems Certified for Canada		

REFINE RESULTS
Build or filter your results by keyword and/or adding criteria like document type, file number and country name.

Search Template *Firestop Systems for Canada* ⓘ

- Keyword**
Filter by Keyword Search
- System Number** ⓘ
Click to view and filter values
- System Type**
Click to view and filter values
- Through-Penetration Firestop System Firestop System**
Click to view and filter values
- Assembly Type**
Click to view and filter values
- Penetrating Item**
Click to view and filter values



UL Product iQ

REFINE RESULTS

Build or filter your results by keyword and/or adding criteria like document type, file number and country name.

Service Penetration Firestop Systems (SP) (673)

Service Penetration for Combustible Systems (SPC) (6)

Service Penetrations for Combustible Systems using Alternate Numbering System (811)

Service Penetrations using

Click to view and filter values

Through-Penetration Firestop System Firestop System

Click to view and filter values

Assembly Type

Click to view and filter values

Penetrating Item

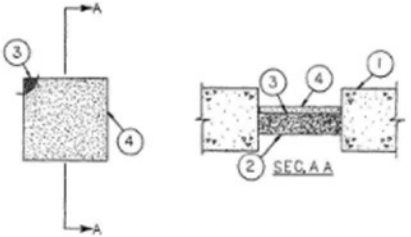
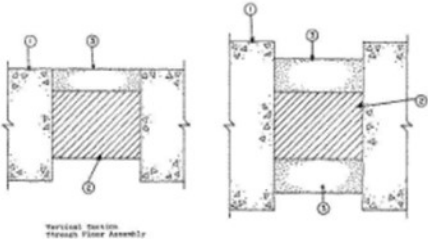

Click to view and filter values

[Dashboard](#) / [Search](#) [Help us improve!](#)

▶ 6830 Results :: Base Template: Firestop Systems for Canada :: No Search Criteria

Action ▾ Display: Images ▾ Rows: 100 ▾

< 1 2 3 4 5 >>

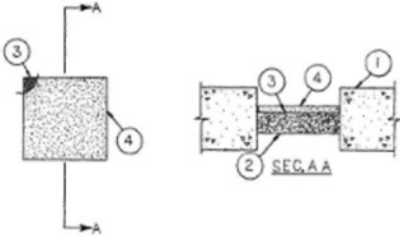
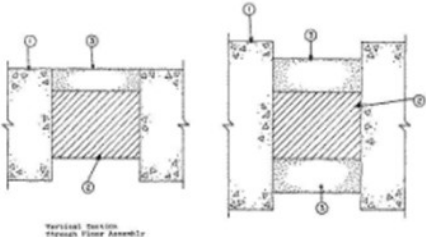

Document Name ↕	UL CCN Description ↕	Related Images ↕	My Tags ↕
XHEZ7.C-AJ-0001	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0002	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0004	Through-penetration Firestop Systems Certified for Canada		

UL Product iQ

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6830 Results :: *Base Template: Firestop Systems for Canada :: No Search Criteria*

Action ▾ Display: Images ▾ Rows: 100 ▾ < 1 2 3 4 5 >

Document Name ↕	UL CCN Description ↕	Related Images ↕	My Tags ↕
XHEZ7.C-AJ-0001	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0002	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0004	Through-penetration Firestop Systems Certified for Canada		

REFINE RESULTS
Build or filter your results by keyword and/or adding criteria like document type, file number and country name.

Search Template *Firestop Systems for Canada* ?

- Keyword**
Filter by Keyword Search
- System Number** ?
Click to view and filter values
- System Type**
Click to view and filter values
- Through-Penetration Firestop System Firestop System**
Click to view and filter values
- Assembly Type**
Click to view and filter values
- Penetrating Item**
Click to view and filter values

Vertical Section Through Floor Assembly



UL Product iQ

[Dashboard](#) / [Search](#) [Help us improve!](#)

REFINE RESULTS

Build or filter your results by keyword and/or adding criteria like document type, file number and country name.

Search Template *Firestop Systems for Canada*

Keyword
Filter by Keyword

System Number

System Type

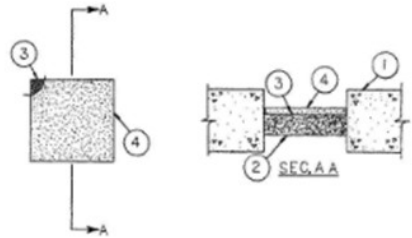
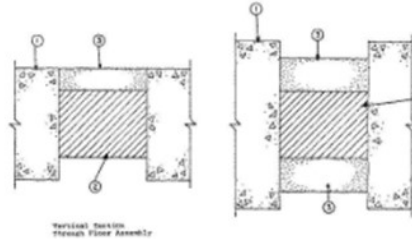
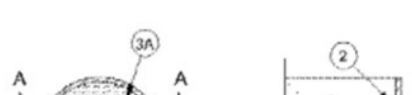
Through-Penetration Firestop System Firestop System

- Concrete/Both Horizontal and Vertical Construction (2115)
- Floor/Horizontal Construction (1153)
- Wall/Vertical Construction (2883)

6830 Results :: *Base Template: Firestop Systems for Canada :: No Search Criteria*

Action ▾ Display: Images ▾ Rows: 100 ▾

« 1 2 3 4 5 »

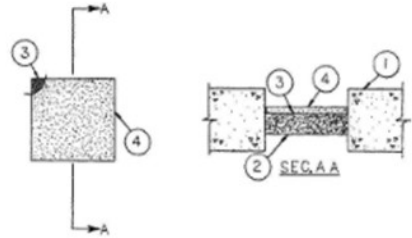
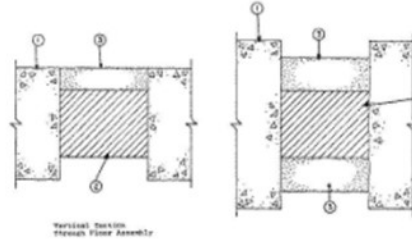
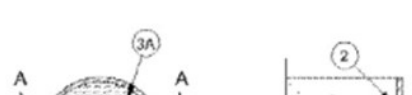
Document Name	UL CCN Description	Related Images	My Tags
XHEZ7.C-AJ-0001	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0002	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0004	Through-penetration Firestop Systems Certified for Canada		

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REFINE RESULTS
Build or filter your results by keyword and/or adding criteria like document type, file number and country name.

Search Template *Firestop Systems for Canada* ?

- Keyword**
Filter by Keyword Search
- System Number** ?
Click to view and filter values
- System Type**
Click to view and filter values
- Through-Penetration Firestop System Firestop System**
Click to view and filter values
- Assembly Type**
Click to view and filter values
- Penetrating Item**
Click to view and filter values



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Search Template Firestop Systems for Canada ?

Keyword

Filter by Keyword

System Number ?

Click to view and filter values

System Type

Click to view and filter values

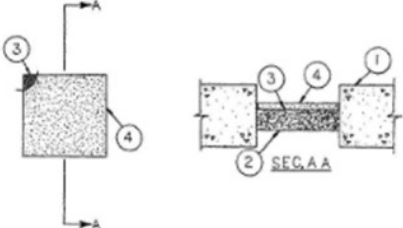
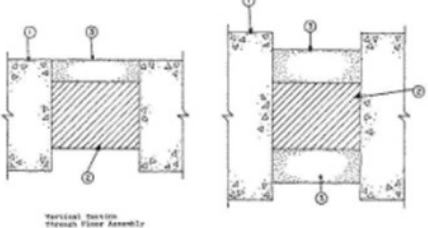
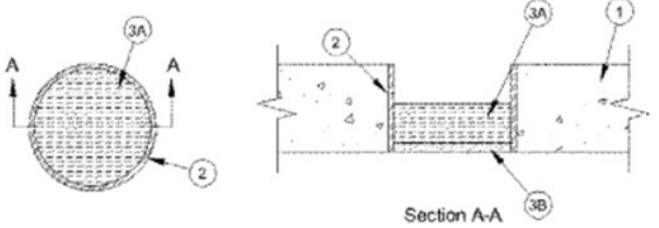

Through-Penetration Firestop System Firestop System

Click to view and filter values

Assembly Type

Click to view and filter values

- Concrete floors with a minimum thickness greater than 127 mm (5 in.) (309)
- Concrete floors with a minimum thickness less than or equal to 127 mm (5 in.) (2442)
- Concrete or masonry walls with a minimum thickness greater than 203.2 mm (8 in.) (29)

Document Name ↕	UL CCN Description ↕	Related Images ↕	My Tags ↕
XHEZ7.C-AJ-0001	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0002	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-AJ-0004	Through-penetration Firestop Systems Certified for Canada		
XHEZ7.C-	Through-penetration		

Engineering Judgments/EFRRA

- Variances to Systems at Site? – Now What...
 - **First Action in Process**
 - Find another system – Same Manufacturer
 - Find another system – Different Manufacturer
 - If no system exists in either case....
 - **Second Action –**
 - *Engineering Judgment* – “EJ”
 - *Equivalent Fire Resistance Rated Assembly* – “EFRRA”
 - ***Based on engineering, IFC Protocol***

Engineering Judgments/EFRRA

International Firestop Council – Manufacturers – www.firestop.org

IFC Guidelines for Evaluating Engineering Judgment Guidelines

‘Construction industry professionals, building officials, fire officials, firestop contractors and other stakeholders need appropriate guidelines for evaluating and using such judgments.’

As such, IFC developed *Recommended IFC Guidelines for Evaluating FireStop Systems in Engineering Judgments*.

Engineering Judgments/EFRRA

IFC EJ Guidelines - Engineering Judgments for firestop systems should:

- Emphasizes importance of tested designs
- Not a substitute for existing designs
- Should be issued only by those who know the components
- Based on sound engineering practices and knowledge of performance of the designs
- Based on interpolation of previous testing
- Issued only for a specific jobsite
- Presented in clear detail



Questions??



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