

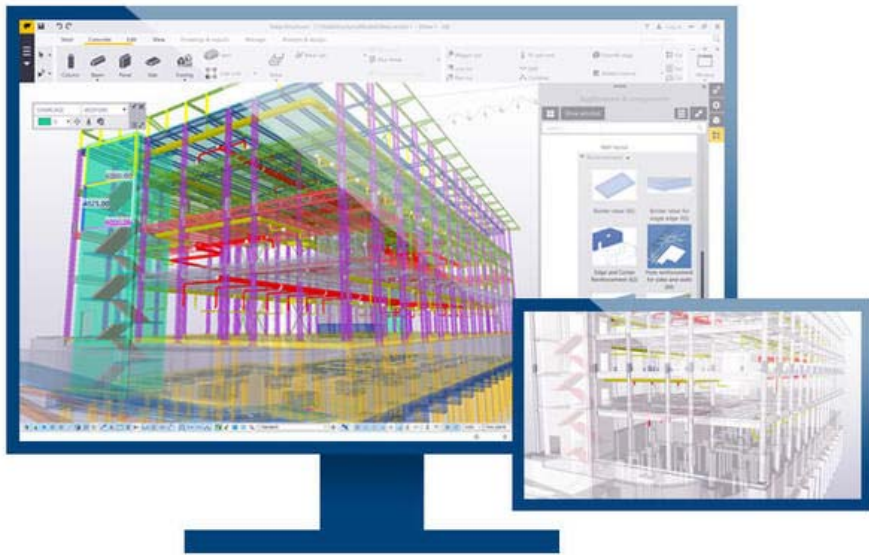
Building for Compliance, Tracking Life Safety from Design to Implementation

Presented by: Justin Pine, RCDD
Specified Technologies, Inc.



It All Starts with the Design

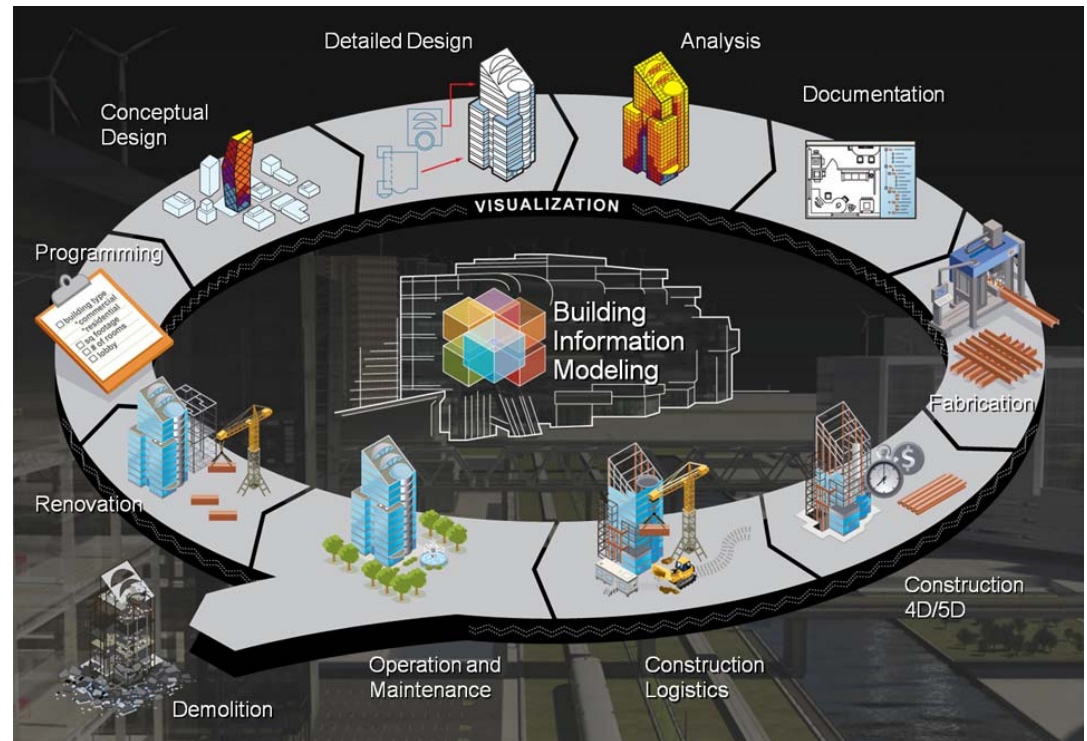
What is Building Information Modeling?



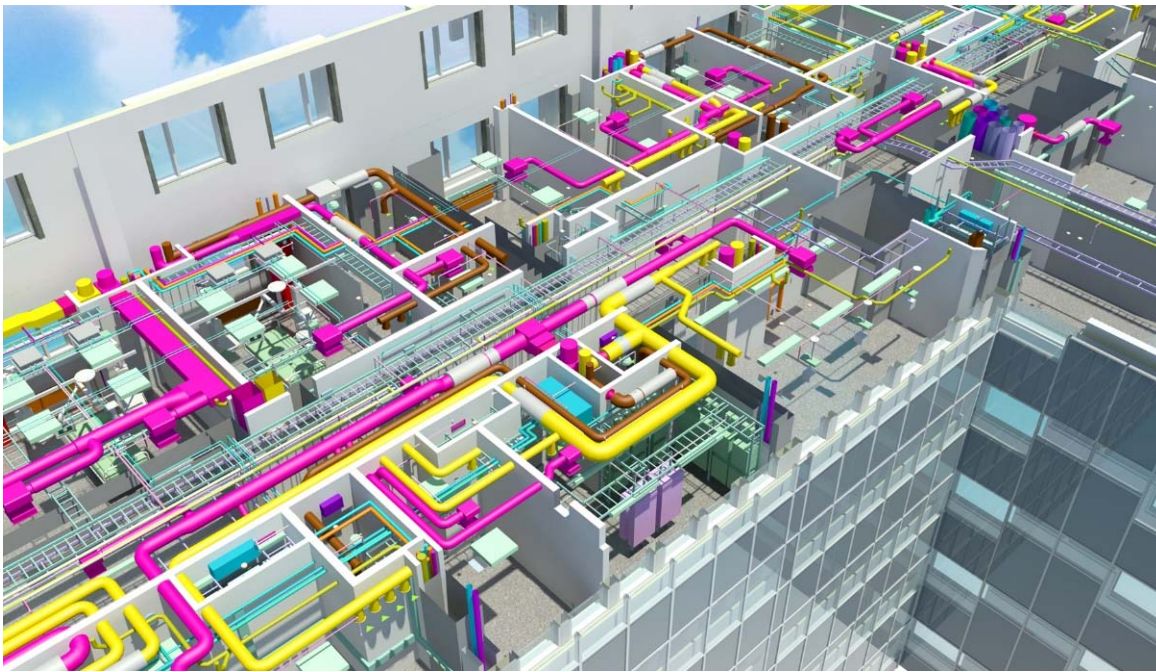
- A digital representation of both the physical and functional characteristics of a building
- Provides a platform for effective collaboration between stakeholders over the building's lifecycle.

The Promise of BIM

- Living Model of Building Spanning:
 - Design
 - Construction
 - Occupation
 - Renovation
 - Decommissioning



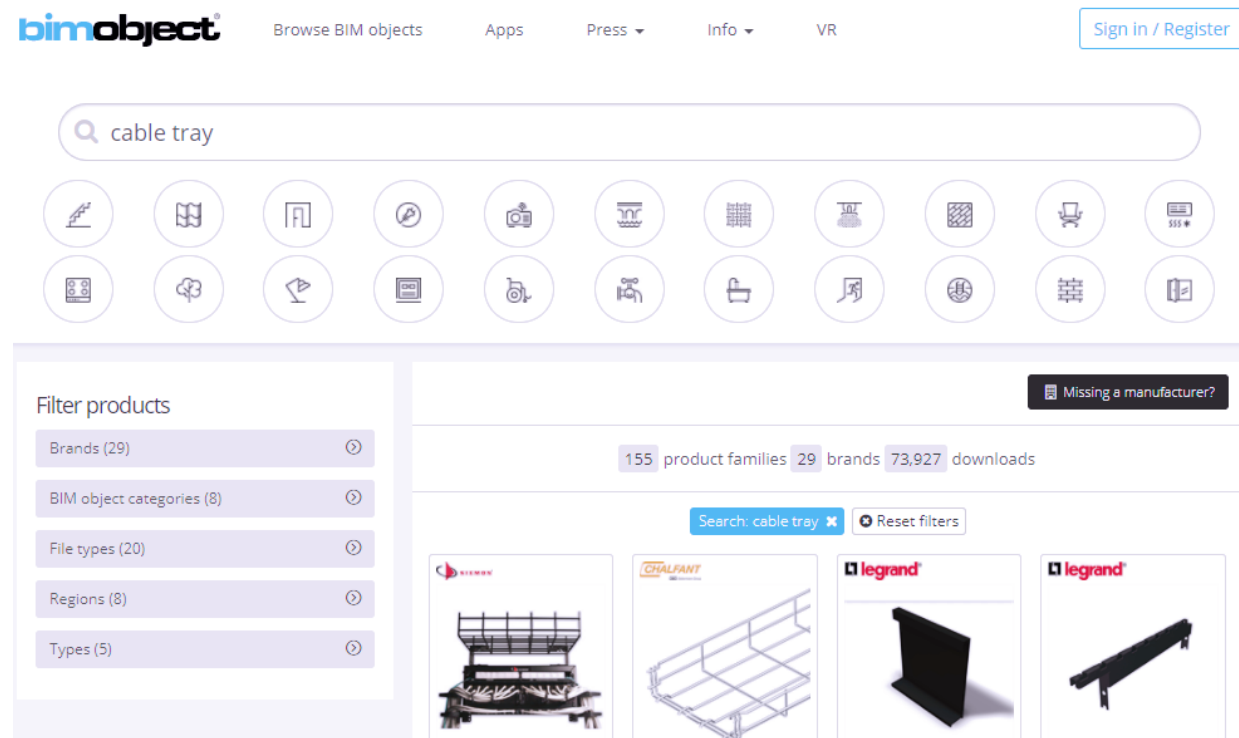
Services in a 3D Space



- Dimensioning and Spacing of Services are well defined
 - Able to prefabricate building services offsite
 - Reduces waste due to field fabrication

Smart Objects

- Different Types of Objects
 - Face Based
 - Family Based
- Available directly from vendor's website or object repositories
 - BIMObject.com
 - BIMSmith.com
 - BIMarium.com



Type Properties

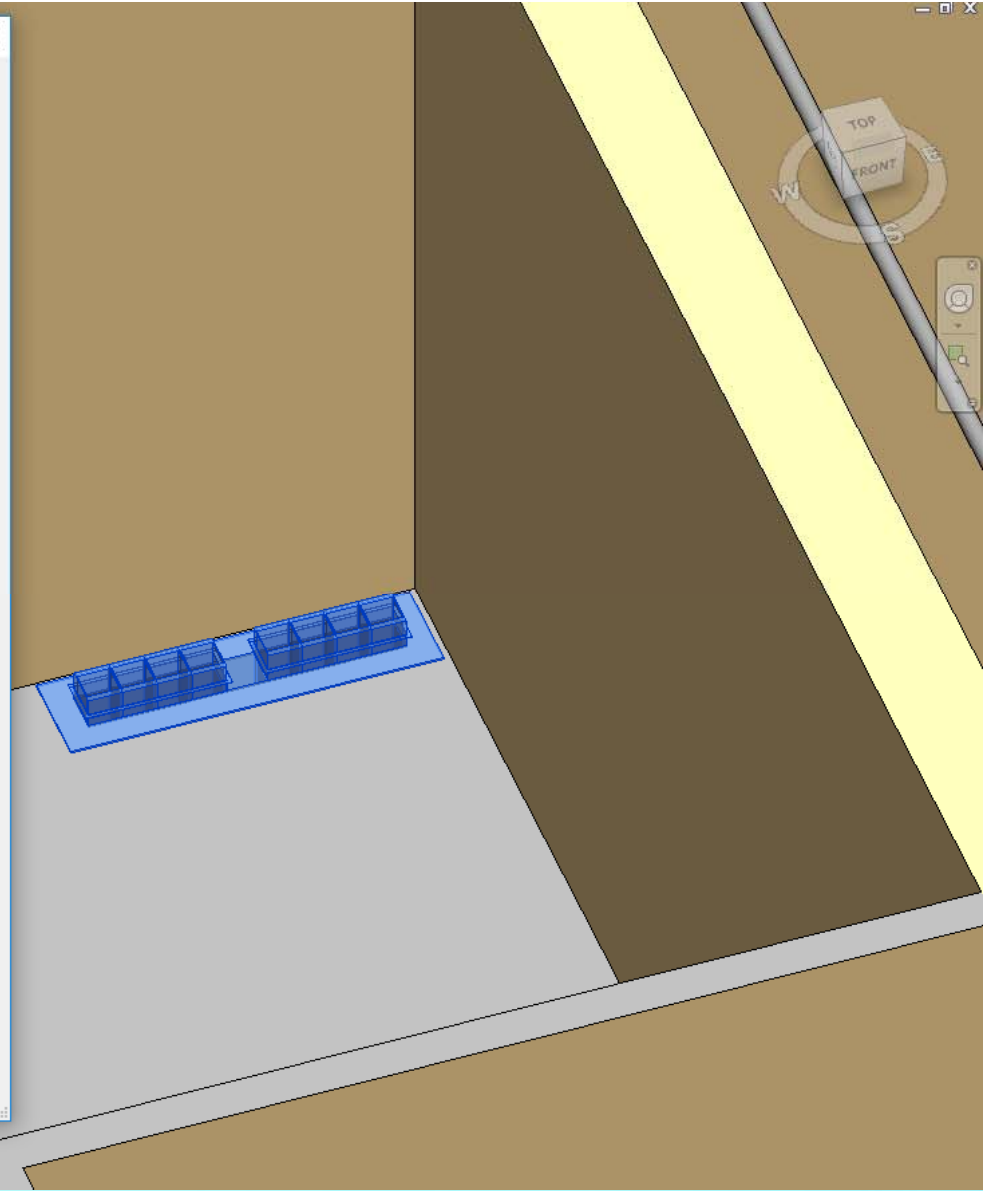
Family: Firestop-EZPath-STI-EZ_Path_Series_44_for_Floors Load...

Type: Series 44+ - 2 Bank Floor Grid - Side by Side Duplicate... Rename...

Type Parameters

Parameter	Value
Base Plate cutout length	0' 4 5/8"
Identity Data	
URL	https://www.stifirestop.com/
Tested Systems	https://systems.stifirestop.com/
Safety Data Sheet	https://files.stifirestop.com/5.%20Safety%20Data%20Sheet/1.%20Eng
Region	Global
Product Page	https://www.stifirestop.com/ez-path/ordering-installation/series-44/
Product Data Sheet	https://files.stifirestop.com/4.%20Product%20Data%20Sheets/1.%20E
No. of Devices	8
Model No. (Hanger Bracket)	(2) EZP444MB
Model No. (Device)	EZD44S2
Model No. (Complete Kit)	
Model No. (Brackets)	(2) EZG444
Model No. (Accessory Bracket)	EZG44CP
Model	EZ-Path Series 44+ Fire-Rated Pathway
Manufacturer Phone No.	800.992.1180
Manufacturer Address	210 Evans Way, Somerville, NJ 08876
Manufacturer	Specified Technologies, Inc
Installation Instructions	http://files.systems.stifirestop.com/8.%20Install%20Sheets/1.%20EZ-
Fire Rating	Up to 4 Hr
Description	EZ-Path Series 44+ Fire-Rated Pathway with Floor Plates
Contact Technical Service	TechServ@stifirestop.com
Assembly Code	D4030900
Type Image	
Keynote	
Type Comments	
Cost	
Assembly Description	Other Fire Protection Specialties
Type Mark	
OmniClass Number	
OmniClass Title	
Code Name	

<< Preview OK Cancel Apply



Third-Party Plugins



- Further enhance the suite of tools that Revit® comes with.
- Integrations with outside services/vendors
 - Design, Object Search/Selection, Production, Scheduling

MWF[®] – Metal Wood Framer

- Finds all openings and penetrations through barriers
- Intelligently frames openings & assemblies
- Output framing information for Manufacturing
 - Minimizes job site waste

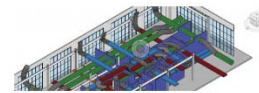


FCM[®] – Firestop Clash Management

- Finds where services clash with barriers
- Searches for appropriate Firestop System
- Places firestop marker and product BIM Object



BIM & FIRESTOP
INTEGRATION



Step 1: Clash Detection

Scan the Revit[®] model to find clash points where firestopping is required.



Step 2: System & Product Selection

Firestop systems are selected and automatically assigned to each clash point. Chooses the correct firestop product every time and imports relevant information into the model.

Clash ID	Clash Name	System Name	System Location	System Level	System Size	System Class	System Type
1	1-100-01-01-01	1-100-01-01-01	Level 1	Level 1	12"	IF	Wall
2	1-100-01-01-02	1-100-01-01-02	Level 1	Level 1	12"	IF	Wall
3	1-100-01-01-03	1-100-01-01-03	Level 1	Level 1	12"	IF	Wall
4	1-100-01-01-04	1-100-01-01-04	Level 1	Level 1	12"	IF	Wall
5	1-100-01-01-05	1-100-01-01-05	Level 1	Level 1	12"	IF	Wall

Step 3: Openings Report

Generates openings reports with assembly details and firestop system information for coordination meetings.

Working Together

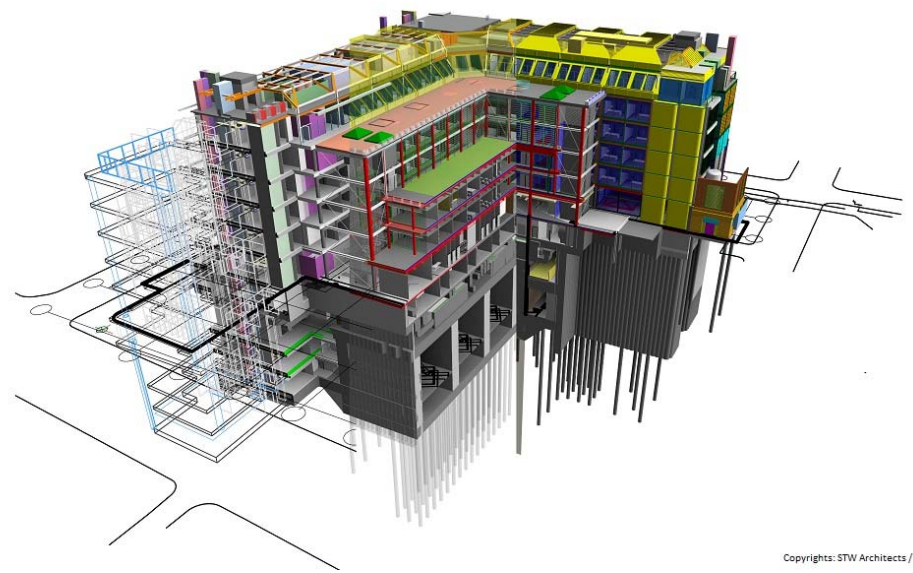
- FCM[®] Firestop Clash Management
 - Finds and places firestop systems and products
- MWF[®] Metal Wood Framer
 - Frames walls, floors, ceilings and through openings with steel/wood studs
- Howick[®]
 - Bend and cut steel framing members based on MWF[®] output on site from sheet steel

IMPLEMENTATION



Keeping Models Up to Date!

- The information in BIM is only as good as what you give it
 - Update Model throughout construction and during occupancy
 - Constant communication between Facilities Teams and BIM Coordinators



Copyrights: STW Architects / Bouygues UK



Paper Fire Barrier Management

- Meant for setting standards not documenting installations
 - Defines what solutions to use
 - Not where problems physically exist in the building



Proprietary Software Systems

- Locked into a Vendor's Platform
- Data typically not easily exported
- Requires dedicated hardware
 - Not re-deployable with other solutions
- Can lock you to the Vendor's Products as well!



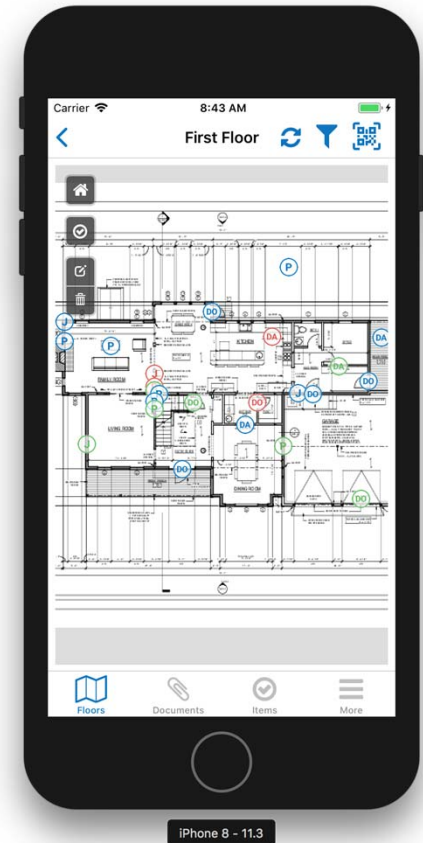
What You Need to Track Life Safety Changes?



- Easily updated & Interactive floor plans
- Interoperability with BIM/Revit®
- Track Firestops, Fire-Rated Doors, Dampers, Etc.
- Fully functional on any device/platform
 - Web Browser, iOS, Android
 - Phones, Tablets, Desktop/Laptop
- Data exportable to any other system
- BYOD (Bring Your Own Device)

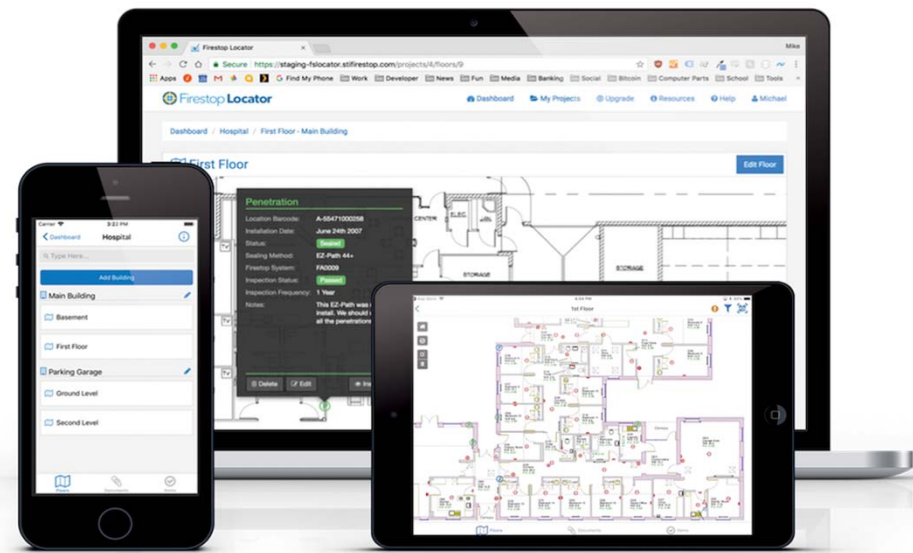
Nice to Haves

- Ability to segment projects
 - By Location or Individual Buildings at the same location
- Manage multiple teams on any site
- Sharing and storage of Life Safety Documentation
 - UL Systems, Engineering Judgments, Submittals, Approvals, Etc.
- Provide Inspectors access to comment/approve on site conditions

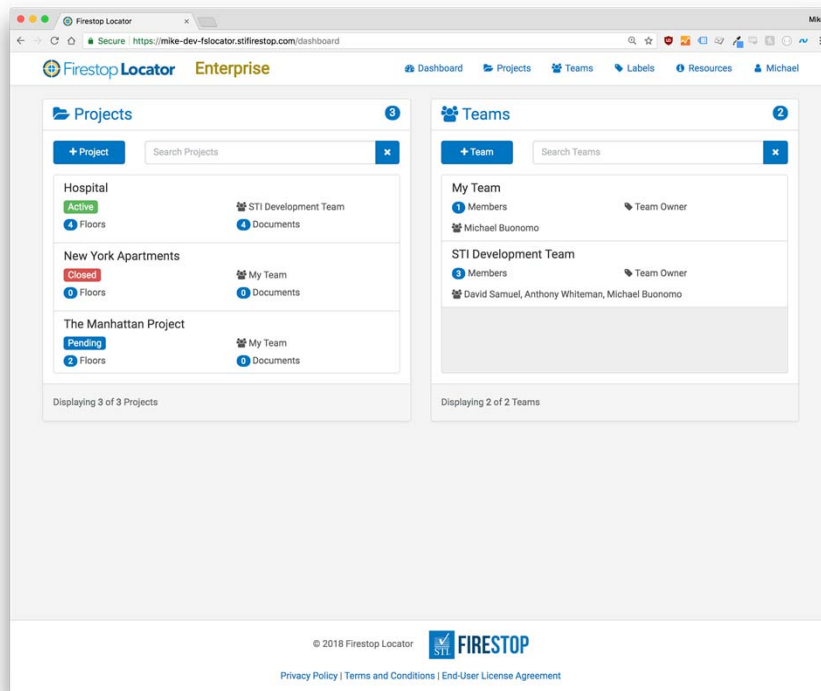


Firestop Locator®

- Fully interactive floor drawings
- Works on Desktop/Laptop, Phone, and Tablet
 - Bring Your Own Devices
- 24 Hour Team notifications
- Life Safety Service Agnostic
 - Tracks any vendor's product/installation
- Detailed reporting



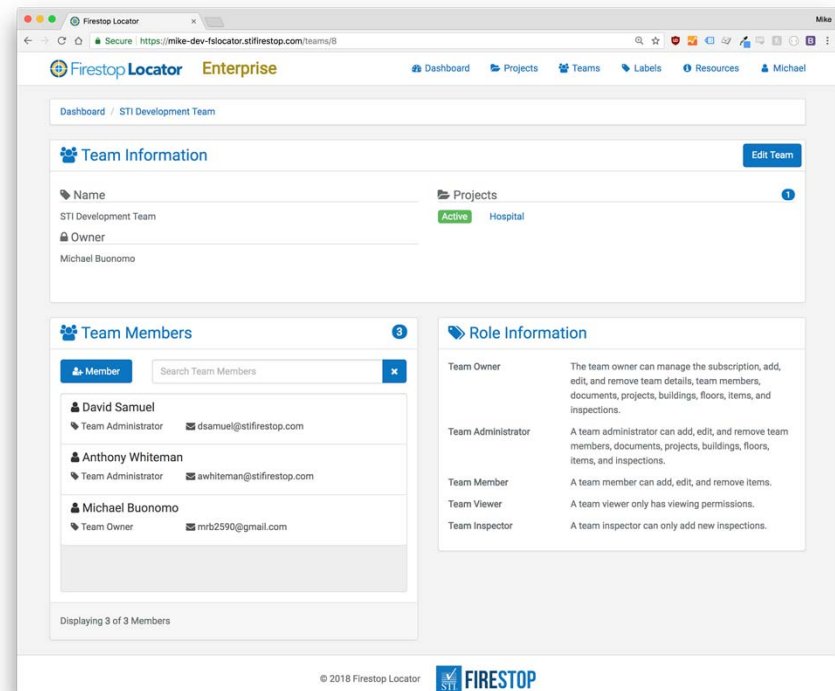
Management Dashboard



- Create and Remove Projects/Facilities
 - Including project status
- Manage Project Teams

Team and Role Information

- Team Members broken out by Role
 - Owner
 - Admin
 - Member
 - Viewer
 - Inspector

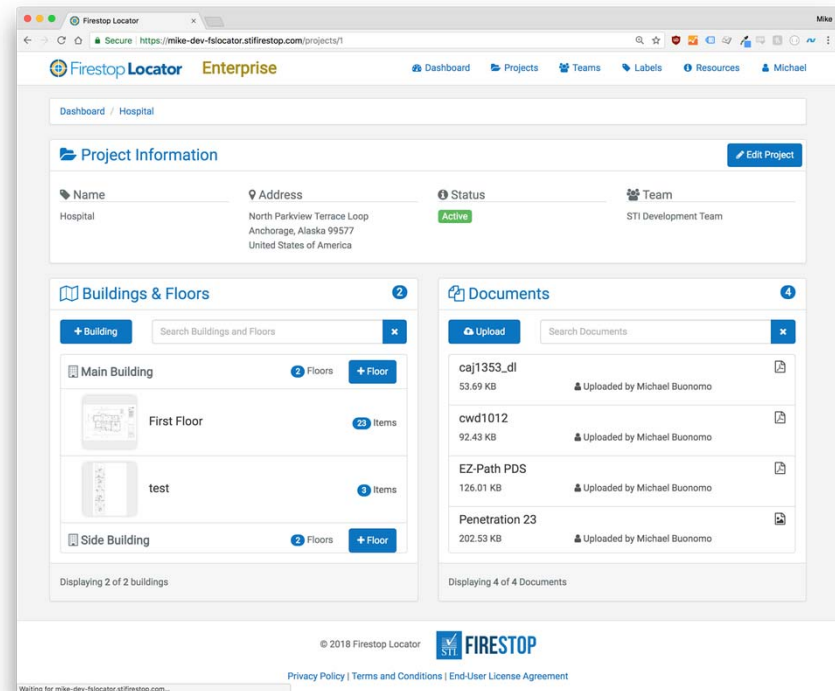


User Roles in Detail

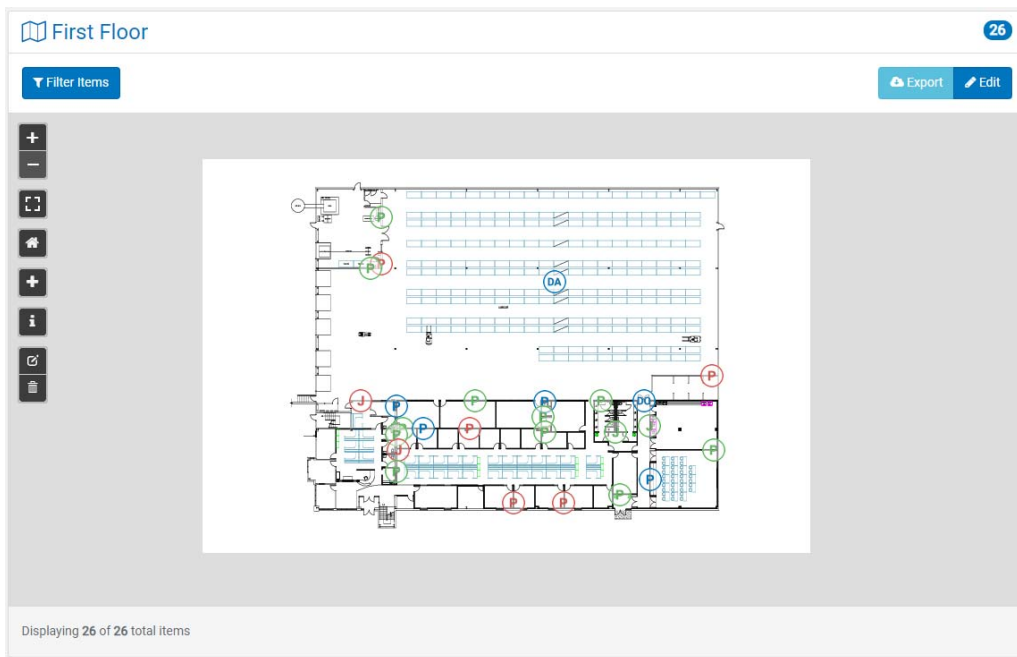
- Account Owner
 - Ultimate Authority of all aspects of the system
- Account Admin
 - Creates and Manages users, teams, and projects.
- Team Member
 - Anyone installing or manipulating life safety systems. Places and updates Markers
- Team Viewer
 - Can view markers but not manipulate
- Team Inspector
 - Reviews, approves, and/or rejects installed Life Safety Services.

Project Management

- Add buildings and floors
- Manage associated documents
- Set project status
- Assign teams

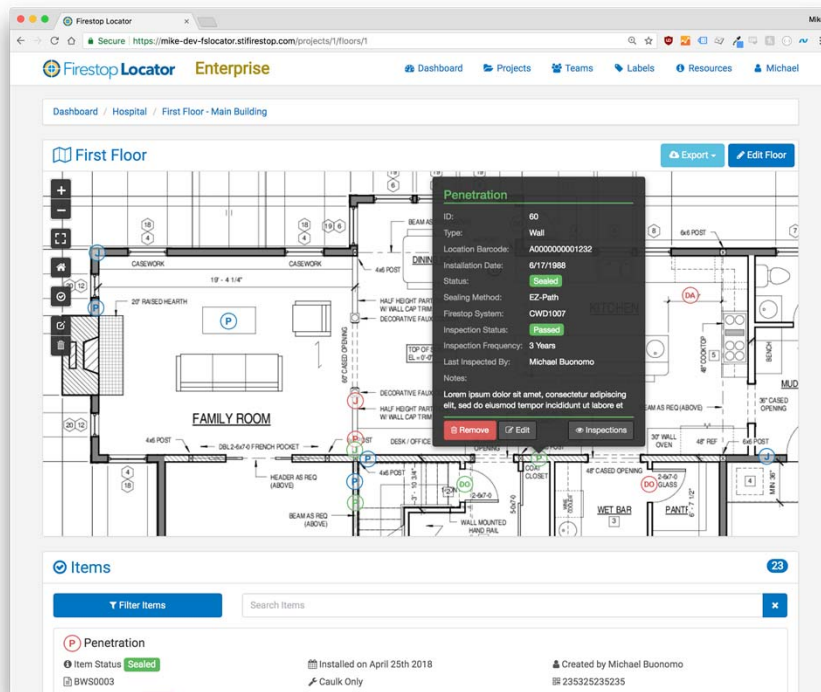


Taking it 1 Floor at a Time



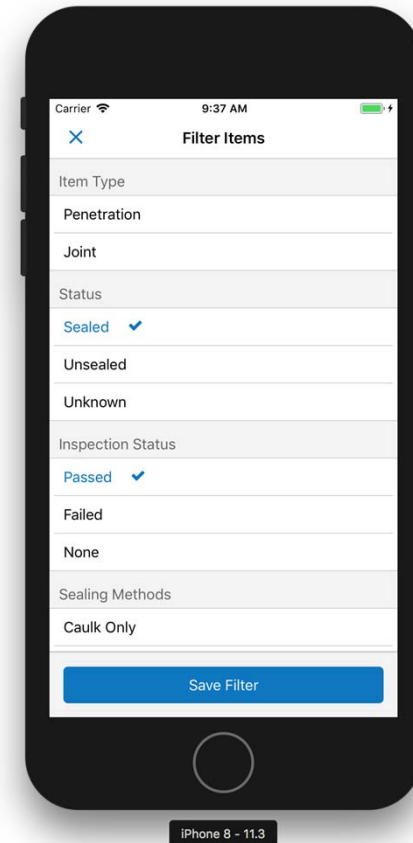
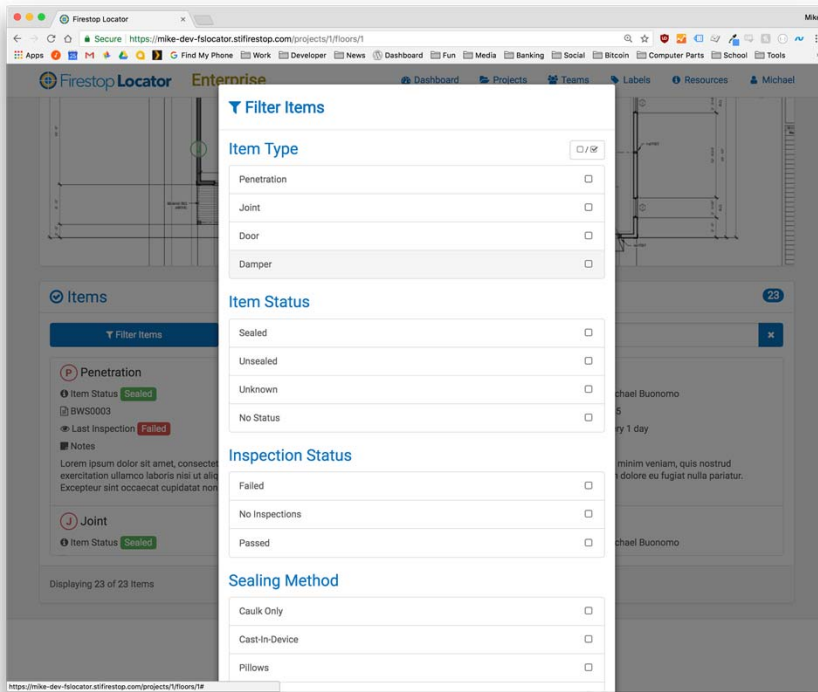
- Primary view for Inspectors and Installers
- Place, Review, and Edit markers for Life Safety Service
- Plans pulled from PDF, CAD, or Revit®

Markers for Each Life Safety Service



- Markers include:
 - Unique ID
 - Assembly Type
 - Location
 - Status (Sealed, Unsealed, Unknown)
 - Products used
 - Corresponding NRTL Documentation
 - Inspection Status
 - Pre and Post Install Photos

Creating and Editing Markers



Digital to Physical

- Labeling with QR Codes for documenting conditions
- Associates markers with physical location
- Provides quick access to review details
 - Scan QR Code and Go



<https://fslocator.stifirestop.com/item/A0000000001>



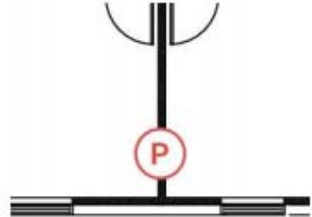
Inspection & Remediation

- Provides a place to inspect Life Safety Systems for compliance
 - Provides place for commentary and guidance on remediation
- Notifies relevant team members of inspection failures

STL FIRESTOP

ITEM 20606


ID 20606	Type Penetration
Sub Type Wall	Status Unsealed
Location Barcode A0000000027	Last Modified By Justin Pine on September 4, 2018
Installation Date October 18, 2016	
Inspection Status Failed	




Inspection History

Status	Date	Inspected By	Notes
Failed	April 18, 2017	Justin Pine	Liquor packaging is not appropriate packing material.

Images



Excel Reports

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2														
3	Title	Firestop Locator Floor Export												
4	Team	Sample Team												
5	Project	Sample Project												
6	Building	Headquarters												
7	Floor	First Floor												
8														
9														
10														
11	ID	Location Barcode	Room	Type	Installation Date	Status	Sealing Method	Firestop System	Weight	Notes	Created By	Last Modified By	Inspection Frequency	Latest Inspection Status
12	20582	A0000000001		Penetration	2016-10-18	Sealed	Caulk & Backing	WJ1108		Metallic Pipe with 6" diameter.	Justin Pine	Justin Pine		Failed
13	20583	A0000000002		Penetration	2016-10-18	Sealed	Putty	CAJ3154			Justin Pine	Justin Pine		Passed
14	20584	A0000000003		Penetration	2016-10-18	Sealed	Plug				Justin Pine	Justin Pine		No Inspections
15	20585	A0000000004		Penetration	2016-10-18	Sealed	Pillows	WJ4033			Justin Pine	Justin Pine		Passed
16	20586	A0000000006		Penetration	2016-10-18	Sealed	EZ-Path	WL3377		No further Maintenance needed per ESR.	Justin Pine	Justin Pine		Passed
17	20587	A0000000007		Penetration	2016-10-18	Sealed	EZ-Path	WJ3240		EZDR installed to correct prior deficiency.	Justin Pine	Justin Pine		Passed
18	20588	A0000000543		Penetration	2016-10-18	Sealed	EZ-Path	WL3377		No further Maintenance needed per ESR.	Justin Pine	Justin Pine		Passed
19	20589	A0000000009		Penetration	2016-10-18	Sealed	EZ-Path	WL3218			Justin Pine	Justin Pine		No Inspections
20	20590	A0000000010		Penetration	2016-10-18	Sealed	EZ-Path	FA3037		No further Maintenance needed per ESR.	Justin Pine	Justin Pine		Passed
21	20591	A0000000011		Penetration	2016-10-18	Sealed	EZ-Path	WL3306		No further Maintenance needed per ESR.	Justin Pine	Justin Pine		No Inspections
22	20592	A0000000012		Penetration	2016-10-18	Sealed	FyreFlange	WL7164			Justin Pine	Justin Pine		Passed
23	20593	A0000000013		Penetration	2016-10-18	Sealed	Collar (Factory)	WL2237			Justin Pine	Justin Pine		Passed
24	20594	A0000000014		Penetration	2016-10-18	Sealed	Collar (Factory)	CAJ2297			Justin Pine	Justin Pine		Passed
25	20596	A0000000016		Penetration	2016-10-18	Sealed	Mortar	CAJ8114			Justin Pine	Justin Pine		Passed
26	20597	A0000000017		Penetration	2016-10-18	Sealed				Non-rated penetration.	Justin Pine	Justin Pine		No Inspections
27	20599	A0000000020		Penetration	2016-10-18	Sealed	Composite Sheet	CAJ8181			Justin Pine	Justin Pine		Passed
28	20601	A0000000022		Penetration	2016-10-18	Unsealed	Caulk Only				Justin Pine	Justin Pine		Failed
29	20602	A0000000023		Penetration	2016-10-18	Unsealed					Justin Pine	Justin Pine		No Inspections
30	20606	A0000000027		Penetration	2016-10-18	Unsealed					Justin Pine	Justin Pine		Failed

PDF Reports



ITEMS

ID	Item	Type	Location Barcode	Room	Installation Date	Status	Method	System	Inspection Frequency
20582	Penetration	Wall	A0000000001		2016-10-18	Sealed	Caulk & Backing	WJ1108	
20583	Penetration	Wall	A0000000002		2016-10-18	Sealed	Putty	CAJ3154	
20584	Penetration	Wall	A0000000003		2016-10-18	Sealed	Plug		
20585	Penetration	Wall	A0000000004		2016-10-18	Sealed	Pillows	W4033	
20586	Penetration	Wall	A0000000006		2016-10-18	Sealed	EZ-Path	WL3377	
20587	Penetration	Wall	A0000000007		2016-10-18	Sealed	EZ-Path	WJ3240	
20588	Penetration	Wall	A0000000543		2016-10-18	Sealed	EZ-Path	WL3377	
20589	Penetration	Wall	A0000000009		2016-10-18	Sealed	EZ-Path	WL3218	
20590	Penetration	Floor	A0000000010		2016-10-18	Sealed	EZ-Path	FA3037	
20591	Penetration	Wall	A0000000011		2016-10-18	Sealed	EZ-Path	WL3306	
20592	Penetration	Wall	A0000000012		2016-10-18	Sealed	FyreFlange	WL7164	
20593	Penetration	Wall	A0000000013		2016-10-18	Sealed	Collar (Factory)	WL2237	
20594	Penetration	Wall	A0000000014		2016-10-18	Sealed	Collar (Factory)	CAJ2297	
20595	Joint	Head of Wall	A0000000015		2016-10-18	Sealed	Spray	HWD0371	
20596	Penetration	Wall	A0000000016		2016-10-18	Sealed	Mortar	CAJ8114	
20597	Penetration	Wall	A0000000017		2016-10-18	Sealed			
20598	Joint	Head of Wall	A0000000019		2016-10-18	Sealed	Track Top Gasket	HWD0696	
20599	Penetration	Floor	A0000000020		2016-10-18	Sealed	Composite Sheet	CAJ8181	
20600	Joint	Head of Wall	A0000000021		2017-10-18	Unsealed			
20601	Penetration	Wall	A0000000022		2016-10-18	Unsealed	Caulk Only		
20602	Penetration	Wall	A0000000023		2016-10-18	Unsealed			
20603	Door	Smoke	A0000000024		2016-10-18	Sealed			



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ITEM 20603

ID
20603

Type
Door

Sub Type
Smoke

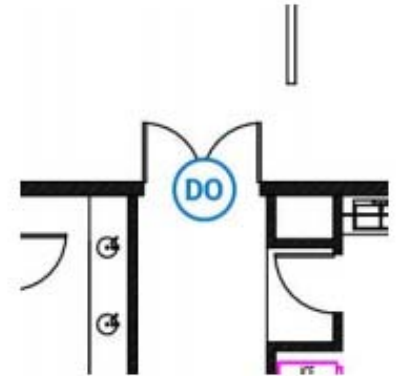
Status
Sealed

Location Barcode
A0000000024

Last Modified
By Justin Pine
on September 4, 2018

Installation Date
October 18, 2016

Inspection Status
Not Inspected



Images



Where to go to learn more?

- Firestop Vendor of Choice
- Third-Party Inspectors
- Specialty Firestop Contractor (SFC)