Presentation Overview

• Basics of Field Engineering
• Site Evaluation Process- What is reviewed?
• New Construction and Projects:
  – Plan Review
    • Design Phase
    • Shop Drawings and Spec. Sheets
  – Project Visits
  – Project Acceptance
• Where does Firestopping fit in?
• Summary
• Question and Answer
Basics of Field Engineering

- Field engineering is a service provided to all FM Global insureds.

- Field Engineering activities result in recommendations for improvement.

- Recommendations made are based on FM Global Research and Loss History.
Site Evaluation Process

• Nearly all facets of a building and their systems are reviewed/evaluated.
  – Inspection Programs
  – Building Envelope
  – Critical areas (electrical, mechanical, etc.)
  – Fire protection systems (fire alarm, sprinkler, special protection)
  – Natural hazard exposures

• Deficiencies are noted and associated recommendations are made.

• Client reviews these recommendations and makes decisions to complete, weighing the cost and benefit.
New Construction and Projects
Plan Review-Design Phase

– Client contacts Field Engineering to discuss scope of project, which includes:

  • Fire protection specifications
  • Roofing and wind loading specifications
  • Electrical specifications
  • Interior finish and wall construction specifications
  • Special protection and occupancy specific items

– Applicable FM Global Data Sheets are referenced.
Plan Review-Design Phase

– Project schedule

– Initial schematics and project specifications

– Comments included in project documents.

– Subsequent releases reviewed (50%, 90%, etc.)

– Recommendations tracked through the entire process and reevaluated at all points of construction.
Plan Review-Shop Drawings & Spec. Sheets

– Shop drawings are issued by the subcontractors.
  • Typically issued through the GC.

– Drawings and all applicable products are reviewed.

– Review comments are made and shop drawings revised accordingly. (Not always)

– Specification sheets reviewed.
  • Installation requirements and details noted.
  • FM Approval and/or acceptance noted.
Project Visits

– Project Meetings and necessary ‘Kick-Off’ Meetings.

– Project is toured and evaluated at key benchmarks.
  • Larger projects are visited more frequently.

– Installations of systems – roofing, firestopping, sprinkler – are reviewed and compliance, with FM Data Sheets and Approvals, is determined.

– Recommendations for alterations/enhancements to systems are made, based upon site specific factors.

– Acceptance testing is conducted with appropriate trades.
Project Acceptance

– All systems within a Project are evaluated once complete.
– Outstanding recommendations are discussed with the client.
– A formal inspection of the facility is conducted once commissioned.
Where does Firestopping fit in?

• *Firestopping becomes an integral part of the entire process (as discussed).*
• *Adequate installation and understanding of installation requirements (UL/FM) is key.*
• *Ensuring compartmentalization of the occupancy and critical areas is key to limiting loss.*
  – *Adequate slab-edge and slab penetration protection.*
  – *Wall penetration protection.*
Where did Firestopping fit in?

• Large complex in Connecticut

• Hospital Campus in New England.
Summary

- **FM Global Field Engineering is ‘All Encompassing’**.
- **Existing buildings are evaluated based on loss experience and best engineering advice.**
- **New construction and projects are reviewed and followed.**
- **Final acceptance of building is based on FM Data Sheets and satisfactory installation of systems and components.**
- **Open recommendations reviewed and discussed with client.**
Thank you
Questions?