FCIA Firestopping Industry Trends for 2013 and beyond

Critical Firestopping Industry Items

November 7, 2012
FCIA Firestopping Industry Trends for 2013 and beyond

• Opportunity
  – Contractors
  – Consultants
  – Manufacturers
  – Reps/Distributors

• FCIA Committees
  - ASTM Inspection in IBC
  - Contractor, SIA Programs
  - Worldwide Growth
  - Education...

• Building Installed Reliability...
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Trends for 2013 and beyond

• **IBC ‘12 ASTM E 2174 & ASTM E 2393**
  – Adapted by jurisdictions in ....
    • Maryland
    • Missouri
    • South Dakota
    • Wyoming
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- **ASTM E 2174 & ASTM E 2393 in 2012 IBC**
  - FCIA 2009 Code Proposal Approved for 2012 IBC
  - 1705.16 Fire-resistant penetrations and joints. In high-rise buildings or in buildings assigned to Risk Category III or IV in accordance with Section 1604.5, special inspections for through-penetrations, membrane penetration firestops, fire resistant joint systems, and perimeter fire barrier systems that are tested and listed in accordance with Sections 714.3.1.2, 714.4.1.2, 715.3 and 715.4 shall be in accordance with Section 1705.16.1 or 1705.16.2.
  - 1705.16.1 Penetration firestops. Inspections of penetration firestop systems that are tested and listed in accordance with Sections 714.3.1.2 and 714.4.1.2 shall be conducted by an approved inspection agency in accordance with ASTM E 2174.
  - 1705.16.2 Fire-resistant joint systems. Inspection of fire resistant joint systems that are tested and listed in accordance with Sections 715.3 and 715.4 shall be conducted by an approved inspection agency in accordance with ASTM F 2393.
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• ASTM E 2174 & ASTM E 2393 in 2012 IBC - FCIA 2009 Code Proposal Approved

1604.5 – Category III - Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to:
• ...whose primary occupancy is public assembly with an occup. load greater than 300.
• ...elementary school, secondary school or day care facilities – occupancy load greater than 250.
• ...adult education facilities, such as colleges and universities, with an occ. greater than 500.
• Group I-2 occupancies with an occupant load of 50 or more resident care recipients but not having surgery or emergency treatment facilities.
• Group I-3 occupancies.
• Any other occupancy with an occupant load greater than 5,000a.
• Power-generating stations, water treatment facilities for potable water, waste water treatment facilities and other public utility facilities not included in Risk Category IV.
• Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that:

Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the International Code; and are sufficient to pose a threat to the public if released.
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1604.5 - Category IV - Buildings and other structures designated as essential facilities, including but not limited to:

- Group I-2 occupancies having surgery or emergency treatment facilities.
- Fire, rescue, ambulance and police stations and emergency vehicle garages.
- Designated earthquake, hurricane or other emergency shelters.
- Designated emergency preparedness, communications and operations centers and other facilities required for emergency response.
- Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures.
- Buildings and other structures containing quantities of highly toxic materials that:
  Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the International Fire Code; and are sufficient to pose a threat to the public if released.
- Aviation control towers, air traffic control centers and emergency aircraft hangars.
- Buildings and other structures having critical national defense functions.
- Water storage facilities and pump structures required to maintain water pressure for fire suppression.
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• **ASTM E 2174 & ASTM E 2393 in 2012 IBC**
  
  – **Scenario...now, and next few years...**
  
  – Spec – FM & UL Contractor
  
  – GC – ‘He who Pokes Hole Fills it’
  
  – Special inspection in spec/code, hired by Owner
  
  – Trades unaware of ‘systems’
  
  – Special Inspection Agency rejection, causes delays and additional costs associated...
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• ASTM E 2174 & ASTM E 2393 in 2012 IBC
  – Special Inspection Agency to Owner...mess!!
  – Building owner to GC & Architect
    • Why such a mess?
  – Architect
    • ‘I Specified FM 4991 Approved, UL Qualified Firms’
  – GC – I control who does the work...
  – Owner – GC, obviously, this is a mess...fix it!!
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• **ASTM E 2174 & ASTM E 2393 in 2012 IBC**
  – GC – Trades – ‘You’re fired, give me credit’
  – GC – Specialty Firestop Contractor, FM / UL/ULC Contractor
  
  • ‘*This project needs to get back on track*…
  • ‘*How much to get you here today?’
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• **ASTM Inspection results in Specialty Firestop Contractor’..**
  – Quantified ‘L’ Ratings – 100cfm/100sf wall
  – Physical Properties of Materials resist field conditions
    • Movement ?
    • Moisture & ‘W’ (water )
    • Chemicals
    • How long will Firestopping last?
    • Warranties (Kevin Dale, Friday)
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• ASTM Inspection plus IAS AC 291 results in Specialty Firestop Contractor’
  – IAS Accredited Inspection Agencies means educated inspector at project site.
  – Educated Inspector means trades cannot mess up
  – FCIA Consultant Members – 18 Firms
  – IAS AC 291 Accredited – 2 Firms
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• **ASSE 9000**
  – FCIA, IFC, Consultants
    • 8000 Hour Firestop Containment Worker
    • Firestop Requirement for ALL TRADES
FCIA Firestopping Industry
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• FM 4991 & UL Qualified Contractor Programs
  – FCIA Accreditation Committee & FM, UL...others discussing improvements
  – More tomorrow...
FCIA Firestopping Industry
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- Education & Workforce
  - Firestop / Containment Worker Career
    - Firestopping
    - Door Maintenance
    - Damper Maintenance
    - Barrier Repair
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• **Education**
  – FCIA promoting Specialty Firestop Contractors and Special Inspection at
    • ICC – International Code Council
    • IAS - International Accreditation Services
    • NFPA – National Fire Protection Assoc.
    • ASHE – Amer. Society of Healthcare Engineers
    • CSI, CSC – Construction Specifications Institute, Canada
    • ASSE – American Society of Safety Engineers
  – FCIA Education Continues
    • Webinars & Face to Face
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• Licensing - Legislative
  – FCIA Members Active
    • Ohio
    • Wisconsin
    • Louisiana
    • Others???
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• Firestop Contractors - Worldwide DIIM Focus
  – North America – USA, Canada
  – Middle East – UAE, Qatar
  – UK
  – Australia
  – Taiwan

• As membership grows, concept grows...

• FCIA at High Levels of ICC, IAS, NFPA, ASHE, JC...
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