Assisted Living Facilities 2021

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Today's Topics

- Applicable Codes, Policies, and Procedures
- Commonly Cited Deficiencies
- Fire-rated Systems

Applicable Codes, Policies, Procedures

- Working with the State Fire Marshal Division
- State Fire Code
- Iowa Administrative Code
- State Fire Marshal Policies
- Emergency Evacuation Plan/Fire Drills

Applicable Codes, Policies, Procedures

- Working with the State Fire Marshal Division
  - Drawings for new projects, additions, and remodels will need to be prepared by a design professional
    - The project will need to have a Preliminary Review
      - In person or remote meeting (Currently only remote due to Covid-19)
    - An application will need to be submitted online @ https://dps.iowa.gov/divisions/state-fire-marshal/building-code
      - Anyone can submit a project application
    - New facilities and additions will require a Building Code Inspection
      - Emergency evacuation plans will need to be submitted to DIA
    - All new work will require a Fire Code Inspection

Applicable Codes, Policies, Procedures

- Working with the State Fire Marshal Division
  - Three ways of gaining approval
    - Apply for an exemption from full plan review
      - Minor alterations that don't affect the fire/life safety of the building
      - Such as adding a bar to an activity space
    - Apply and SFM Engineer grants exemption from full plan review after a preliminary meeting
      - Slight alteration fire/life safety
      - Architect involved in preliminary meeting
      - Such as changing the use of a space and altering the occupant loads
    - Apply for full plan review
      - Will include preliminary meeting
      - Significant renovations or adding square footage to the building

Applicable Codes, Policies, Procedures

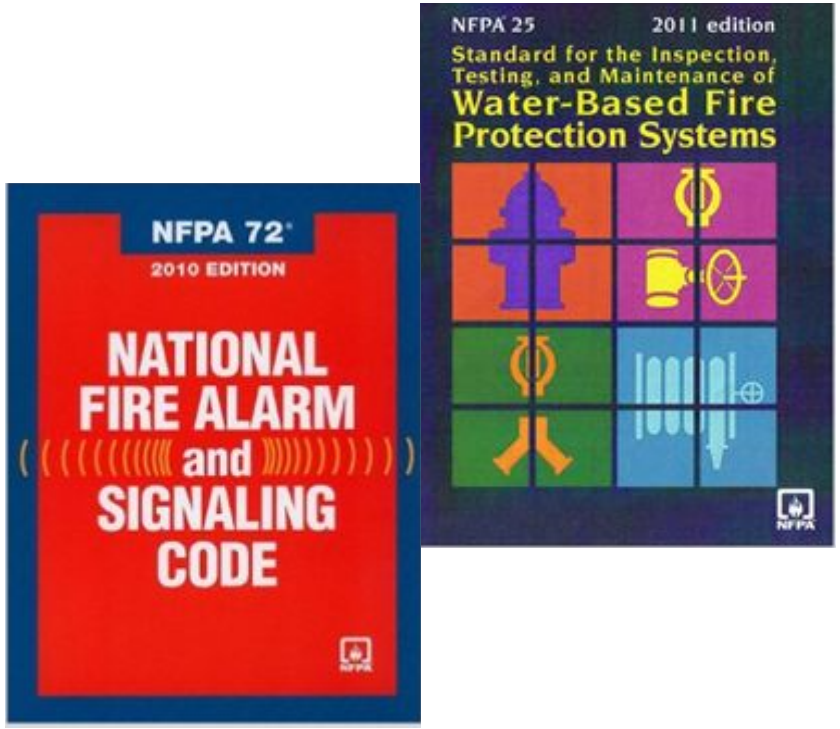
- State Fire Code
  - Iowa Administrative Code 661-201
    - References the 2015 International Fire Code (IFC)
    - References the 2015 International Building Code (IBC)
      - Both codes are nationally recognized
      - Both are adopted by many local jurisdictions throughout the state
      - The 2021 Building and Fire Codes will be adopted
- Accessibility - 2010 ADA

Applicable Codes, Policies, Procedures

- Iowa Administrative Code
  - Department of Inspection and Appeals
    - Assisted Living
      - IAC 481-67 - Group Homes, Assisted Living, and Adult Day Services
        - General Provisions
        - 67.6 - Another business or activity located within a program
      - IAC 481-69 - Assisted Living Programs
        - The chapter outlines the scope of the division's involvement

Applicable Codes, Policies, Procedures

- NFPA Standards
  - NFPA 10, 2013 edition
  - NFPA 13, 2013 edition
  - NFPA 25, 2014 edition
  - NFPA 72, 2013 edition
  - NFPA 96, 2014 edition
  - NFPA 110, 2013 edition

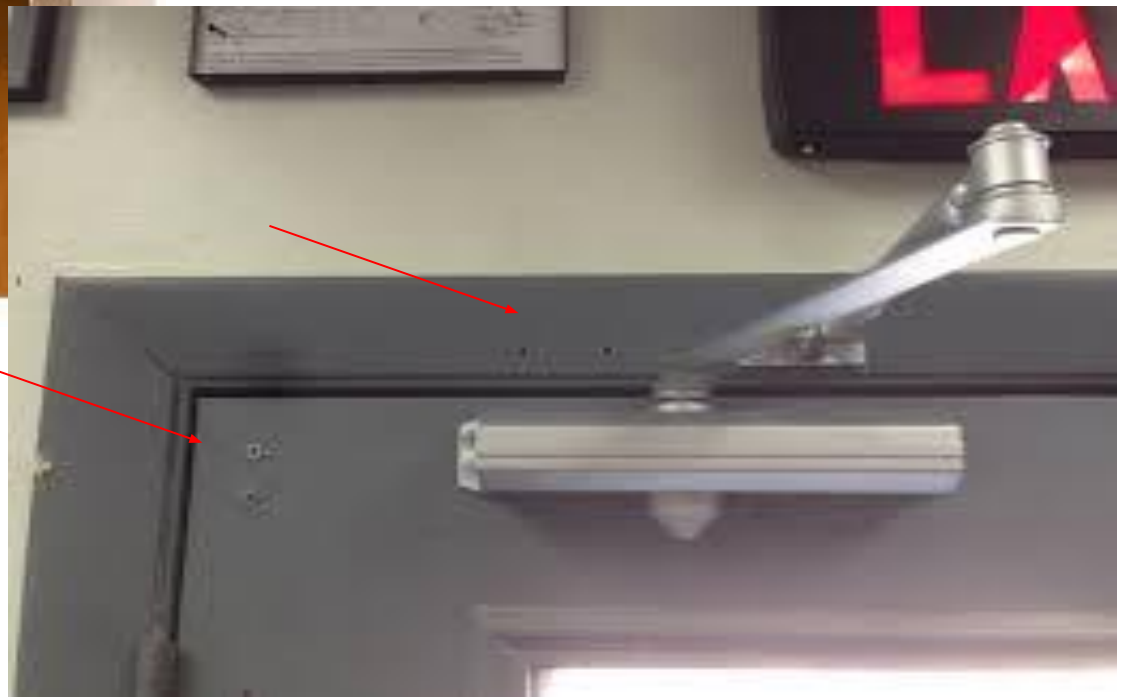


Applicable Codes, Policies, Procedures

- State Fire Marshal Policies
  - Residential Hood Policy
    - Allows for domestic cook tops to be protect by a residential hood with a UL300A suppression system
    - Only when used for preparing meals for 16 residents or less
    - Cooking equipment cannot be open to to the corridor

Applicable Codes, Policies, Procedures

- State Fire Marshal Policies
  - Door-closing Device Policy
    - Allows door-closing devices to be removed from dwelling unit door
    - Cannot have a stove within the unit
    - Policy is not recommended to be used to omit devices from design
      - Recommended to be used in individual cases only when necessary
      - May not be permitted by some local jurisdictions
      - Avoid leaving holes in doors and frames



Applicable Codes, Policies, Procedures

- Emergency Evacuation Plan and Fire Drills
  - Emergency Evacuation Plan - IAC 481-69.32
    - (1) The Plan
      - A. Natural disaster procedures
      - B. Fire safety procedures
        - Residents to be transported into a refuge area then out of the building
      - C. General and person procedures
        - Might be specific to the facility or types of patients
      - D. Provisions for changing the plan

Applicable Codes, Policies, Procedures

- Emergency Evacuation Plan and Fire Drills
  - Emergency Evacuation Plan - IAC 481-69.32
    - (1) The Plan
      - E. Provisions for employee training
      - F. Fire drill procedures
      - G. Smoking regulations
      - H. Monitoring and testing of smoke-control systems
      - I. How to get the tenants out
      - J. Reporting and documentation procedures

Applicable Codes, Policies, Procedures

- Emergency Evacuation Plan, Structure Safety, and Fire Drills
  - Structure Safety - IAC 481-69.32
    - (2) Exit doors in dementia-specific programs must have an operating alarm system
    - (3) Any delayed-egress specialized locking systems must be approved
    - (4) Programs with residents who have cognitive disorders:
      - Written procedures for alarm systems that are in place
      - Written procedures for how staff should respond to residents who have wandering tendencies or are a risk for elopement
      - Written procedures for how staff should handle a missing person
    - (5) Occupancy must be approved by the State Fire Marshal's office
    - (6) Means to control water temperature to prevent scalding

Applicable Codes, Policies, Procedures

- Fire Drills
  - IAC 661-201/IFC Chapter 4
    - Those who are capable of evacuating themselves will need to practice where to go in the event of a fire
    - Training to include evacuation through an adjacent smoke compartment and then to an exterior assembly point
      - We permit exiting through a horizontal exit (2-hour firewall or barrier)

Applicable Codes, Policies, Procedures

- Fire Drills
  - IAC 661-201/IFC Chapter 4
    - Residents can be trained to assist one another
      - Residents need to be mentally and physically capable
      - Cannot pose a risk to either resident
    - Frequency
      - 12 drills in the first year of operation
      - Otherwise, 6 drills a year
      - 2 drills per year on each shift
      - At least 2 drills need to be when residents can reasonably be expected to be sleeping

Commonly Cited Deficiencies

- Doors/Means of Egress
- Electrical
- Fire Suppression
- Fire Alarms

Commonly Cited Deficiencies

- Doors
  - Doors not closing and latching properly
  - Doors not sealing properly (warped)
  - Door wedges are not permitted
  - Electromagnetic hold opens connected to the fire alarm are allowed for any doors on self-closing devices

Commonly Cited Deficiencies

Commonly Cited Deficiencies

Door closed and sealed

Door open

Commonly Cited Deficiencies

Missing Signage

Commonly Cited Deficiencies

- Doors/Means of Egress
  - All newly installed door locks must have prior approval from the State Fire Marshal.
  - A door locking guide can be found on the SFM website: *http://www.dps.state.ia.us/fm/inspection/PDFs/DLG-NonHC-2018.pdf*

Commonly Cited Deficiencies

- Means of Egress
  - Proper Exit lights and locations
  - Door hardware
  - Hard surface to “Public Way”
  - Emergency Lighting

Commonly Cited Deficiencies

- Means of Egress
  - Emergency Lighting
    - Testing- every month for 30 seconds and once a year for 90 minutes
    - When you log your test results list all units separately and note if they were tested for 90 minutes or 30 seconds
    - Beware of:
      - Battery operated unit failed to illuminate
      - Improper documentation (each unit not being individually listed on the testing log

Commonly Cited Deficiencies

- Means of Egress
  - Exit Signs
    - They need to be on emergency generator power (or) battery backup
    - 100 foot rule
    - Arrows? Left? Right? None?

Commonly Cited Deficiencies

- Electrical
  - Extension cords
  - Electrical adapters
  - Improper surge protector use
  - GFCI electrical receptacles

Commonly Cited Deficiencies

- Fire Suppression - Sprinkler System
  - **5.2.1.1.2** Any sprinkler that shows signs of any of the following shall be replaced:
    - (1) Leakage
    - (2) Corrosion
    - (3) Physical damage
    - (4) Loss of fluid in the glass bulb heat responsive element
    - (5)*Loading (coated with dust)
    - (6) Painting unless painted by the sprinkler manufacturer

Commonly Cited Deficiencies

- Fire Suppression - Sprinkler System
  - **Failure to Meet Inspection, Testing, & Maintenance Requirements NFPA 25, 2014 Edition, 5.1.1.2**
  - Annual testing (5.2.1, 5.2.2, 5.2.3, 5.2.1.4, 5.2.6.1)
  - Quarterly inspections & testing (5.2.5, 5.2.6, 5.3.3.1)
  - Internal obstruction investigation – 5 years (14.2)
  - Gauges – 5 years (5.3.2)
  - *(See Table 5.1.1.2 – NFPA 25, 2014 Edition)*

Commonly Cited Deficiencies

Commonly Cited Deficiencies

- Fire Suppression - Sprinkler System
  - Debris on the sprinkler head (can be cleaned)
  - Paint on the sprinkler head (must be replaced)
  - Missing escutcheon rings
  - No quarterly testing
  - 18 inch clearance
  - Failure to provide enough spare sprinklers

Commonly Cited Deficiencies

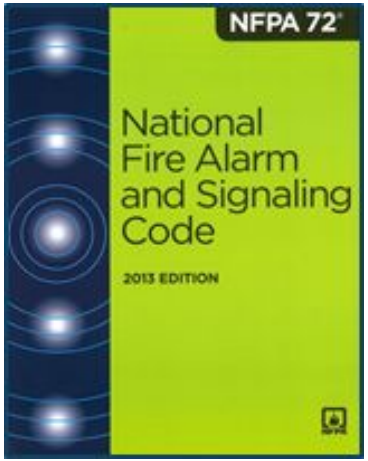
- Fire Suppression - Portable Fire Extinguishers
  - Inspected, Tested, maintained in accordance with NFPA 10
  - Locations in accordance with 2015 IFC section 906
  - Beware of:
    - Not Inspected by facility monthly (sign and date card)
    - Not Inspected by a trained tech yearly
    - Not Maintenanced every 6 years
    - Not Hydro tested every 12 years
    - Mounted too high? (5 feet or less) more than 4 inches off the ground)
    - Blocked?

Commonly Cited Deficiencies

- Fire Alarms
  - All devices connected to your fire alarm system need to have evidence that each individual device was tested.
  - You need an accurate inventory of every device, complete with a description as to where it is located.
  - The test report needs to list each and every individual device, a description of where it is located, and whether it passed or failed its test.

Commonly Cited Deficiencies

- Fire Alarms
  - 14.4.4 Testing Frequencies (examples):
    - Control equipment (monitoring) – **Annually**
    - Initiating devices (smoke detection & heat detection) – **Annually**
    - Manual fire alarm boxes – **Annually**
    - Voltage test (batteries) – **Semi-annual**
    - Waterflow devices – **Semi-annual**



Commonly Cited Deficiencies

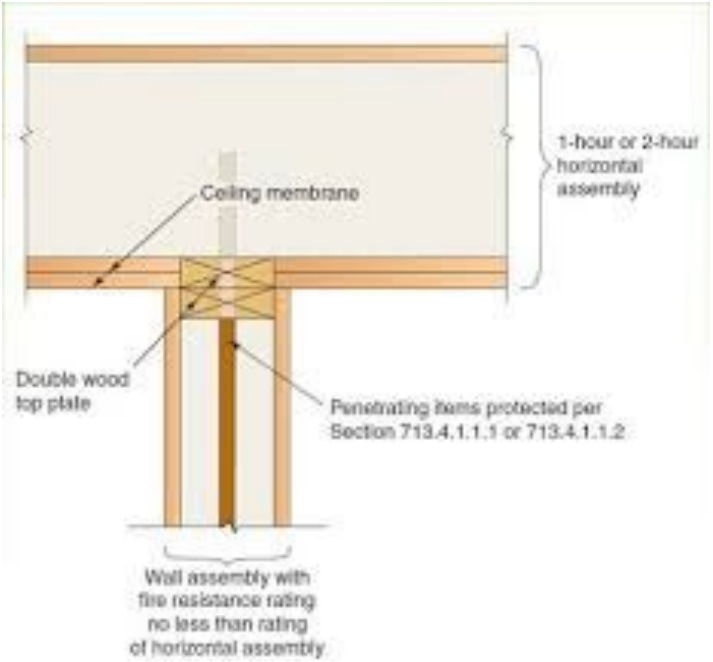
- Fire Alarms
  - System not inspected and tested semi-annually
  - Improper documentation of the fire alarm inspection
  - Fire alarm system does not indicate trouble upon disconnection of the remote automatic dialer panel (4 minutes)
  - Circuit disconnect for fire alarm system not locked and location not labeled at fire alarm control panel
  - Fire alarm control panel fails to monitor failure of battery charging in panel
  - Electromagnetic hold open devices re-engage when the fire alarm system is placed in silence

Fire-rated Systems

- Fire Partitions
- Fire Barriers
- Fire Walls
- Penetrations
- Joints
- Materials/Tested Assemblies

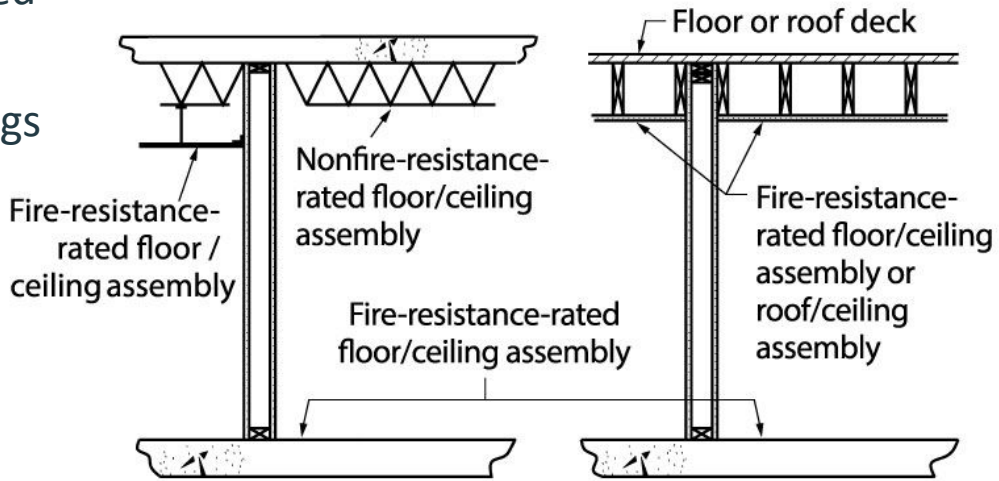
Fire-rated Systems

- Fire Partitions
  - Corridor walls and demising walls
    - 1-hour fire-resistance rating
    - Typically type X gypsum board
    - Can stop at a fire-rated ceiling
    - Must extend to the bottom of the floor above if the ceiling is not fire-resistance rated



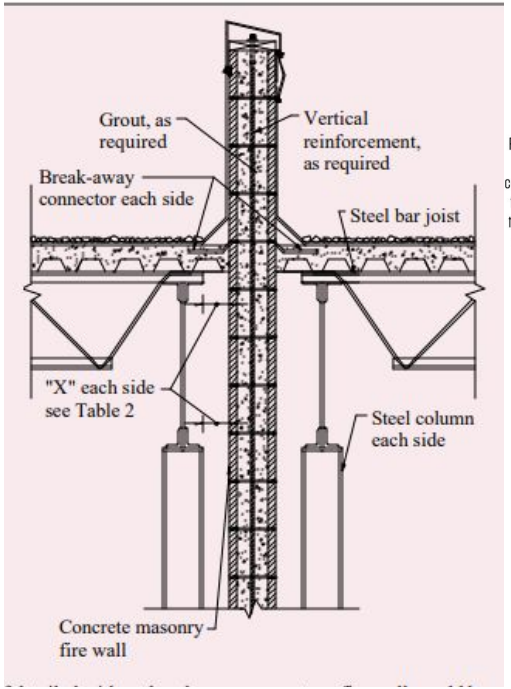
Fire-rated Systems

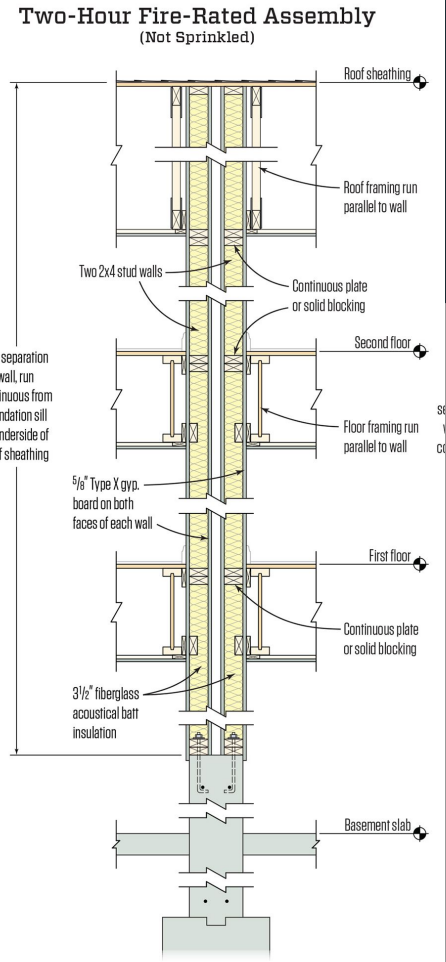
- Fire Barriers
  - Occupancy separation, Shaft enclosures (Stairways, mechanical, elevators, etc.), Horizontal assemblies (Floors)
    - Typically 1 or 2 hour rated
    - Type X gypsum for walls
    - Type C gypsum for ceilings
    - Walls must extend to the roof/floor above



Fire-rated Systems

- Fire Walls
  - 2-hour fire resistance rating minimum
  - Used to separate buildings
  - Must be continuous through all stories
  - The wall is designed to remain in the event that the structure on either side of the wall collapses





Fire-rated Systems

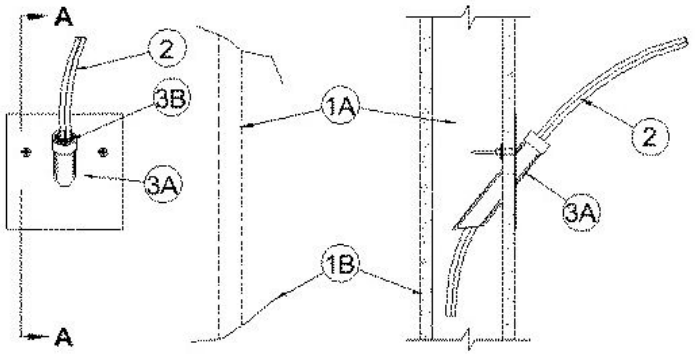
- Materials/Tested Assemblies
  - All fire/smoke rated walls are designed according to a specific tested assembly which describe
    - Type of materials (type sheetrock, insulation, screws, framing, etc.)
    - How the materials should be installed
  - Repairs need to be done with appropriate materials and respect the methods
    - Drywall joints need to overlap
    - Single layered sheetrock repair guide

Fire-rated Systems

- Materials/Tested Assemblies
  - Can holes just be filled with fire foam?
    - Never
  - Fire caulking?
    - Maybe

Fire-rated Systems

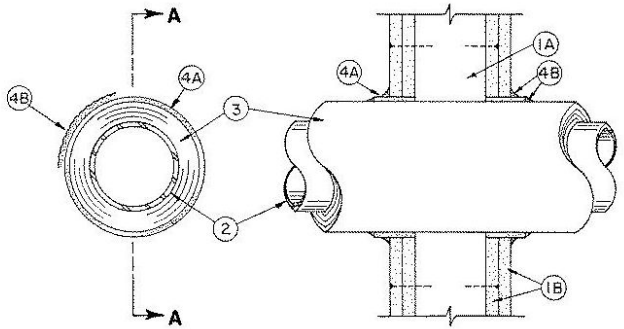
- Penetrations - Tested Assembly
  - Two types:
    - Membrane - one layer of the wall system
    - Through - penetration goes all the way through



System No. W-L-5001

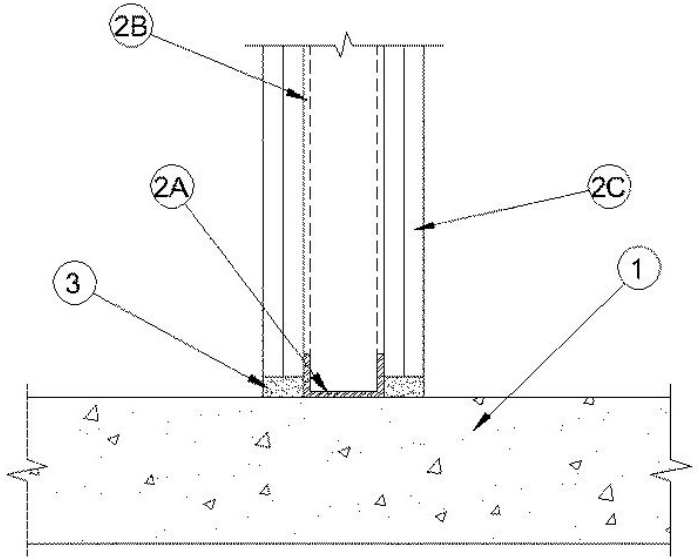
May 19, 2005

F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 3/4, 1 and 1-1/2 Hr (See Item 3)
L Rating At Ambient — 2 CFM/sq ft
L Rating At 400 F — less than 1 CFM/sq ft



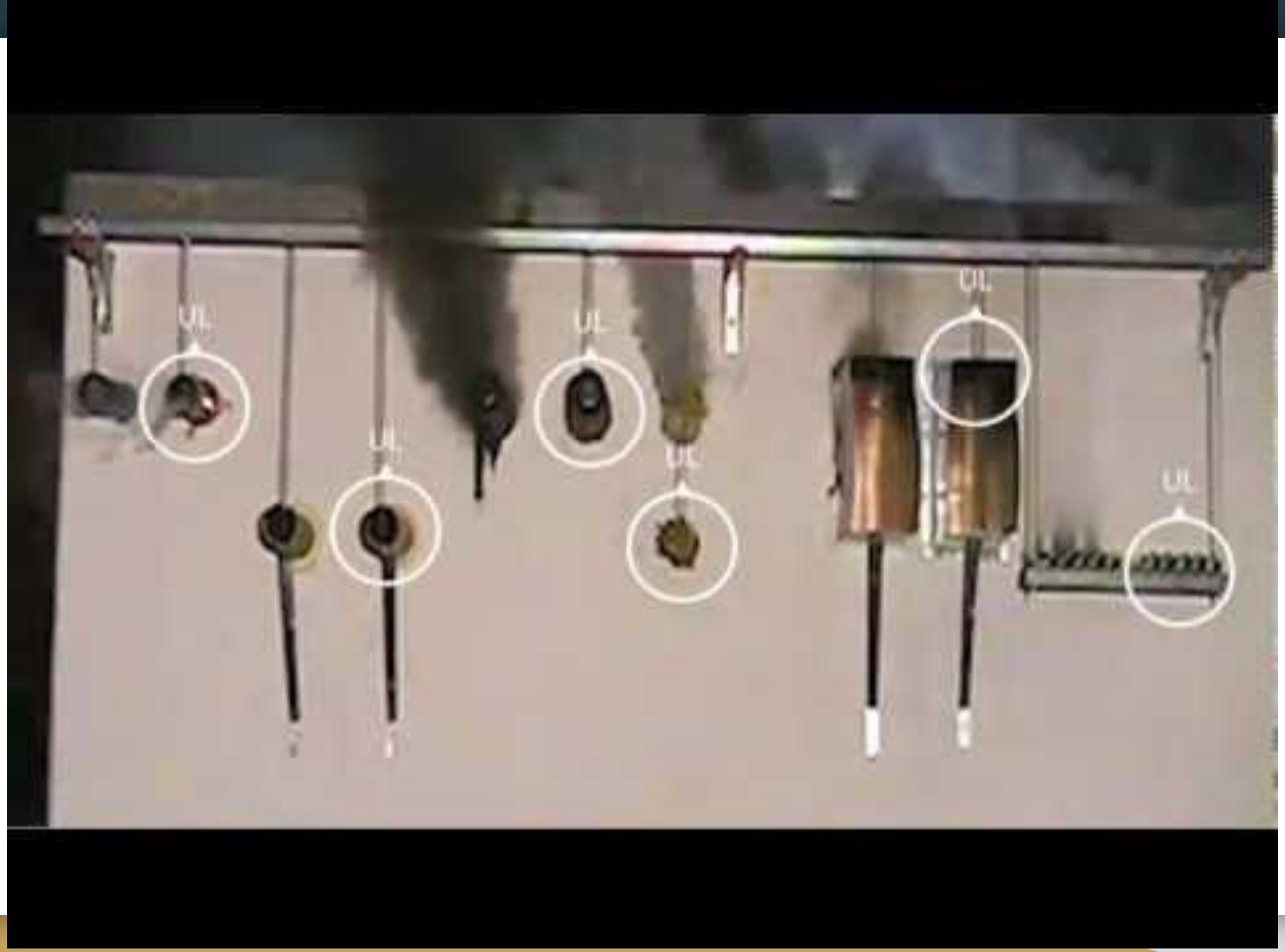
Fire-rated Systems

- Joints - Test Assembly
  - Where a rated wall meets the top or bottom of a floor system
  - Where a rated wall meets another rated wall of dissimilar materials
    - Wood framed wall meets a block wall



Fire-rated Systems

- Tested Assemblies
  - Each wall design, penetration, joint, and door/opening should be protected according to a tested assembly
  - Specific type of fire caulking, materials, and spacing are detailed in the listings.
  - If a rated wall has a gash that meets the criteria of a listed joint assembly, it may be able to simply be filled with fire caulking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- Why fire-stopping matters
  - A fire rated system is an engineered system
    - All individual parts need to function properly in order for it to provide the intended protection
  - These systems provide safe passage for residents to get to safety, but also for first responders coming in.
  - Property damage can be limited
  - Firestop contractors exist

Thank You

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