Spray Foam Issues in California

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California . . .

It’s different
SPFA Response

- SPFA is not normally active in individual state regulatory affairs
- California represents a large market
- Title 24 (California’s energy code) could become a model for other states
SPFA Response (cont.)

• California Energy Commission requested a single voice from the industry
• SPFA initiated a self-funded program to address California concerns
SPFA Response (cont.)
Program Sponsors

• Contractors
  – 5-Star Performance Insulation
  – Cool-Roof Systems
  – SDI Insulation
  – Western Pacific Roofing

• Suppliers
  – BASF
  – Bayer
  – CertainTeed
  – Demilec
  – Henry Co.
  – Honeywell
  – Huntsman
  – Icynene
  – NCFI
  – SWD

THANK YOU!
Uniqueness

- Licensing of insulation manufacturers
- Different building code
- Complicated energy code
- Unvented Attics
  - Wildland-Urban Interfaces
- Unique climate zones
CALIFORNIA BUILDING CLIMATE ZONES
(colors represent IRC climate zones)
Licensing Insulation Manufacturers

- BEARHFTI
- Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation
- Requires manufacturers to be licensed/certified to sell insulation products in California
- $2000 per year
Licensing Insulation Manufacturers

- BEARHFTI publishes a Thermal Insulation Directory listing all licensed manufacturers and their individual products
- Directory listing are not accurate or consistent
Licensing Insulation Manufacturers

• Listing problems
  – “URETHANE” vs. “POLYURETHANE”
  – R-value vs. k-factor
  – Initial R-value
  – Composite, System, Single Material, Faced Single Material
Licensing Insulation Manufacturers

- Directory DOES list the reported R-value (or k-factor)
- Goal of the Bureau: The Bureau is responsible for ensuring thermal insulation products offered for sale in California perform at the level stated by the manufacturer.
Title 24

- California’s Energy Code
- High degree of regulation
- State vs. Local Orientation
- Computer models
Title 24

• The Fiberglass Problem
• Easily installed incorrectly
• Quality Insulation Installation program (QII)
  – QII installation procedures
  – Checklist
  – HERS inspections
Title 24

• The Spray Foam Problem
• All SPF s required to full fill construction cavity
• R-value: Dumb down to lowest common denominator
  – Med Density 5.8
  – Low Density 3.6
Title 24

- Medium Density
  - Justification for partial fill
  - Installation procedures
  - Inspection procedures
  - Qualifies for QII
Title 24

- Low Density
  - Always permitted under Title 24
  - Requires full fill (?)
  - No installation procedure
  - No inspection procedure
  - Does NOT qualify for QII
Title 24

• What’s so important about QII?
  – Qualifies for extra energy credits
  – Other California entities have latched onto QII concept
    • EnergyStar
    • Rebates, incentives, discounts

• MD SPF OK
• LD SPF not OK
Title 24

• “No quality insulation installation compliance credit is allowed for low density SPF insulation.”

[from the CA Residential Compliance Manual]
Unvented Attics

• Initially disallowed due to computer modeling problems
• Pressure Points
  – Local code authorities
  – State Fire Marshal
• Wildland-Urban Interfaces
STATE OF CALIFORNIA

FIRE HAZARD
SEVERITY ZONES
IN STATE RESPONSIBILITY AREAS

Adopted by CAL FIRE on November 7, 2007
Unvented Attics

- Adoption of 2006 IRC in 2009
- Use of unvented attics now approved state-wide
Issues / Status

• LD SPF QII disqualification
  – Compliance Option application

• Recognition of listed R-values
  – Future effort

• Unvented Attics
  – OK to install

• BEARHFTI Directory
  – Still a mess
Lessons

• KNOW what’s going on in YOUR state
• Contact appropriate staffers
  – Communicate: Knowledgably, firmly and frequently
• Seek SPFA support as needed