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Building Permits: Quality HVAC Installations

Scott Blunk
September 10, 2021
Permitting and Quality HVAC Installation

- Permitting is a foundational item to improving HVAC installation quality
  - Customer Benefits
    - Value of property and neighborhoods are maintained
    - Saves energy / money
    - Safety and Health impacts
  - Contractor Benefits
    - Level playing field is established between all bidders
    - Reduces liability
    - Increases legitimacy of the profession

- Unpermitted work costs utilities/ incentive programs
  - Participating in programs, and permitting the work, costs $200-$400 per installation when the cost of not obtaining a permit is essentially $0

- This has cost SMUD ~$1.1M in the last 3 years on HVAC alone
Now more than ever – Quality Matters

- There are a lot of gas furnace to be replace with heat pumps
- Quality installations of heat pumps lead to better customer satisfaction
- Permit compliance is a step in ensuring this transition when code aligns

![Graph: Percent of New Sales by Technology Type for Residential Space Heating and Water Heating in the High Electrification Case (2015–2050)]

Source: E3
Permit Compliance

• Improving Compliance Options
  • Equipment Registration – CEA Proposal
  • City of Davis, CA has near 100% compliance
  • Boulder Colorado has ~75% compliance
    • Study these jurisdictions to understand how this is achieved

• City of Davis, Resale Inspection Program – required when selling home
  • Verifies compliance to codes in effect at the time the home was constructed, or at the time any subsequent work was performed
  • $438 inspection fee, good for 18 months
  • Creates jobs for inspectors and building officials
  • Cost neutral to the City
  • Piece of mind to the home buyer, reduces liability to the real estate professionals
Permit Compliance & the CSLB

- Contractors State License Board (CSLB)
  - In charge of contractor licensing including obtaining and maintaining licenses, complaint investigation, unlicensed activity, etc.
  - CSLB may lack the workforce or funding to adequately investigate unlicensed and/or unpermitted contracting
  - Could be integral in maintaining the integrity of and trust in the contracting industry
  - **Important partner in developing programs to improve permit compliance**

- Consideration: Expand Plumbers and HVAC contractor ability to contract
  - Plumbers: allow to perform or sub-contract the electrical required for HPWH installation
  - HVAC: allow to perform or sub-contract insulation and air sealing as part of a HVAC replacement
Thank you

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