

# i3 Energy

## Mobile Homes

Inclusion, Integration and Innovation

## i3 Energy

- ▶ i3 Energy started out of succession planning for Staples Energy
- ▶ Woman-owned business committed to workforce development
- ▶ Trade Ally network development, program admin, rebate processing, direct installation, software solutions
- ▶ Founded on Inclusion, Integration and Innovation

# Credibility

i3 Energy is a hybrid Trade Ally and Program Implementer

- ▶ i3 Energy does the installs
  - ▶ Air sealing, duct sealing, blower door tests, HVAC installs, repairs, troubleshooting
  - ▶ Just started electrification with ASHP and induction ranges

# Presentation Goal

- ▶ Provide the audience with insight into mobile homes
- ▶ Use actual notes and photos from our field crew to show:
  - ▶ Every home is different
  - ▶ Very few homes are in an “ideal” state
  - ▶ Much more than energy efficiency needs to be done

# Job 1 - Notes from the Field

- ▶ No furnace or thermostat
- ▶ Ventilation in front of house is missing a connection and will need to be built
- ▶ All other vents need sealing
- ▶ Floor where furnace was needs to be replaced
- ▶ Area above furnace needs to be sealed.
- ▶ Belly replacement needed
- ▶ Area between door and wall frame for front door needs to be sealed with spray foam



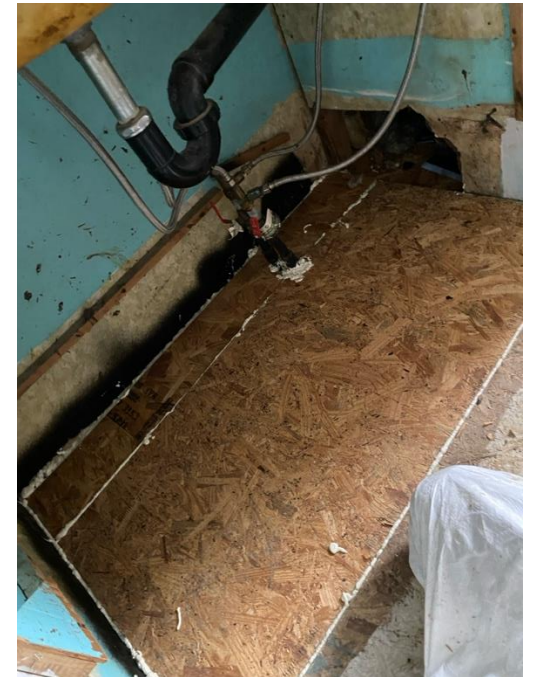
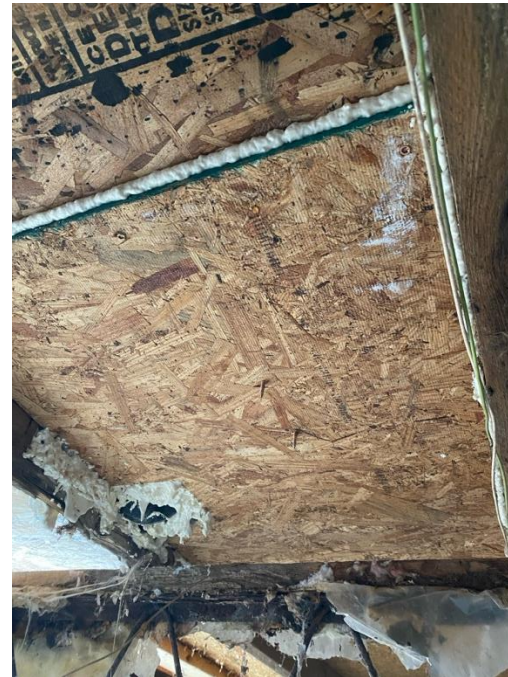
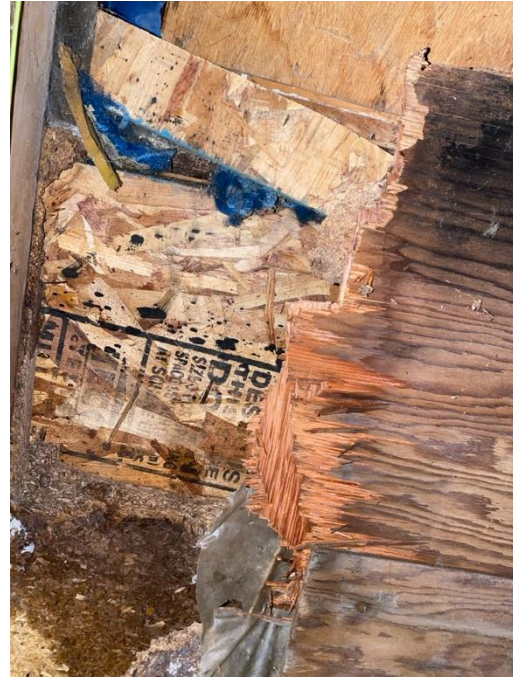
## Job 2 - Notes from the field

- ▶ Waterline constantly running hot water and leaking underneath kitchen
- ▶ Leak flows into old vent under house
- ▶ Sewage buildup underneath
- ▶ Sewage flooded around drain line going into ground
- ▶ Septic tank needs draining?







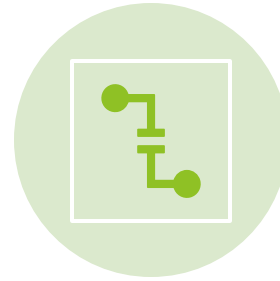


## Repairing Leaks and Floors

# An “Easy” Job



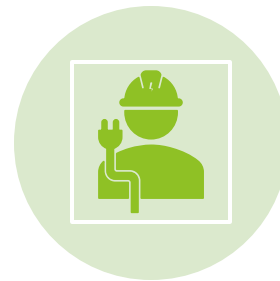
Ventilation needs sealing



One floor vent is rusted



Master bath has multiple drainage lines that will need sealing from underneath



Need to replace one flex vent depending on numbers from connection replacement





# Summary of Jobs

- ▶ No furnace
- ▶ Disconnected ductwork
- ▶ Floor vents need sealing
- ▶ Holes in floor
- ▶ Belly replacement needed - Tyvek
- ▶ Gaps around doors
- ▶ Holes where plumbing penetrates
- ▶ Sewage leaking
- ▶ Leaky pipes destroying underbelly insulation

# Non-Energy Benefits

- ▶ Single mom with kids
- ▶ Kids had to use nebulizers when at mom's mobile home
- ▶ When at dads they seemed to get better
- ▶ Ductwork was disconnected and shredded - dirt, dust, yuck was getting sucked into home
- ▶ Our crew fixed ductwork, reconnected and sealed from underneath the home



## Non-Energy Benefits

*Thank you all so much again. I know you're doing a great service, but I wanted to reiterate how life changing it is for us. I had no clue the conditions were as bad as they were in the ductwork. We will all be breathing easier – literally. Saving money is just a bonus at this point. My kids' health improving is priceless and I owe it all to you.*



# Takeaways

- ▶ Tons of savings in mobile homes
- ▶ Tons of work needed in mobile homes not all linked directly to EE
- ▶ Huge impact on quality of life
- ▶ Who is going to do the work?
- ▶ When do we walk away?
- ▶ Can we work with codes enforcement to identify issues and provide savings

# Additional Opportunities in Mobile Homes



SWITCHING FROM  
PROPANE TO ALL-  
ELECTRIC



WATER HEATERS



INDUCTION RANGES



SOLAR?

# i3 Energy

- ▶ [nbaer@i3-energy.com](mailto:nbaer@i3-energy.com) | 262-271-0781
- ▶ [www.i3-energy.com](http://www.i3-energy.com)
- ▶ 262-267-7993
- ▶ N28W23050 Roundy Dr, Suite 102, Pewaukee, WI 53072



# Questions