

# INOVATIONS IN MOBILE HOME WEATHERIZATION

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# Seven Basic Steps to Mobile Home Weatherization

1. Complete accurate audit
2. Access cavities
3. Install insulation in a **COST EFFECTIVE** and **EFFICIENT manner**
4. Sealing Access point
5. Diagnostics
6. Inspection
7. Motivation

# Gauging your machine

- Check your connections, reducers and hose
  - $A = \pi r^2$
- Size of hose or pipe
  - Use largest diameter possible
  - What procedure or technique being used
- Adjust air for density/R-value
  - R-value verses density
- Adjust feed for efficiency



# PVC, ABS, Grey Electrical Conduit or Metal

- PVC
- ABS Schedule 40
- Grey electrical
- Copper
- Exhaust
- Aluminum
- Flexible tube (must be straight)

# Size Does Matter

- Rigid Pipes
  - 1 ½" , 1 ¾" , 2" , 2 ¼" , 2 ½"
- Hoses
  - 1" , 1 ¼" , 1 ½"
- Different weights
  - Summer
  - Winter
- Clear, mesh, vacuum

# How to handle long pipes on scaffolding

Use a Tube



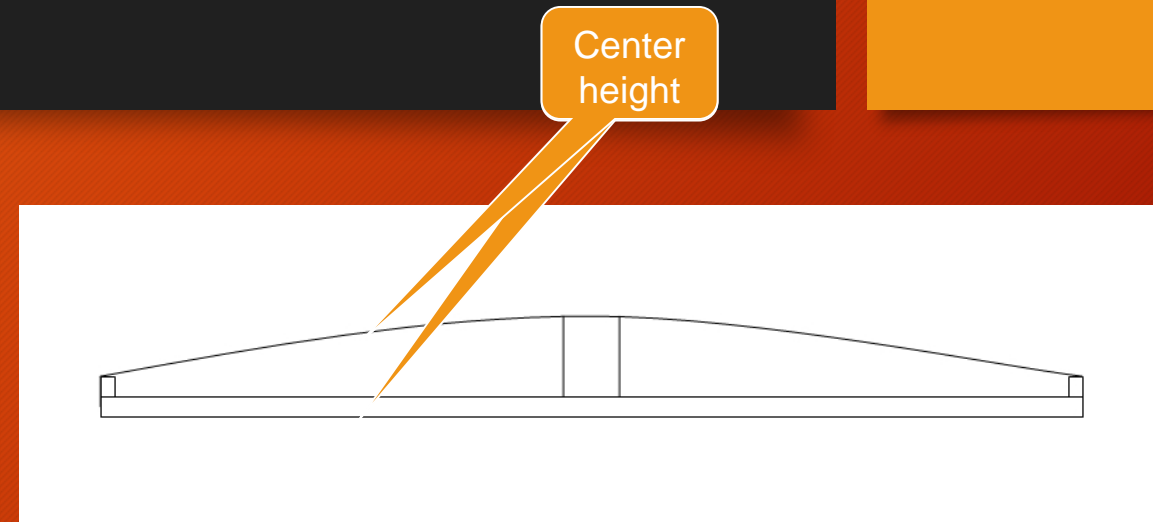
Use supports



# How to measure center height of attic for audit, and why?



This hole should be in a closet



Insulation supports or stiff wire



Maybe use  
ABS or a  
lighter  
metal



# Keep your Tubes Straight

Have adaptors on to save time  
Adaptors are cheap, time is expensive



# CATHEDRAL ATTICS



Use smaller diameter tubes and flexible ridged tubes such as 1 ½" ABS Schedule 40

# Strong Back Procedures

What is a Strong Back



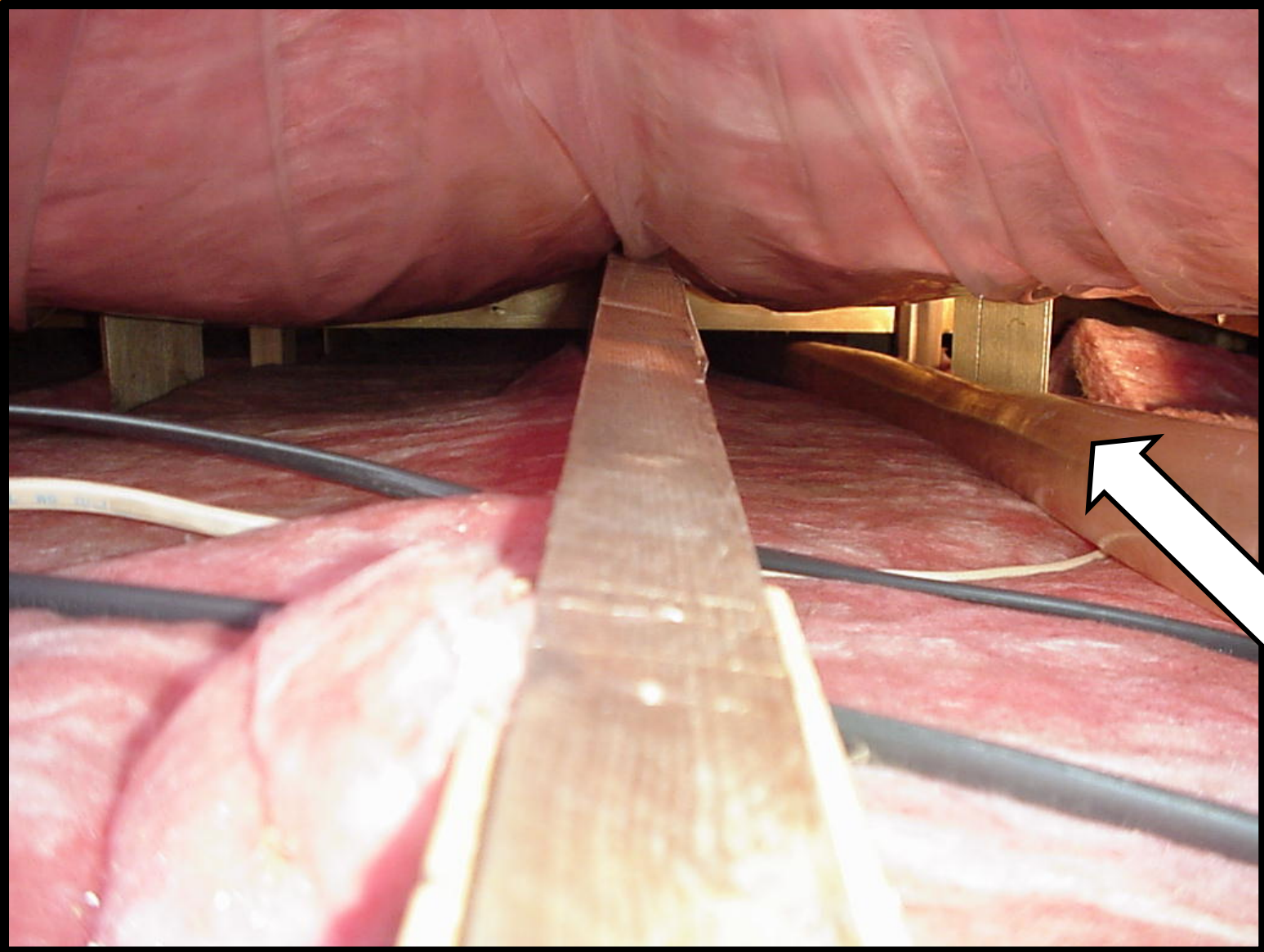
Old way



# New Way to address Strong Backs

- Picture of ABS Tubes with 45





Tube must be stored straight

# Insulating an Attic at the ridge



Add ridge vent pic



# Insulation tab at end of cavity



## Benefits

- Stop blowing before end of cavity
- Lack of blow by
- Will not overfill cavity
- Very efficient r-value at edge



Use a 3 inch hole or larger when blowing from roof or ceiling



# Interior attic blow with decorative covering



When insulating from top use a wire rotary brush to clean metal before patching.

Don't miss this opportunity to access an attic



# “Through the Roof” sealant and others approved

- USED TO COVER PEAL AND SEAL PATCHES ON ROOF
  - Rapid Roof
  - Geocel Pro Flex
  - Through the Roof

# Testing for a disconnected vent in attic



House to zone pressure while turning on the exhaust fan

# Why are we not doing WALLS

- Great SIR
- Easiest of the measures
- Simplify
- Learn a few simple tricks
- Tube control,
  - straight up the wall
  - Belt rails
- Pressures
- Feed gate

Insulate walls with a tube,  
unless stuffing is your baby





# Pressure and Feed control density and time



# Insulating walls from the roof line



# Splitting the siding



# Above doors and windows



Stop blowing 16 inch's from the bottom



# Stopping wall seams from splitting



# EASY PATCH, HIGH QUALITY POLY URATHANE ADHESIVE



# LARGE PATCH 1X2'S AND HOUSE WRAP







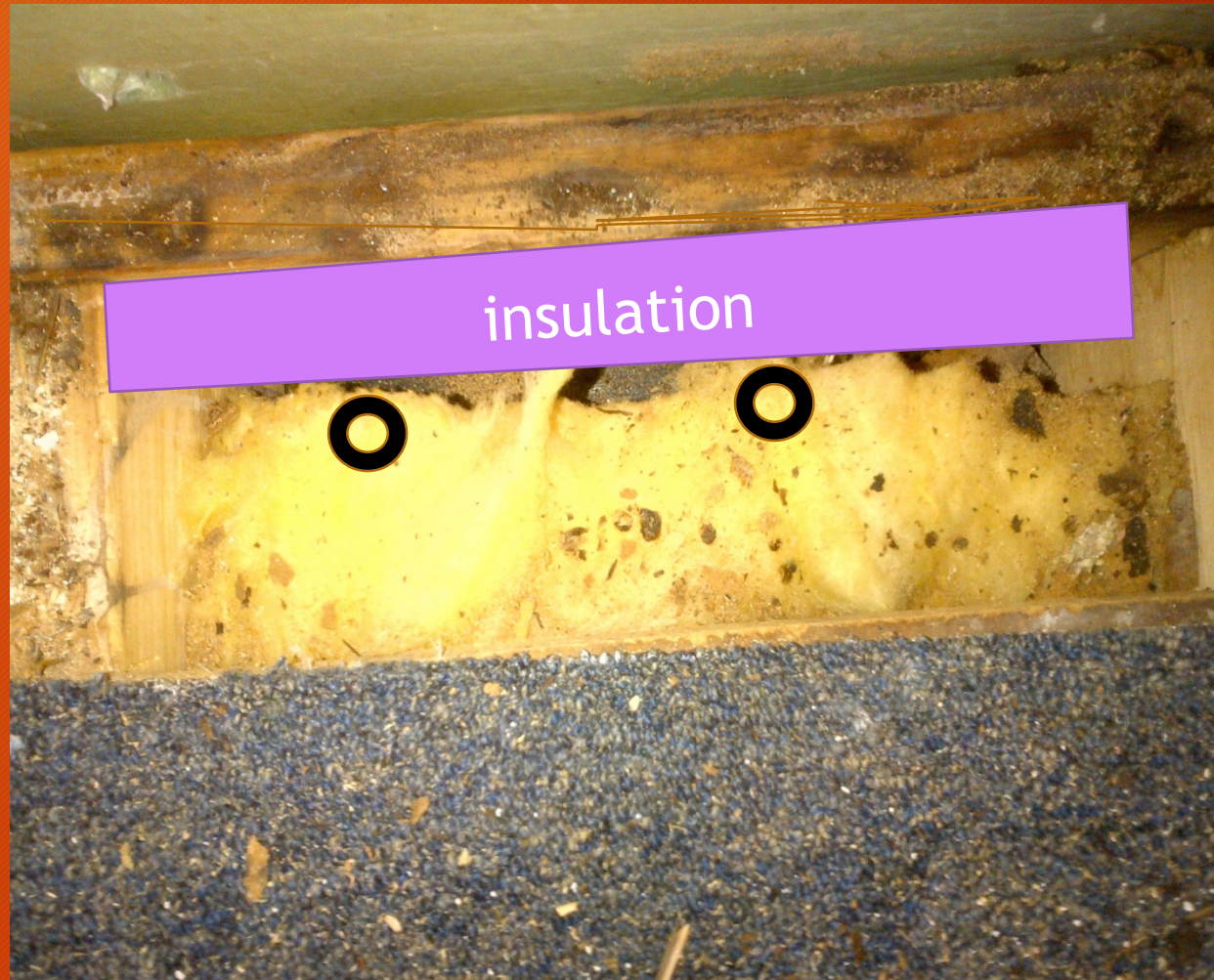


# Belly Perimeter Blow on marginal bellies



DO THE MATH

# Protecting water lines from freezing





# NO RIM PLATE DRILL METHOD

Must be able to remove skirting from one side

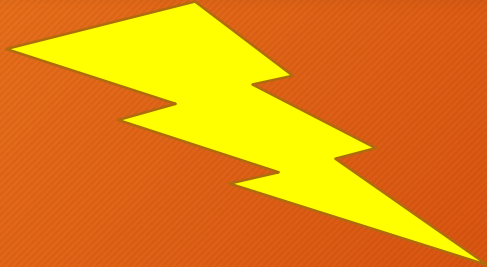
I beam



Must use flexible ridged pipe



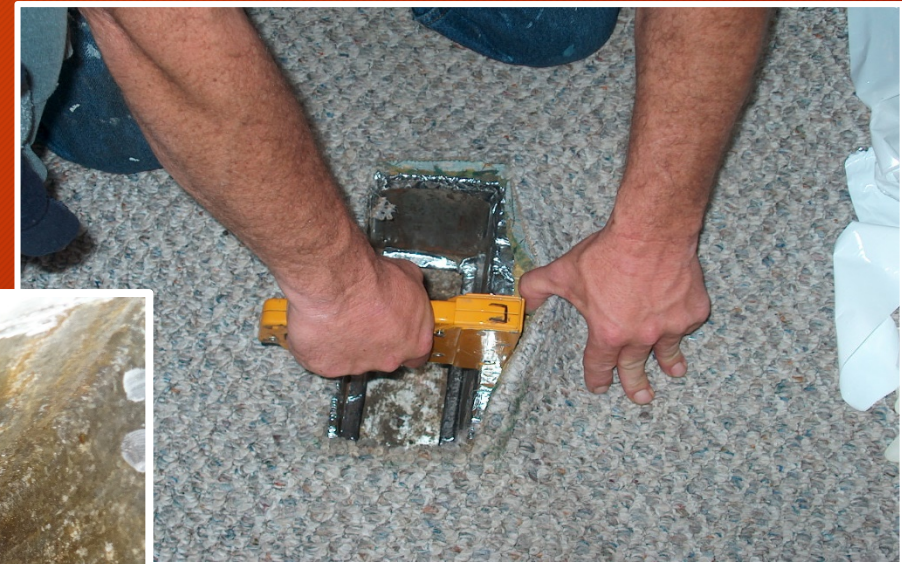
# STILL GETTING ZAPPED?



- IS INSULATION MACHINE GROUNDED
- WHAT TYPE OF PIPE ARE YOU USING
- TOUCH MOBILE HOME AND PIPE
- INSTALL A GROUNDING WIRE FROM HOSE OR METAL CONNECTOR TO GROUND.

# DUCTWORK PROCEDURES

Repair  
Clean.  
Clean with good rag  
Clean with acetone (best)  
Apply butyl tape or mesh  
Pressure, pressure  
Staple on floor  
Mastic over seams and  
edges, don't smear, gob on





# Un-equal air flow to rooms or ends of homes

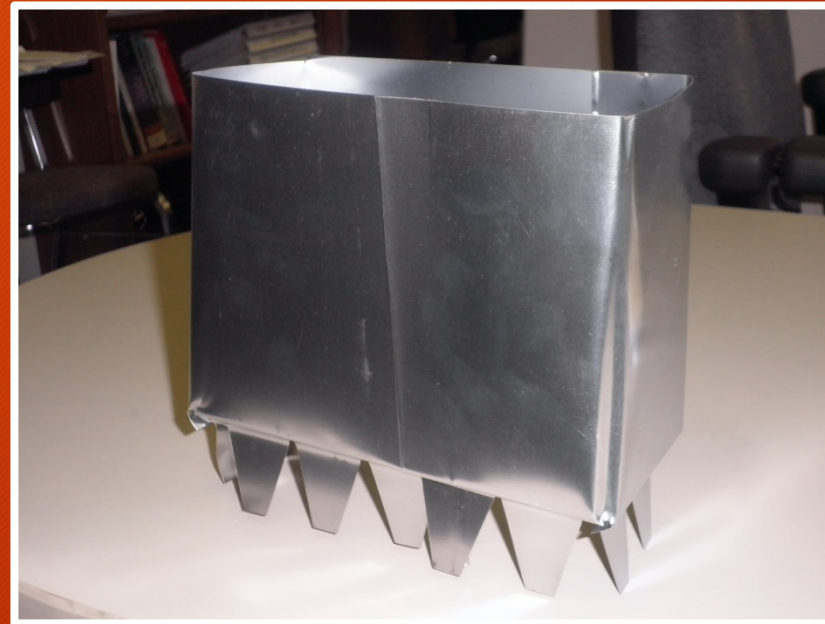
## Turning Vane



Measure pressures at registers with pressure pan and with furnace fan running. Try to equalize them.



## Add or remove a register



BE PREPARED

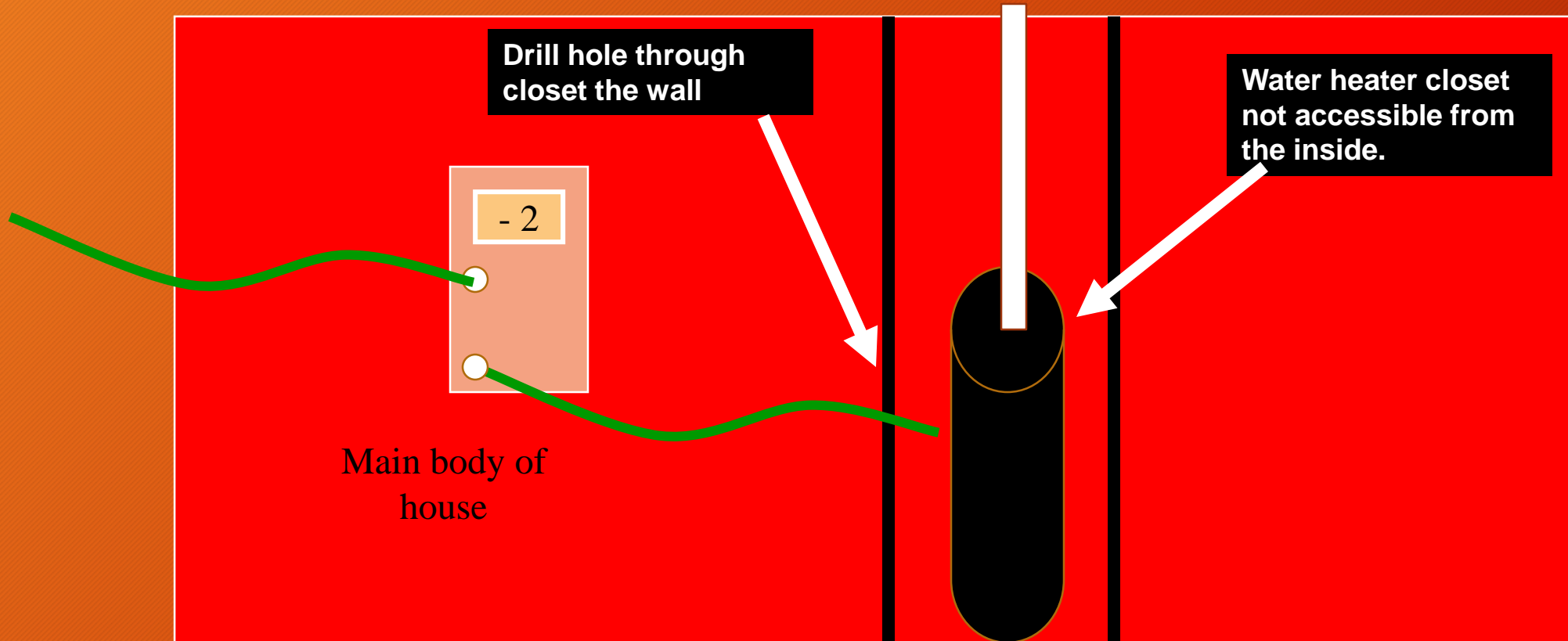


# Checking Water heater closet connections to the furnace closet from OUTSIDE



When the furnace fan kicks in a CHANGE OF 2 pascal reading is an action level. Make sure you take a baseline

# Checking Water heater closet connections to the heating system from INSIDE



When the furnace fan kicks in, A DROP or Change of 2 pascal reading is an action level. Check for spillage. Make sure you take a baseline

ANY QUESTIONS?

# NOW ITS YOUR TURN YOU ARE THE REAL EXPERTS

- NEW

- MATERIALS
- TOOLS
- EQUIPMENT
- PROCEDURES
- TECHNIQUES
- MOTIVATIONAL ADVICE

# You Owe it to the Taxpayers to spend there money wisely

People have worked hard and struggled to earn the money you are now spending..

Make good use of it.

