



Common Household Problems Impacting Energy Use, Comfort & Safety

What We Found In Anaheim

Presented by
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Common Household Problems Impacting Energy Use, Comfort & Safety

Few Problems, Mostly Opportunities!

- Every home owner should leave today asking what opportunities there are in their home
 - *To help lessen global warming*
 - *To reduce your energy consumption*
 - *Make your home more comfortable*



Common Household Problems Impacting Energy Use, Comfort & Safety

Many Homes Needed Insulation

- Attics
- Duct work
- Walls
- Floors

Typical Attic Insulation

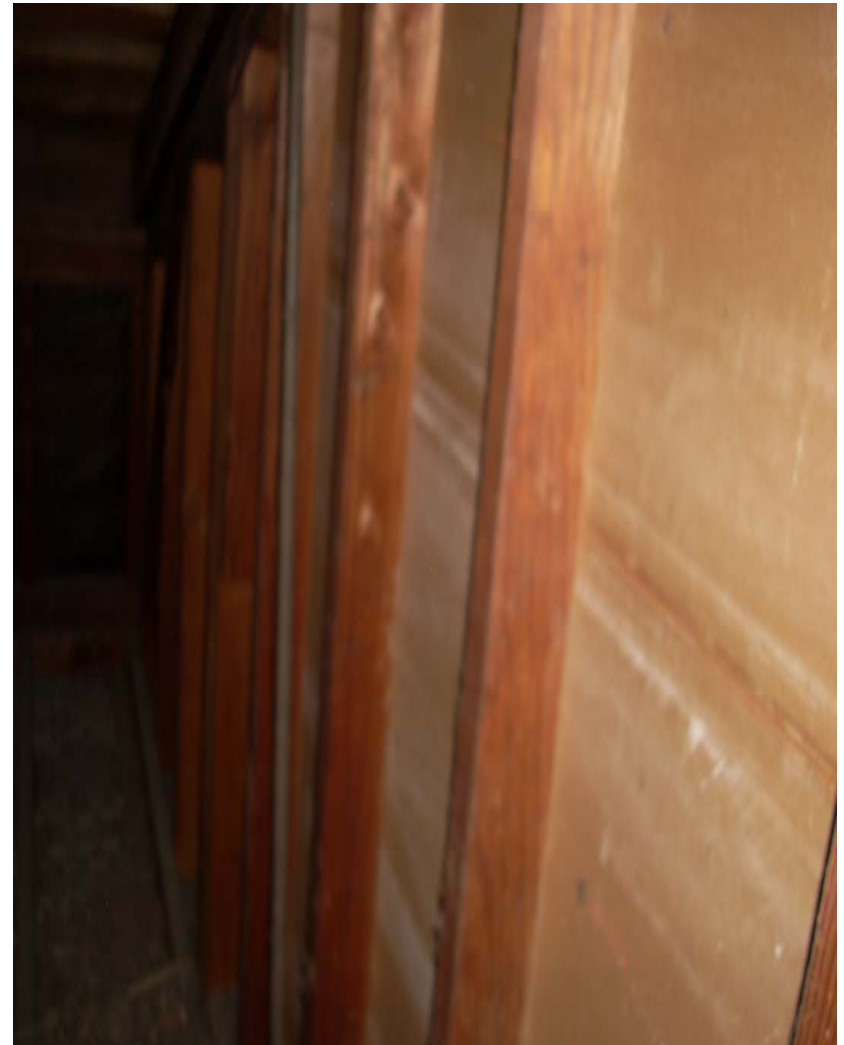
Home owner pays for a R-30 instead gets R-11
due to poor installation



Poor Duct Insulation & Asbestos



Un-insulated Knee Walls and Ceilings Were Common



Attic Fans Use Electricity & Have Little Benefit In Saving Energy





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Asbestos Is A Problem

- Found on several HVAC duct systems
- In order to make ducts tight, the ducts had to be removed



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Asbestos Ducts Were Inexpensive & Quick To Remove





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Furnace & Air Conditioning Comfort Issues

- Over sizing
- Inoperable
- Needed service
- Poor distribution systems



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← Plugged A/C condensation tube

← Buckets collecting water from A/C



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Safety Issues With Combustion Appliances

- Poor draft
 - Exhaust fans back-drafting water tanks
- Proper amount of air make up for gas appliances



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Combustion Safety

Furnace located inside the home
Does this look safe?

Test draft to be sure and eliminate CO
contamination in your home.

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Hot Water Tanks





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Air Returns, Circulate Air From Your House Through The Air Handler



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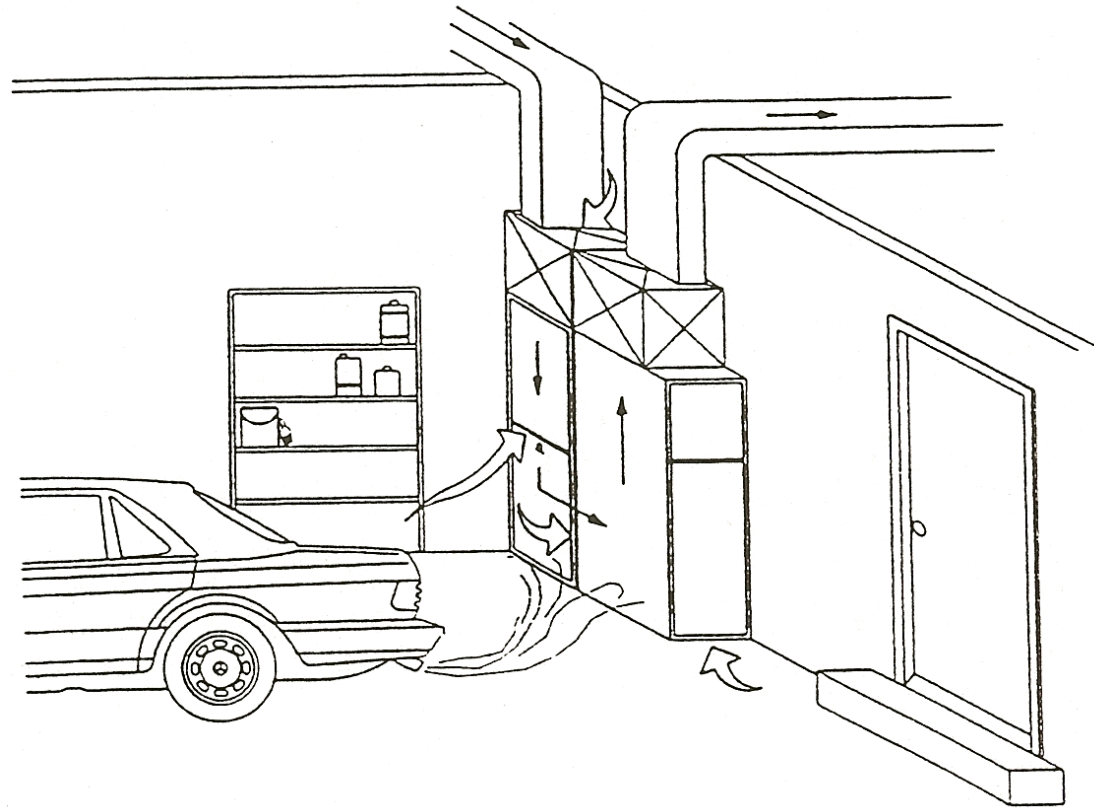
Inside Your Air Return





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Leaks In Returns Can Cause Poor Indoor Air Quality



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Air Conditioners & Furnaces Oversized

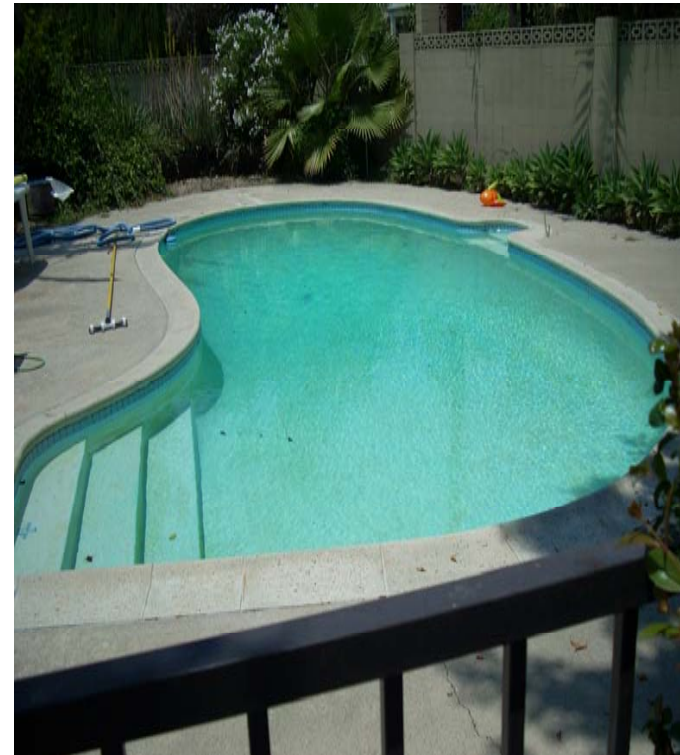


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Pool Pumps & Heaters

Usually Oversized

Pumps Need To Be Run At Night Not During Peak Hours

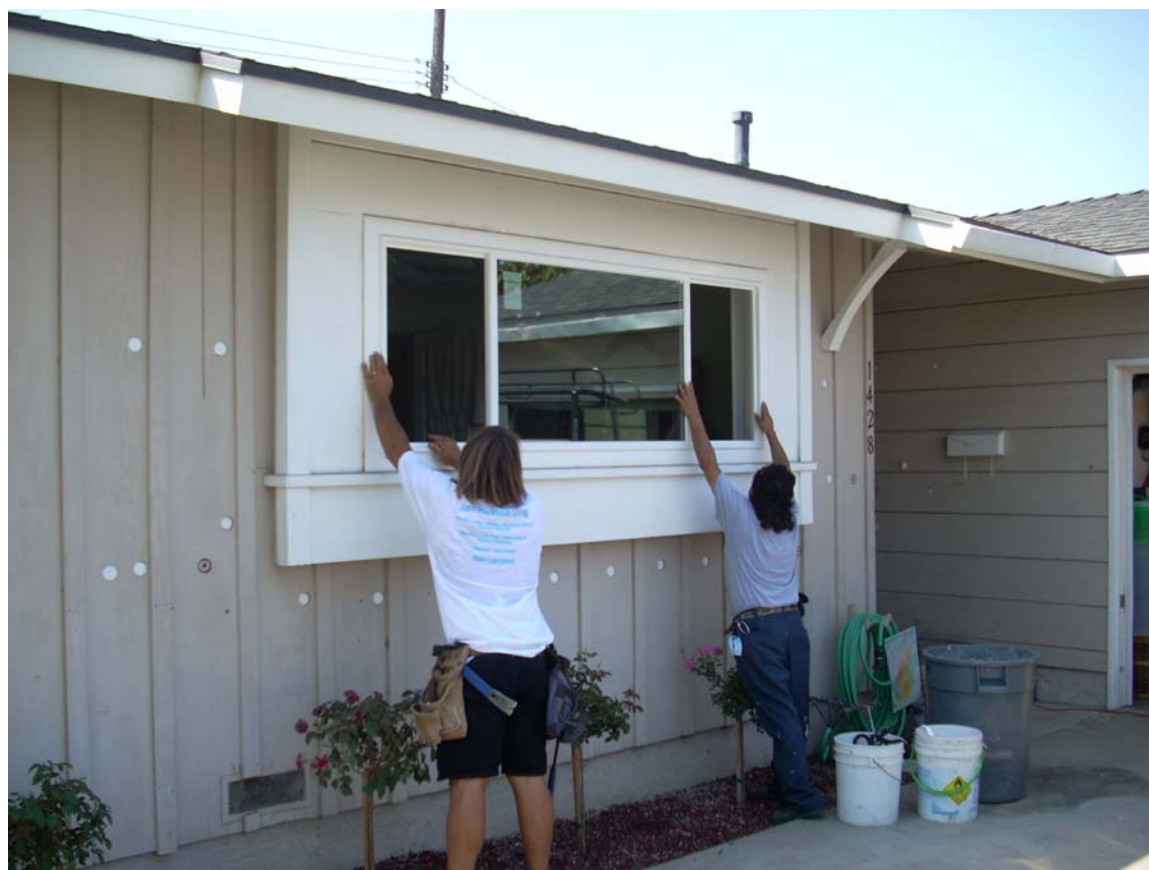


Filling The Holes After Drilling For Wall Insulation



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Installing New Windows





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Leaky Homes

- Air infiltration makes it hard to cool and heat the home
- Seal leaks increase indoor comfort and air quality



Wood Ceilings



Riddle's home air infiltration was reduced 42%. The home now stays a constant temperature throughout

← **Foam insulation seals air leaks**

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Foaming The Attic



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**Did I tell you, you have to leave
your house overnight when
foaming the attic?**



Common Leaks

Before sealing



After sealing





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Air Infiltration

Everything done to the house
contributed to minimizing the leaks

- Windows
- Insulation
- Caulking around trim
- Sealing floor & attic penetrations



COMPREHENSIVE HOME ASSESSMENT

Testing For Air & Duct Leaks

