



# Draft Detectives

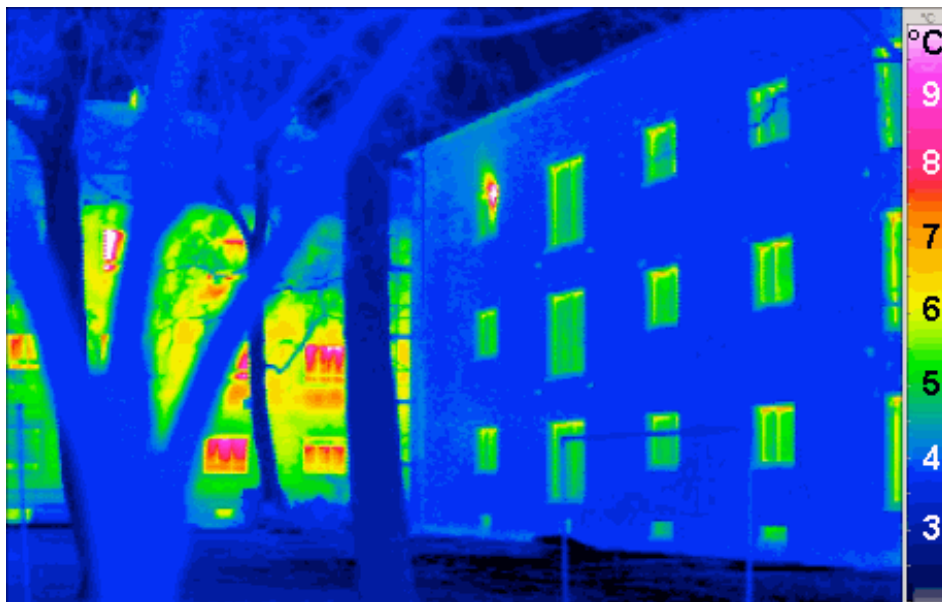
Create your own draft catchers!

Background Info

When people heat their houses in the winter, or cool them in the summer they typically use **energy** from **fossil fuels** such as coal or natural gas. In order to maximize the efficiency of the heating and cooling we can trap in our heated or cooled air using **insulation**. Insulation is the process or materials used to reduce heat or cold loss. Insulation materials such as fiberglass and rock wool are used to line attics, windows, doors and other areas where air flow is common. In order to keep houses warm in the winter and cool in the summer, people have come up with some pretty creative materials to use as insulation. They use newspapers, corncobs or even recycled blue jeans!

To avoid wasting energy in our homes we must first find out where the heat loss is coming from. We can do this with a **draft catcher**, a simple measuring tool that will flutter when a breeze or draft is present. Most drafts occur in cracks under the doors and windows. A draft stopper reduces the loss of heated or cooled air by creating an insulation barrier under leaky doors and windows.

Do you notice a color difference around the windows of the two buildings in the picture below? A thermal camera we can see a large amount of heat escaping – look where the reds and pinks are showing. The scale on the side of the image shows how much heat is being lost. The building on the left is not insulated properly. The building on the right, however, is better insulated and is keeping heat loss at a minimum.



Left building

Right building

## Credits

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