Ask Jon Eakes

Should I put an air deflector over my baseboard heaters? No!

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Jean Charles from Shawinigan, Quebec noticed that the heat from his baseboard heaters was flowing up and being "wasted" by hitting the cold window glass. So he decided to put a piece of plywood over the heater to deflect the heat out into the room. He even sent me sketches of before and after. Your observation was right Jean Charles, about how the hot air flowed across the window glass. But let's take a closer look at what your deflector is doing, and why it is not recommended. First it is made of combustible material and it may be very close to that heater. It could in fact be a fire hazard if it gets too hot.

As for the air flow, if you look across the country, you will discover that almost all heating systems put their hot air output right under windows. The reason is because the window is the weakest (or should I say coldest) part of the wall. This is where condensation will start first. If we can keep this area warm and dry, then we can increase the humidity in the house without causing the formation of mould. In fact the hot air rises up the wall, up the glass and meets the cold air that is falling from the top of the window. These two air streams actually join together and flow into the room at about face height, making for a comfortable slow flow of warm air right where you are breathing it. So the position of the heating ducts is part of making our houses work. In some very modern houses with ultra efficient windows, this heat is no longer necessary and the heating system can now be uncoupled from the window, allowing for different arrangements of furniture, like sofas right under windows that won't have cold air drafts coming down your back.

Thinking of every little part of the house as a part of a larger system will allow us to understand why some things seem wrong when in the larger picture, they are right.

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