

S1 Heat Loss House Revision

Trapped air is a good **insulator** of heat (thermal) energy. When building houses in the UK where we get quite cold winters they need to think about how they can use trapped air to insulate houses so energy bills are lower and to meet government guidelines for energy efficiency. Many older houses over 100 years old need their insulation materials removed and replaced with new materials that trap air better. Fibre glass wool (loft insulation), carpets, underlay, draft excluders, double glazed windows and cavity wall foam all trap air and reduce heat loss in our homes.

Some materials that are silver and shiny in colour have a reflective surface to **reflect the heat** back into the house. **Aluminium foil** or aluminium polyester is used in roof and in the walls or behind radiators.

Use the passage above to complete the table below with ✓ or ✗

Type of insulation	Traps air	Reflects heat
Fibre glass wool in loft		
Aluminium foil in walls		
Double glazed windows		
Foam in cavity wall		
Aluminium foil in roof		
Carpet and underlay on floor		