

Build Back Smarter Info Sheet

Curtains and blinds

The opportunity to build back smarter

Disaster repairs: Repairs to windows. Any added renovations during repairs.

Opportunity to upgrade: If you replace existing curtains or add new curtains, make sure they are thick, lined, full length, and close fitting to the wall. Consider retaining or installing pelmets or use curtain brackets that are flush with the wall.

Why curtains are important

Your windows are the most likely place for heat can escape from a house. 21-31% of heat escapes through your windows in an uninsulated house, and an even higher proportion once your ceiling, walls and floor are insulated.

Curtains are an effective way of improving your window performance – in summer and in winter – because they keep an air pocket between the curtain and glass. In winter a good thick lined curtain will reduce heat loss through your windows, as well as reducing draughts and the feeling of cold radiating into the room. A square metre of uncovered window can lose four or five times as much heat as a square metre of uninsulated wall.

Build Back Smarter recommendations

There are opportunities to improve your home's warmth by:

- Installing pelmets on any windows that do not already have these. If you don't want to install pelmets, then consider replacing your current curtain rails with runners that fit tightly against the window frame to minimise the gap at the top of the curtain.
- Installing good quality, lined, well-fitting, full length curtains on any windows that do not already have these.

Effective curtains and blinds

There are two key things for effective curtains¹:

1. Snugness of fit
2. Layers

On a cold winter's night, with curtains or blinds closed, the air behind the curtain or blind loses heat through the glass. This colder air is heavier and sinks. Warmer air gets drawn in from the top to

¹ Eco Design Advisor Factsheet



replace it. The warm air cools and sinks, creating a cycle in which warmer air at the top of the room is pulled down behind the curtains, cools down and drops out below the curtain into your warm room.

The air between the curtain and the pane of glass needs to be still for the curtains to be effective. If that layer isn't adequately sealed, the convection cycle can resume, taking your heat with it.

Keeping a snug fit

Firstly, close off the top. Pelmet - the enclosed framework above a window that conceals the curtain rail - are an excellent way to seal off the top of the curtain. Other options are fitting curtain brackets that are flush with the wall or attaching curtain tracks to the underside of the window frame.

Secondly, close off the bottom. Make sure the bottom edge of the curtain rests on the floor, and that blinds seal against the sill.

Thirdly, make sure your curtains close well, and that there are no gaps around the edge. Velcro strips sewn on one side to the back of the curtain can also be used to tightly fit your curtain around the side of the window frame. Velcro dots at the bottom corners can help hold the blind snug.

Layering up

Linings are important as they trap the air between the layers of curtains. Use a minimum of two layers of fabric to provide adequate insulation. The thicker the material, the better. The curtain fabric itself adds very little to the insulation value of the window – it's the layers of still air trapped in and between materials that provide the insulation. Note that the term "thermal curtain" usually refers to a single-layer fabric with a rubberised backing. It gives a slight improvement in thermal performance, but is nowhere near as effective as a standard curtain material with a separate lining.

Two-layer roman blinds (decorative fabric on the front, with a separate lining behind) can be as effective as double-layer curtains, provided they are snug all round.

Also on the market are "insulating curtains" containing a thick light layer (sometimes called "bumpf") between the curtain fabric and lining. They improve insulation (and help deaden sound), but only if there are no leaks round the outside.

Curtain tips

- Venetians and slatted blinds are great for screening out sun and providing privacy, but have too many gaps to keep the heat in.
- Don't cover wall mounted radiators with curtains. As well as being a fire risk, the heat from the radiator won't move into the room.
- Do make your own insulated curtains – you can buy the insulating lining and sew it on the back of existing curtains.
- Do try curtain banks for a cheap source of second-hand curtains – make sure they fit your windows down to the floor. Curtain banks may provide good quality free recycled curtains to community service card holders.
- Do pull your curtains in winter when it gets dark and open them during the day to let the sun in.

