CURTAINS & BLINDS

INFORMATION SHEET

WHAT TO LOOK FOR AND THINGS TO THINK ABOUT

Windows and glass doors account for substantial heat loss in most homes. Curtains and insulating blinds help retain heat, and if installed properly can be as effective as double glazing. Unfortunately, most curtains are not installed properly. Are yours?

STOPPING HEAT LOSS

No matter what type of windows you have, curtains can significantly reduce heat loss overnight. Even if double glazed, windows and glass doors should always have window treatments.

Too often New Zealanders neglect to install curtains or blinds in the following areas: kitchen, bathroom, toilet, and laundry, as well as front and back doors.

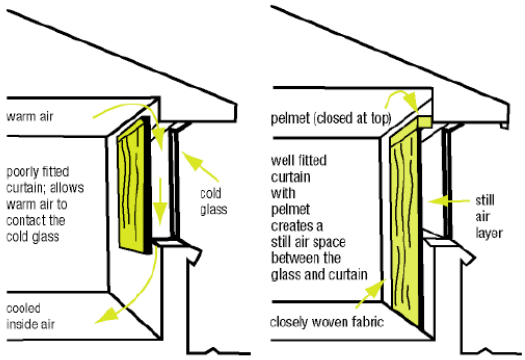
Curtaining some windows and not others is like bundling up for a walk on a cold day but rolling up your sleeves. We should dress our windows in winter the way we dress ourselves – in close fitting layers.

Venetians and slatted blinds are great for screening out sun and providing privacy, but ineffective at keeping heat in because there are too many gaps. If you're serious about reducing heat loss in winter, add curtains, Roman blinds or pleated blinds.

SNUGNESS OF FIT

When installed properly, curtains, Roman blinds, cellular blinds, and window blankets create trapped pockets of air that reduce heat loss. According to research by Consumer achieving a snug fit to reduce air movement is critical.

But first some simple science: glass is a poor insulator. During cold weather, the air close to the glass is cooled. This cold air is heavier than warm air and therefore sinks to the floor. Warmer air gets drawn in from the top to replace it. (See diagram). This cools and also sinks, creating a cycle in which warmer air at the top of the room is pulled down behind the curtains and drops out as cold air at floor level. The insulating effect of curtains and blinds is achieved mainly by the layer of still air it traps against the window. If that layer isn't adequately sealed, the convection cycle can resume, taking your precious heat with it.



Low versus high performing curtains

Rule One: Close off the bottom

Make sure the bottom edge of the curtain rests on the floor, and that blinds seal against the window sill. Consider using Roman or pleated insulating blinds if it is impractical to take curtains to the floor. The key is to make sure that the bottom of the window treatment rests on a solid surface.

Rule Two: Two-layer minimum

Use a minimum of two layers of fabric to provide adequate insulation. The more layers 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. So the key is layers of material that will trap still air. Think of window treatments like clothing, would you go outside in winter wearing just a thin single layer? No you would put on multi layers and jackets. Cover the windows in a similar fashion.

Rule Three: Close off the top

Pelmets are an excellent way to seal off the top of this heating/cooling cycle, but the sides of the curtain should also fit snugly to the wall. Other options are: fit curtain brackets that are flush with the wall; fit a strip of hardboard between the wall and the curtain track to seal off the gap (paint a colour that matches the track and you won't notice it); or fit curtain tracks that attach to the underside of the window frame. Some people take the top of the curtain all the way up to the ceiling.

Thermal versus standard fabrics

The term "thermal drape" 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 standard curtain material with a separate lining. Remember, it's the layers of still air that provide the insulation. Another improvement is curtains containing a thick light layer (sometimes called "bumpf") between the curtain fabric and lining.

Blinds

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 around. Velcro dots at the bottom corners can help hold them snug. Another good option is multi-walled pleated blinds, also called cellular blinds, which trap layers of still air within them. These are generally made of moisture-tolerant fabrics and are a good option for wet areas such as bathrooms and kitchens.

Budget Options

If making window treatments yourself you can use cheap materials like polar fleece or woollen blankets as an insulation layer between the decorative fabric and the lining. They improve insulation (and help deaden sound), but only if there are no leaks around the outside. Heat, like sound, is sneaky and can get through the smallest gaps.

Mould and mildew

If mould and mildew appear on curtains, there's too much moisture in the house. This is a separate topic but should be addressed first before installing tight-fitting curtains all over your home. See Information Sheet: **Moisture and Condensation**.

You can get curtain fabrics and linings that have anti-microbial properties to reduce the likelihood of mould growing – talk to your curtain consultant. Remember, curtains only work when closed at night, so get into the habit closing them at sunset!

RULES OF THUMB

- Mount curtains as close as possible to the window frame.
- Make floor length curtains touch the floor and blinds seal snuggly against the sill and sides of windows.
- Use multi layers to achieve effective heat retention, just like clothing in winter.
- Close off the gap at the top of the curtain.

FOR FURTHER INFORMATION

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