

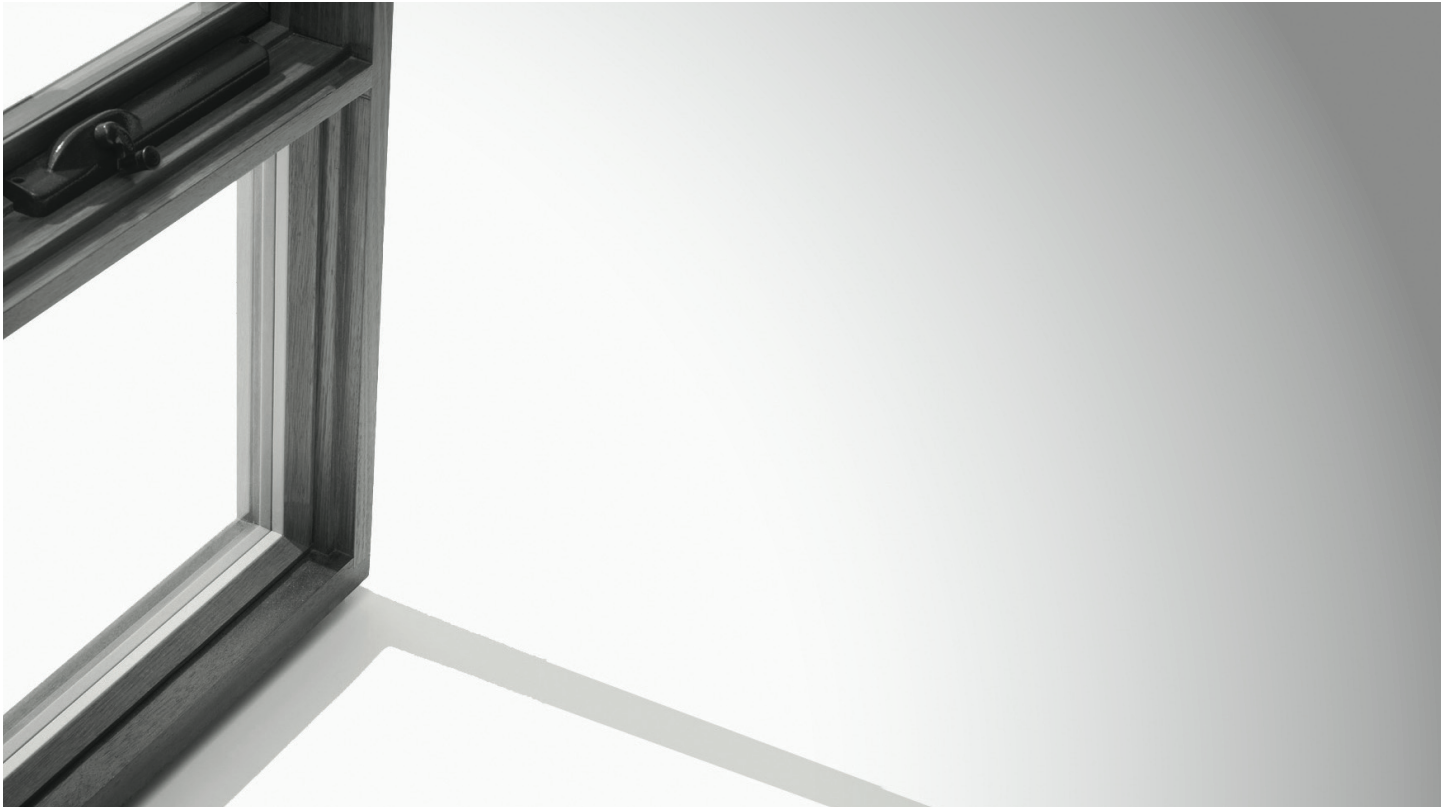
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Windows Fact Sheet



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Are your windows draining your pocket?

Windows make a big difference to the comfort of your home – they can account for more heat loss in winter & heat gain in summer than any other part of the building.

For example

- In summer, heat from the sun shining on 1m² of standard glass is like having a single bar radiator turned on in the room. So if you have 10m² of window facing west, on a summer afternoon it would be like having 10 radiators in the room.
- In winter, a single glazed window will lose up to 10 times as much heat as an insulated wall.

So any steps to reduce heat transfer through glass will help improve the comfort of the room and reduce power bills, in both winter and summer.



Sustainability Fund



Helen Macpherson Smith Trust





Things to think about

The total thermal performance of the window depends on the combination of: size, aspect, type of glass, frame material, opening style.

Type of glass

- Double glazing provides maximum performance
- High performance single glazing (e.g. “lowE” glass) is a more economical alternative
- For retrofitting, there are systems available which add a layer of glass or Perspex to change a window from single to double-glazed.

Window frames

- Frame material (timber frames are preferable to aluminium, which allow heat transfer)
- Opening style: sash, casement, sliding, double-hung – all have different air-flow properties.

Two common measures of window performance are

- U-value: how well a glass prevents heat from escaping - expressed as a number between 2.0 - 10.0 (a low number is better)
- Solar Heat Gain Coefficient (SHGC): how well a glass blocks heat caused by sunlight - written as a number between 0 and 1 (lower is better).
- A typical timber-framed window with ordinary 3mm single glazing = U5.5
- A typical double-glazed argon-filled low-e window = U1.5
- A typical uninsulated timber-framed wall = U1.9

Even the best window materials and glazing is not much better in energy terms than an un-insulated timber-framed wall.

Therefore... don't forget about window coverings! They are important, and you can make a big difference to your room comfort and energy bill relatively cheaply by adding close-fitting window blinds or drapes.

See the Window Coverings fact sheet for more information.



The windows at Jika Jika Neighbourhood House

- In the hall we decided on EcoGlaze from EcoMaster – this is a system which adds a layer of perspex to effectively double-glaze existing windows.
- The windows in the small hall are single-glazed with aluminium frames, which have poor thermal performance. These are being replaced with timber-framed double-glazed low-e windows. (low-e, argon filled, 4mm glass: 10mm air gap: 4mm glass).
- The sliding door in the small hall was already double-glazed in a previous renovation and has a retractable external blind to protect it from the northern sun in summer.

Handy resources

Your Home – Design for Lifestyle and the Future: Technical Manual pp119
 Australian Govt – Dept of the Environment, Water Heritage and the Arts
 Windows Energy Ratings Scheme – WERS – a national rating scheme managed by the Australian Window Association www.wers.net



For more information call The North East Neighbourhood House Network on 9457 7900, or Jika Jika Community Centre 9482 5100

Greener Houses Growing Greener Neighbourhoods is transforming five Neighbourhood Houses into ecolving demonstration centres. It is a unique collaboration involving community volunteers, six Neighbourhood Houses, five local Governments, and tertiary institutions. The project is supported by the Victorian Government Sustainability Fund, managed by Sustainability Victoria and two Charitable Trusts.

