DIY Affordable Window Shading

Overview

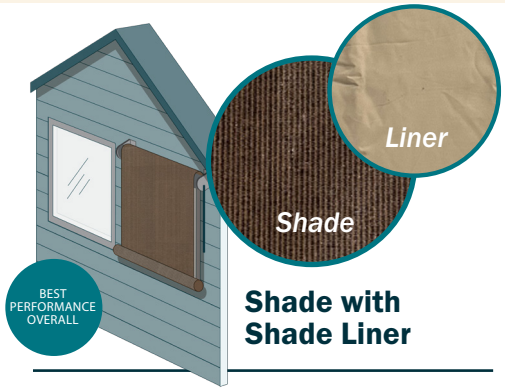
This document shows how you can easily and affordably shade your windows to keep your home from getting too hot on sunny days. This phenomenon (what researchers call “solar heat gain”) can threaten occupant comfort and safety, especially during heatwaves. Still, many homes lack adequate protection.

All of these solutions can be implemented inexpensively using common household items or items that can easily be purchased online. Additionally, you don’t need specialized tools or expertise to install them. Note that these are ideally temporary fixes, so households with sufficient means should still pursue permanent ones (e.g.,shades—preferably on the outside—or specialized windows or films). In their absence, the stopgap measures described below can help protect you and your loved ones during heatwaves and other exceptional events.

Recommendations

Exterior-Mounted Solutions

(Provide the highest protection from solar heat)



Shade with Shade Liner

What to look for: 1) fabric outdoor roller shade, 2) blackout curtain liner for outdoor roller shade

Where to purchase: Major online retailers, major home improvement stores

Installation materials: Screws

Price: $60 -$90 per window

Typical usage: Longer-term

Aluminum Foil

What to look for: Aluminum foil

Where to purchase: Grocery stores

Installation materials: Door and window weather stripping tape, waterproof foam tape

Price: $10 - $20 per window

Typical usage: Short-term

PVC Bamboo Shade

What to look for: Exterior PVC bamboo shade

Where to purchase: Major online retailers, major home improvement stores

Installation materials: Screws, door and window weather stripping tape, waterproof foam tape

Price: $25 -$35 per window

Typical usage: Longer-term

Recommendations

Interior-Mounted Solutions

Mylar Emergency Blanket

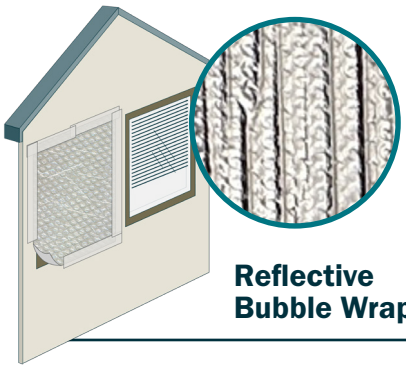
What to look for: Emergency blanket, thermal blanket, Mylar sheet

Where to purchase: Major online retailers, major home improvement stores, outdoor store

Installation materials: Adhesive tape, double sided tape

Price: $10-$15

Typical usage: Short-term



Reflective Bubble Wrap

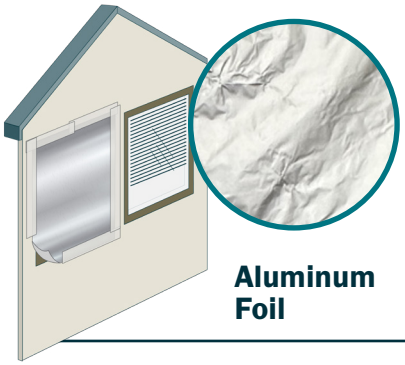
What to look for: Reflective bubble wrap, reflective bubble insulation

Where to purchase: Major online retailers, major home improvement stores, it can also be found in delivery packaging

Installation materials: Adhesive tape, double sided tape

Price: $50-$55

Typical usage: Reusable



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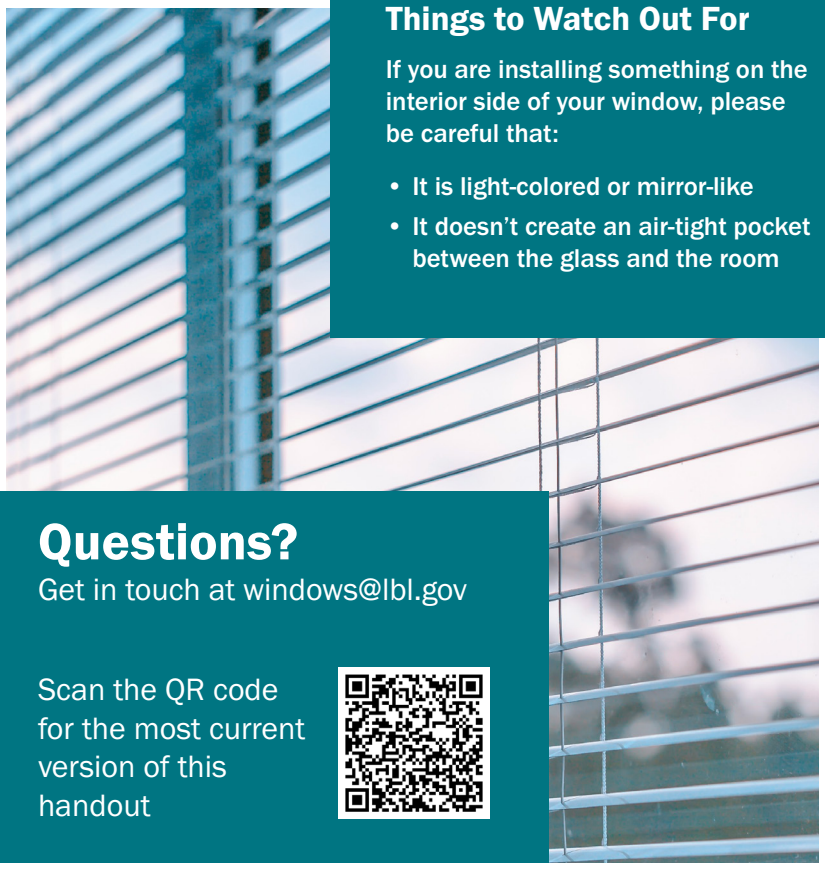

Things to Watch Out For

If you are installing something on the interior side of your window, please be careful that:

- It is light-colored or mirror-like
- It doesn't create an air-tight pocket between the glass and the room

Blackout Curtain with Suction Cups

Can be easily installed and removed repeatedly

What to look for: window shades with suction cups

Where to purchase: Major online retailers, major home improvement stores

Installation: Suction cups

Price: $40 -$50 per window

Typical usage: Reusable

Questions?

Get in touch at windows@lbl.gov

Scan the QR code for the most current version of this handout

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