Shading with Sunscreens:
An Inexpensive Way to Keep Your Home Cool

MISSISSIPPI STATE UNIVERSITY™
EXTENSION

Sunscreens, also called solar screens, are made of specially woven fiberglass, designed to block up to 70 percent of the incoming sunlight while still permitting a view out the window. Like regular insect screening, sunscreens let breezes in and keep insects out.

Mounted in wood or aluminum frames, sunscreens should be installed on the outside of the windows, and, for maximum benefit, should cover the whole window. By stopping most of the heat before it reaches the windows, interior heat is diminished, thereby substantially reducing the amount of air conditioning needed. Most people living in the South spend more money for cooling than they do for heating. Based on a 165-day cooling season, sunscreens placed over east and west windows save about one dollar for every square foot of glass covered during the cooling season.

Here are some other advantages of sunscreens:

- Increased privacy. The special weave of the sunscreen allows more daytime privacy from the outside; you can see out, but others cannot see in.
- Reduced fading of curtains and furniture. The amount of light that enters the room is reduced; consequently, ultraviolet radiation damage is decreased.
- Works with windows opened or closed. The open mesh allows cool breezes to flow through, yet keeps insects out.
- Works in winter, too. Independent tests show a 15 percent improvement in thermal performance of the sunscreen-window combination during the winter.
- Long lasting. Life expectancy is 10–20 years.

Measuring for Screens: General Rules

Select window(s) in a room most frequently used and which receives direct sunlight in the summer (particularly on the east and/or west side of the house).

Decide how you will attach the finished sunscreen to cover the entire glass area of the window. It is best to have a flat surface area (minimum ¼-inch wide) around the window so that the screen can be mounted with screws. Be sure to include this area as part of your sunscreen measurement.

Measure the height and width of your window, just outside the blind stop.

When measuring sunscreens to fit storm windows, measure the glass inside the storm window frame and then add 1⅛ inch to both measurements.

Height 1 _____
Width 1 _____

Option 1: Replacing Existing Screen on a Wooden Frame

Materials and Tools
Staple
Pry bar or nail puller
¼-inch staples
Sunscreen
¾-inch or 1-inch brads
Hammer
Mitre box with hacksaw (if new molding is required)
Paint scraper or steel wool brush
Utility knife or scissors
Measuring tape
Pencil or chalk

Instructions
1. Remove molding from old screen. Do this carefully if you plan to use the molding again. Remove old screen and staples. Clean the edge of the frame with a paint scraper or steel wool brush.
2. Cut a piece of sunscreen 1 inch larger than the outside dimensions of the old screen.
3. Place the screen on the frame, and staple the screen to the top of the frame using ¼-inch staples and a staple gun.
4. Stretch the screen to the bottom and staple.
5. Staple one side down; stretch the other side and staple.
6. Trim any excess screen with a utility knife.
7. Cover the staples with the old screen molding (or new screen molding if the old is too rotten). Use ¾- or 1-inch brads hammered in place to attach the molding to the frame. (Note: The screen molding may be mitered for a more professional look.) The screen is now ready for your window.

Option 2: Replacing a Screen on an Existing Frame

Materials and Tools
Rubber spline
Sunscreen
Screen-spline roller
Screwdriver
Utility knife
Scissors
Measuring tape
Pencil or chalk

Instructions
1. Remove old screen by removing the old spline. Do this carefully if you plan to reuse it. Cut a piece of sunscreen 1 inch larger than outside dimensions of old screen.
2. Place the sunscreen over the frame. Start at the top left-hand corner, and lay the rubber spline on top of the screen directly over the groove. Using a screen-spline roller, roll in a clockwise direction to press the spline and screen into the groove. Continue around the frame until you reach your starting point.
3. Trim any excess sunscreen from the spline. You are now ready to install the screen on your window.

Option 3. Installing Sunscreen on a New Metal Frame

Materials and Tools
Rubber spline
Sunscreen
Aluminum screen stock
Screen-spline roller
Mitre box and hacksaw
Screwdriver
Drill and bit
Utility knife
Scissors
Measuring tape
Pencil or chalk
Corner clip (fastener)

Instructions
1. Measure the outside frame of your window.
2. Cut two pieces of screen frame to match the top and bottom measurements. Cut two more pieces to match the side measurements. Miter each corner by cutting the end at a 45 degree angle. Fasten frame together with a corner clip at each corner.
3. Cut a piece of sunscreen 1 inch larger than the outside dimensions of the frame. Place the sunscreen over the frame. Start at the top left-hand corner, and lay the rubber spline on top of the screen directly over the groove. Using a screen-spline roller, roll in a clockwise direction to press the spline and screen into the groove. Continue around the frame until you reach your starting point.
4. Trim any excess sunscreen from the spline. You are now ready to install the screen on your window.

Attaching Sunscreen
Securely attach new screens to window frames with screws. Note: If window frames are wooden, you may want to drill a hole in the frame and install a screw-threaded device (wall fastener or sheetrock fastener) to allow for easy removal.

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