

# PENGUIN BLINDS

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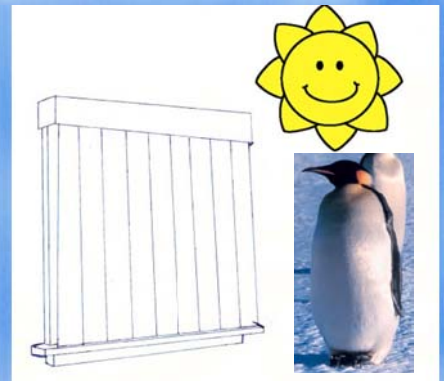
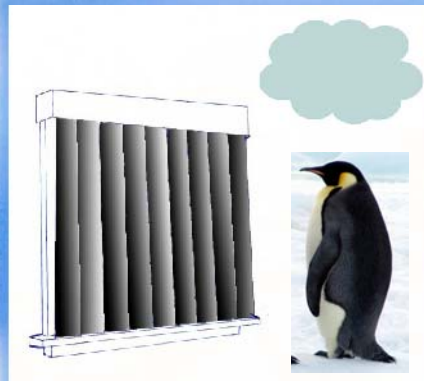
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## Color-Changing Blinds

Emperor penguins use a variety of methods to regulate their body temperature. Penguins use their black and white coloring to absorb and reflect sunlight. In warmer temperatures, the penguin turns its white belly towards the sun, which serves to reflect the heat. In cold temperatures, the penguin will point its back, covered in black feathers, towards the sun in order to absorb the maximum amount of heat.

We propose using Eclipse color-changing paint from Alsa Corporation to paint the blinds. The paint gets dark at lower temperatures, and white at higher temperatures. As the building heats up, the paint changes to white, keeping the building cooler without requiring additional energy.



## Self-Opening Blinds

Penguins also ruffle their feathers to break up the layer of warm air near their skin. This allows the penguins to cool their bodies down when they are too hot.

We are duplicating this behavior with a mechanism that opens the blinds slightly when the temperature inside is higher than a certain threshold. This is a passive cooling system that requires no electricity to operate.

