

## CASE STUDY: Keeping world-famous produce fresh

### Building

Harry and David's Country Store

### Location

Medford, Oregon, USA

### Window Film

R-20 SR CDF (Silver)

### Type

Solar Control Film



## SITUATION

Aside from its famous mail-order business, Harry and David's Country Store is a familiar landmark in and around Medford, Oregon. After a renovation, manager Bill Krumpeck had major issues with the store's 1,015 square feet of new skylights. "We were getting too much light," Krumpeck said. "Our fruit was ripening much too quickly, and our famous handmade candy was melting." Plus, the internal glare from the side windows was intense.

## SOLUTION

"It was immediately evident that we needed some expert help," Krumpeck said. "Our problems were compounded by an acute architectural challenge—the fact that our skylights were 40 feet up, with beams criss-crossing the glass." After numerous calls to find an installer with the product and skills needed to take on this architecturally difficult job, Krumpeck chose the local LLumar dealer who recommended LLumar reflective solar control window film.

## RESULT

"We couldn't have found a better solution than LLumar R-20 SR CDF reflective solar control window film," Krumpeck said. "Not only have the problems of melting merchandise ended, but glare from reflecting sunlight has been totally eliminated." The window film provided an additional benefit. "The temperature in the store is much more consistent and comfortable, and I have a ten-year warranty from LLumar to ensure it stays this way."

## Performance Data

|                      | % Total Solar Transmittance   | % Total Solar Reflectance | % Total Solar Absorptance | % Visible Light Transmittance | % Visible Reflectance (exterior) | % Visible Reflectance (interior) | Winter U-value | Shading Coefficient | % Ultraviolet Ray Protection (wavelengths 280-380nm) | Emissivity | Solar Heat Gain Coefficient | % Total Solar Energy Rejected | Light-to-Solar Heat Gain Ratio (LSG) | % Summer Solar Heat Gain Reduction | % Winter Heat Loss Reduction | % Glare Reduction |
|----------------------|---|---------------------------|---------------------------|-------------------------------|----------------------------------|----------------------------------|----------------|---------------------|--|------------|-----------------------------|-------------------------------|--------------------------------------|------------------------------------|------------------------------|-------------------|
| Clear Glass          | 83  | 8                         | 9                         | 90                            | 8                                | 8                                | 1.03           | 1.00                | 29   | 0.84       | 0.86                        | 14                            | 1.05                                 | 0                                  | 0                            | 0                 |
| Reflective Series    | Reflective films feature reflectance on both interiors and exteriors for superior reduction in summer cooling costs and heat retention in winter. Providing a high level of glare and heat control, they are scratch-resistant, shield 99% of ultraviolet rays, and provide excellent heat rejection. |                           |                           |                               |                                  |                                  |                |                     |  |            |                             |                               |                                      |                                    |                              |                   |
| R-20 SR CDF (Silver) | 12  | 54                        | 34                        | 16                            | 62                               | 62                               | 0.94           | 0.25                | 99   | 0.71       | 0.21                        | 79                            | 0.76                                 | 75                                 | 9                            | 82                |

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The solar performance data reported for LLumar architectural window films was captured using the National Fenestration Rating Council's (NFRC) standard guidelines for window film solar performance measurement as measured on single pane, 1/8 inch (3mm), clear glass. All values averaged from routinely accumulated quality control data.

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