

CASE STUDY: Kudu customers enjoy greater comfort

Building

Kudu Corporation Branch 33

Location

Riyadh, Saudi Arabia

Window Film

AIR-80BL SR HPR (Blue)

Type

Solar Control Film



SITUATION

The Kudu brand is famous in Saudi Arabia and other gulf regions, and the company's Riyadh branch is its largest location. The building's large window facade created the typical problems that result from too much direct sunlight: excess interior heat, high cooling costs, and extreme discomfort for customers and employees alike.

SOLUTION

After consulting with the local LLumar dealer, general manager Musaed Al-Yahya chose to install LLumar solar control AIR-80BL SR HPR film building's glass with LLumar AIR-80BL SR HPR film. This spectrally selective film offers 42% total solar energy rejection, 79% visible light transmission, and >99% protection of damaging ultraviolet rays. The film would help the Kudu branch to significantly reduce interior heat while allowing plenty of visible light to fill the building.

RESULT

After having the film installed, Al-Yahya's been pleased to find the film delivers all the benefits he wanted for both his customers and employees. The environment inside the building is now significantly more comfortable and the number of customers has even increased, Al-Yahya believes, as a direct result. Al-Yahya is completely satisfied: the company's energy costs have gone down and its equipment is better protected.

Performance Data

| | % Total Solar Transmittance | % Total Solar Reflectance | % Total Solar Absorbance | % 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 | - | - | - |
| Specialty Series | While other films employ very dark tinting to achieve similar levels of heat rejection, AIR film's lightly-shaded tint reduces heat but not visibility. AIR not only provides protection against harmful ultraviolet radiation; it also significantly reduces heat. | | | | | | | | | | | | | | | |
| AIR-80BL SR HPR (Blue) | 43 | 7 | 50 | 79 | 9 | 9 | 0.93 | 0.67 | >99 | 0.89 | 0.58 | 42 | 1.36 | 33 | 11 | 12 |