## **Architectural Window Film**

Data Sheet



SolarZone™ Exterior Silver™ 20, 35, 50 Xtra, PolyZone™ Silver 20 Xtra, Silver Matte™ 20 Xtra, Solar Bronze™ 20 Xtra

### Introduction

The SolarZone Xtra range of window films are special versions of many of our standard SolarZone window films, developed for installation on the <u>exterior</u> of the window, instead of on the interior (room side) of the glazing system. Exterior films reject solar energy on the outer pane, keeping the inner pane cool and reducing the energy that penetrates inside even more effectively than a similar interior film. SolarZone Xtra offers one of the best solutions for keeping interiors cooler in the summer, maximizing savings on energy costs, and upgrading energy efficiency.

## Typical Usage

- Silver Xtra: With a strong visual statement, excellent heat rejection, and a speedy return on investment, Silver Xtra is the popular choice for commercial projects
- PolyZone Silver: Engineered for exterior installation to polycarbonate and other rigid plastic substrates, solution delivers a strong visual statement with excellent heat rejection
- Solar Bronze Xtra: Delivers high levels of heat rejection in a warm, yet sophisticated, appearance.
- Silver Matte: Silver Matte Xtra provides indoor comfort together with two-way night and day privacy

#### **Product Construction**

Face: Silver 20, 35, 50. PolyZone Silver 20. Silver Matte 20. Solar Bronze 20

Adhesive: Pressure sensitive permanent - solvent based acrylic

Liner: PET

### Certificates

Fire Certificates: DIN EN 13501-1: 2010 B-s1, d0



# Shelf Life and storage conditions:

When stored in original packaging upon arrival at the customer: 2 years. Recommended Storage conditions are 20 °C ( $\pm$  2 °C) with 50 %RH ( $\pm$  5%).

# **Key Features**

- Very good solar heat and glare rejection
- 99% UV Block
- Upgraded building appearance
- Daytime privacy

### Film Performance

Warranted Durability in Years:

|                     | Silver 20<br>Xtra | Silver 35<br>Xtra | Silver 50<br>Xtra | PolyZone<br>Silver 20<br>Xtra | Silver Matte<br>20 Xtra | Solar<br>Bronze 20<br>Xtra |
|---------------------|-------------------|-------------------|-------------------|-------------------------------|-------------------------|----------------------------|
| Vertical            | 7                 | 7                 | 4                 | 4                             | 5                       | 4                          |
| Horizontal / Sloped | 4                 | 4                 | 3                 | 3                             | 3                       | 2.5                        |



# Optical & Solar Properties

| Glazing Unit: Pane Single<br>Clear 3mm   | Silver 20<br>Xtra | Silver 35<br>Xtra | Silver 50<br>Xtra | PolyZone<br>Silver 20<br>Xtra | Silver Matte<br>20 Xtra | Solar<br>Bronze 20<br>Xtra |
|--|-------------------|-------------------|-------------------|-------------------------------|-------------------------|----------------------------|
| Visible Light<br>Transmitted %           | 17                | 33                | 48                | 16                            | 13                      | 16                         |
| Visible Light Reflected -<br>Interior %  | 62                | 42                | 28                | 63                            | 48                      | 46                         |
| Visible Light Reflected -<br>Exterior %  | 62                | 42                | 27                | 64                            | 60                      | 39                         |
| UV Block %                               | 99                | 99                | 99                | 99                            | 99                      | 99                         |
| Total Solar Energy<br>Reflected %        | 63                | 45                | 30                | 65                            | 62                      | 64                         |
| Total Solar Energy<br>Transmitted %      | 12                | 25                | 37                | 12                            | 10                      | 9                          |
| Total Solar Energy<br>Absorbed %         | 25                | 30                | 33                | 23                            | 28                      | 27                         |
| Emissivity (Room Side)                   | 0.84              | 0.84              | 0.84              | 0.84                          | 0.84                    | 0.84                       |
| Glare Reduction %                        | 81                | 63                | 46                | 82                            | 84                      | 82                         |
| Selective InfraRed<br>Reduction %        | 91                | 80                | 70                | 90                            | 92                      | 96                         |
| InfraRed Energy<br>Reduction %           | 84                | 71                | 59                | 84                            | 85                      | 92                         |
| Shading Coefficient                      | 0.22              | 0.39              | 0.53              | 0.22                          | 0.22                    | 0.20                       |
| Solar Heat Gain<br>Coefficient (G-Value) | 0.19              | 0.34              | 0.46              | 0.19                          | 0.19                    | 0.17                       |
| U-Value Winter (IP)                      | 1.04              | 1.04              | 1.04              | 1.04                          | 1.04                    | 1.04                       |
| U-Value Winter (SI)                      | 5.91              | 5.91              | 5.91              | 5.91                          | 5.91                    | 5.91                       |
| Luminous Efficacy                        | 0.77              | 0.84              | 0.90              | 0.73                          | 0.59                    | 0.80                       |
| Total Solar Energy<br>Rejected           | 81                | 66                | 54                | 81                            | 81                      | 83                         |
|  |                   | 1                 | 1                 | 1                             |                         |                            |



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