

# WINDOW FILM PERFORMANCE DATA | Architectural: North America



## Decorative Window Film

|  | % 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 |
|--|-----------------------------|---------------------------|---------------------------|-------------------------------|----------------------------------|----------------------------------|----------------|---------------------|--|------------|-----------------------------|-------------------------------|--------------------------------------|------------------------------------|------------------------------|-------------------|
| <b>Clear Glass</b>   | 83                          | 8                         | 9                         | 90                            | 8                                | 8                                | 1.03           | 1.00                | 29   | 0.84       | 0.86                        | 14                            | 1.05                                 | 0                                  | 0                            | 0                 |
| <b>Frosts</b>  |                             |                           |                           |                               |                                  |                                  |                |                     |  |            |                             |                               |                                      |                                    |                              |                   |
| Frosted films were created to enhance privacy and improve aesthetics. They are ideal for commercial interior glazing applications such as office partitions to achieve privacy or to meet interior design goals at a fraction of the cost of etched glass.             |                             |                           |                           |                               |                                  |                                  |                |                     |  |            |                             |                               |                                      |                                    |                              |                   |
| NRM80-PS2 (Mist)   | 76                          | 15                        | 9                         | 84                            | 19                               | 19                               | 0.95           | 0.91                | 99   | 0.81       | 0.79                        | 21                            | 1.06                                 | 9                                  | 8                            | 7                 |
| NRM-PS2 (Frost)  | 69                          | 20                        | 11                        | 75                            | 25                               | 22                               | 1.02           | 0.84                | 98   | 0.84       | 0.73                        | 27                            | 1.03                                 | 16                                 | 1                            | 17                |
| NRM55-PS4 (Glacier)  | 62                          | 28                        | 10                        | 67                            | 36                               | 24                               | 0.97           | 0.74                | 99   | 0.72       | 0.64                        | 36                            | 1.05                                 | 26                                 | 6                            | 26                |
| NRMB-PS2 (Bronze)  | 50                          | 13                        | 37                        | 36                            | 11                               | 15                               | 1.03           | 0.69                | 98   | 0.84       | 0.61                        | 39                            | 0.59                                 | 31                                 | 0                            | 60                |
| RMS-PS2 (Silver)   | 13                          | 57                        | 30                        | 16                            | 60                               | 64                               | 1.03           | 0.24                | 99   | 0.72       | 0.21                        | 79                            | 0.76                                 | 76                                 | 0                            | 82                |
| NRMV60F-PS3 (Etched Frost)   | 55                          | 22                        | 23                        | 55                            | 34                               | 36                               | 1.04           | 0.7                 | 90   | 0.84       | 0.61                        | 39                            | 0.9                                  | 30                                 | -1                           | 39                |
| NRMV80DC-PS3 (Dusted Crystal)  | 80                          | 9                         | 11                        | 87                            | 11                               | 10                               | 1.04           | 0.96                | 75   | 0.84       | 0.83                        | 17                            | 1.05                                 | 4                                  | -1                           | 3                 |
| <b>Patterns</b>  |                             |                           |                           |                               |                                  |                                  |                |                     |  |            |                             |                               |                                      |                                    |                              |                   |
| Patterned films are available in a variety of styles to offer a wide range of aesthetic solutions through varying levels of translucent and opaque whites with a simulated acid-etch appearance. This series also includes a broad range of classic patterns.          |                             |                           |                           |                               |                                  |                                  |                |                     |  |            |                             |                               |                                      |                                    |                              |                   |
| NRM FS SR HPR (Stripes)  | 72                          | 17                        | 11                        | 73                            | 20                               | 20                               | 1.03           | 0.9                 | 99   | 0.84       | 0.79                        | 21                            | 0.92                                 | 10                                 | 0                            | 19                |
| NRM MFS SR HPR (Matte Stripes)   | 65                          | 26                        | 9                         | 69                            | 35                               | 41                               | 0.97           | 0.77                | 95   | 0.71       | 0.67                        | 33                            | 1.03                                 | 23                                 | 6                            | 23                |
| NRM FTL SR HPR (Thin Lines)  | 70                          | 19                        | 11                        | 73                            | 20                               | 20                               | 1.03           | 0.84                | 99   | 0.84       | 0.73                        | 27                            | 1                                    | 16                                 | 0                            | 19                |
| NRM FB SR HPR (Bands)  | 63                          | 19                        | 18                        | 63                            | 23                               | 23                               | 1.03           | 0.8                 | 99   | 0.84       | 0.7                         | 30                            | 0.9                                  | 20                                 | 0                            | 30                |
| NRM FSQ SR HPR (Squares)   | 68                          | 16                        | 16                        | 69                            | 20                               | 20                               | 1.03           | 0.87                | 99   | 0.84       | 0.77                        | 23                            | 0.9                                  | 13                                 | 0                            | 23                |
| NRM MSQ SR HPR (Matte Squares)   | 61                          | 20                        | 19                        | 61                            | 25                               | 25                               | 1.03           | 0.75                | 99   | 0.84       | 0.66                        | 34                            | 0.92                                 | 25                                 | 0                            | 32                |
| NRM FSD SR HPR (Small Dots)  | 78                          | 12                        | 10                        | 82                            | 13                               | 13                               | 1.03           | 0.94                | 99   | 0.84       | 0.81                        | 19                            | 1.01                                 | 6                                  | 0                            | 9                 |
| NRM MFSD SR HPR (Matte Small Dots)   | 60                          | 23                        | 17                        | 64                            | 30                               | 30                               | 0.98           | 0.75                | 96   | 0.73       | 0.65                        | 35                            | 0.98                                 | 25                                 | 5                            | 29                |
| NRM FMD SR HPR (Mini Dots)   | 76                          | 12                        | 12                        | 81                            | 15                               | 15                               | 1.03           | 0.91                | 99   | 0.84       | 0.79                        | 21                            | 1.03                                 | 9                                  | 0                            | 10                |
| Frosted Sparkle  | 70                          | 16                        | 14                        | 73                            | 19                               | 18                               | 1.03           | 0.85                | 83   | 0.84       | 0.74                        | 26                            | 0.99                                 | 15                                 | 0                            | 19                |
| <b>Textures</b>  |                             |                           |                           |                               |                                  |                                  |                |                     |  |            |                             |                               |                                      |                                    |                              |                   |
| Textured films, the latest in the decorative film portfolio, add visual interest to any design. The unique vinyl construction of these films make them ideal candidates for custom cut solutions. Add elegance to your building without the expense of designer glass. |                             |                           |                           |                               |                                  |                                  |                |                     |  |            |                             |                               |                                      |                                    |                              |                   |
| NRMV CG HPR (Crackled Glass)   | 83                          | 8                         | 9                         | 90                            | 9                                | 9                                | 0.94           | 0.99                | 27   | 0.8        | 0.86                        | 14                            | 1.05                                 | 1                                  | 9                            | 0                 |
| NRMV SC HPR (Satin Crystal)  | 83                          | 8                         | 9                         | 90                            | 9                                | 11                               | 1.03           | 1                   | 25   | 0.81       | 0.86                        | 14                            | 1.05                                 | 0                                  | 0                            | 0                 |
| NRMV BC HPR (Brushed Crystal)  | 83                          | 11                        | 6                         | 90                            | 12                               | 10                               | 0.94           | 1                   | 25   | 0.8        | 0.86                        | 14                            | 1.05                                 | 0                                  | 9                            | 0                 |
| <b>Specialties</b>   |                             |                           |                           |                               |                                  |                                  |                |                     |  |            |                             |                               |                                      |                                    |                              |                   |
| Specialty films provide a rainbow of color options to enhance any building design. Specialty film products are recommended for interior applications. Combine color with patterns to inspire a wide range of custom design solutions.                                  |                             |                           |                           |                               |                                  |                                  |                |                     |  |            |                             |                               |                                      |                                    |                              |                   |
| NRMM-PS2 (Black)   | 0                           | 11                        | 89                        | 0                             | 13                               | 8                                | 1.03           | 0.34                | 100  | 0.84       | 0.29                        | 71                            | 0                                    | 66                                 | 0                            | 100               |
| NRMW-PS3 (White)   | 18                          | 66                        | 16                        | 14                            | 87                               | 84                               | 1.03           | 0.25                | 99   | 0.84       | 0.23                        | 77                            | 0.61                                 | 75                                 | 0                            | 84                |
| Red SR HPR (Red)   | 59                          | 8                         | 33                        | 26                            | 8                                | 8                                | 1.03           | 0.79                | 98   | 0.84       | 0.69                        | 31                            | 0.38                                 | 16                                 | 0                            | 70                |
| Yellow SR HPR (Yellow)   | 73                          | 9                         | 18                        | 85                            | 8                                | 8                                | 1.03           | 0.9                 | 98   | 0.84       | 0.78                        | 22                            | 1.09                                 | 4                                  | 0                            | 3                 |
| Blue SR HPR (Blue)   | 61                          | 8                         | 31                        | 28                            | 8                                | 8                                | 1.03           | 0.8                 | 98   | 0.84       | 0.7                         | 30                            | 0.4                                  | 15                                 | 0                            | 68                |
| Green SR HPR (Green)   | 46                          | 7                         | 47                        | 32                            | 8                                | 8                                | 1.03           | 0.68                | 98   | 0.84       | 0.59                        | 41                            | 0.54                                 | 28                                 | 0                            | 64                |