

# 3M Technical News

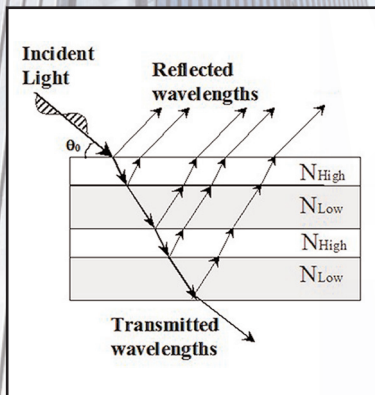
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## 3M™ Prestige Series Window Films

With 3M Prestige Series Window Films, you can enjoy the benefits of a world-class window film while leaving the beauty of your windows virtually unchanged.

Because 3M Prestige Series Window Films use no metals, they are not susceptible to corrosion and do not interfere with EMI signals such as cell phone reception. Other window films that reject heat tend to have high reflectivity, but not Prestige Series Window Films – Prestige Series Window Films offer low reflectivity. In fact, two of the films offer reflectivity lower than glass itself. A final key technical feature of the Prestige Series Window Film line of products is that they were designed to perform best when the sun is high, at the hottest parts of the day so, when the sun is working hardest, our films are performing their best.



Hundreds of layers in the multi-layer optical base film (less than the thickness of a Post-It note) are the key to these film's high performance. The physics behind the multi-layer optical base film are illustrated at left:

A final key advantage of Prestige Series Window films is that they block 97% of the sun's infrared energy. Please see the data table below for performance figures:

The next newsletter will include a much more in-depth description of 3M Prestige Series Window Films.

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| Product | Glazing type  | VLТ | Visible Light reflected (Interior) | Visible Light reflected (exterior) | UV Blocked | Shading Coeff. | Total Solar Energy Rejected | TSER @ 60 deg | Heat Gain Reduction | Glare reduction | Luminous Efficacy | IR rejected |
|---------|---------------|-----|------------------------------------|------------------------------------|------------|----------------|-----------------------------|---------------|---------------------|-----------------|-------------------|-------------|
| PR-70   | Single Clear  | 68% | 9%                                 | 9%                                 | 99.9%      | 0.58           | 50%                         | 59%           | 38%                 | 23%             | 1.17              | 97%         |
|         | Single Tinted | 41% | 8%                                 | 6%                                 | 99.9%      | 0.5            | 57%                         | 63%           | 32%                 | 23%             | 0.82              | 97%         |
|         | Double Clear  | 61% | 13%                                | 16%                                | 99.9%      | 0.64           | 44%                         | 50%           | 21%                 | 23%             | 0.95              | 97%         |
|         | Double Tinted | 37% | 12%                                | 9%                                 | 99.9%      | 0.48           | 58%                         | 62%           | 19%                 | 22%             | 0.77              | 97%         |
| PR-60   | Single Clear  | 61% | 8%                                 | 8%                                 | 99.9%      | 0.55           | 52%                         | 61%           | 41%                 | 31%             | 1.11              | 97%         |
|         | Single Tinted | 36% | 7%                                 | 6%                                 | 99.9%      | 0.48           | 58%                         | 63%           | 34%                 | 32%             | 0.75              | 97%         |
|         | Double Clear  | 54% | 11%                                | 15%                                | 99.9%      | 0.63           | 45%                         | 54%           | 22%                 | 32%             | 0.86              | 97%         |
|         | Double Tinted | 32% | 10%                                | 8%                                 | 99.9%      | 0.47           | 59%                         | 64%           | 20%                 | 32%             | 0.68              | 97%         |
| PR-50   | Single Clear  | 50% | 7%                                 | 8%                                 | 99.9%      | 0.51           | 56%                         | 63%           | 46%                 | 43%             | 0.98              | 97%         |
|         | Single Tinted | 30% | 6%                                 | 6%                                 | 99.9%      | 0.46           | 60%                         | 66%           | 37%                 | 44%             | 0.65              | 97%         |
|         | Double Clear  | 44% | 9%                                 | 15%                                | 99.9%      | 0.61           | 47%                         | 53%           | 25%                 | 44%             | 0.72              | 97%         |
|         | Double Tinted | 27% | 9%                                 | 8%                                 | 99.9%      | 0.46           | 60%                         | 64%           | 22%                 | 43%             | 0.59              | 97%         |
| PR-40   | Single Clear  | 39% | 6%                                 | 7%                                 | 99.9%      | 0.47           | 59%                         | 66%           | 50%                 | 56%             | 0.83              | 97%         |
|         | Single Tinted | 23% | 6%                                 | 6%                                 | 99.9%      | 0.43           | 63%                         | 67%           | 41%                 | 57%             | 0.53              | 97%         |
|         | Double Clear  | 35% | 8%                                 | 14%                                | 99.9%      | 0.59           | 49%                         | 54%           | 27%                 | 56%             | 0.59              | 97%         |
|         | Double Tinted | 21% | 7%                                 | 8%                                 | 99.9%      | 0.45           | 61%                         | 64%           | 24%                 | 56%             | 0.47              | 97%         |

## 3M Window Films Awarded Skin Cancer Seal of Recommendation

3M is proud to announce that 31 additional window films have been recently approved by The Skin Cancer Foundation, bringing our total number of products now to 43. The Skin Cancer Foundation recommends the following 3M window film products as effective UV protectants.

|                                       |                             |  |
|---------------------------------------|-----------------------------|--|
| <b>3M Scotchtint Automotive Films</b> | CS Series                   | CS-5,CS-20   |
|                                       | Crystalline Series          | Crystalline 40, Crystalline 50, Crystalline 60, Crystalline 70 |
|                                       | Black Chrome Series         | BC-10, BC-20, BC-35, BC-40                                     |
|                                       | FX Series                   | FX ST-5,FX HP-5, FX HP-20, FX HP-30, FX HP-35, FX HP-50        |
| <b>3M Scotchtint Window Films</b>     | Prestige Series             | PR40,PR50, PR60, PR70  |
|                                       | Nightvision Series          | NV-15,NV-25, NV-35, NV-45                                      |
|                                       | Affinity Series             | Affinity15, Affinity 30  |
|                                       | Amber Series                | LE35AMARL, RE35AMARL   |
|                                       | Counter Intelligence Series | CI100T,CI100B  |
|                                       | Neutral Series              | RE20NEARL, RE35NEARL, RE50NEARL                                |
|                                       | Silver Series               | P18ARL   |
|                                       | XL Series                   | RE15SIARXL,RE20BRARXL, RE35NEARXL, RE35SIARXL                  |
| <b>3M Scotchshield Safety Films</b>   |                             | S20SIAR400,S25NVAR400, S35NEAR400, S50NEAR400                  |
|                                       |                             | SH14CLARL  |

For additional information, please visit: <http://www.skincancer.org/aboutus/documents/SealList.pdf>

## 3M Affinity Window Films

3M™ Affinity™ Window Films offer 3M quality and features along with attractive pricing providing an exceptional value. Like our Night Vision films, they feature lower interior reflectivity and a warm bronze hue.

They also feature a unique water-activated adhesive and come in 72" wide rolls.

| Product    | Glass thickness | Glass type    | Shading Coeff. | Visible Light reflected (Interior) | Visible Light reflected (exterior) | VLT  | Emissivity (film) | U Value | UV Blocked | Heat Gain Reduction | Heat Loss | Glare | TSER |
|------------|-----------------|---------------|----------------|------------------------------------|------------------------------------|------|-------------------|---------|------------|---------------------|-----------|-------|------|
| Affinity15 | 6mm             | Single Clear  | 0.24           | 25%                                | 58%                                | 9%   | 0.79              | 1.00    | 99         | 74%                 | 2%        | 90%   | 79%  |
|            |                 | Single Tinted | 0.31           | 25%                                | 24%                                | 5%   | 0.79              | 1.00    | 99         | 58%                 | 2%        | 91%   | 73%  |
|            |                 | Double clear  | 0.37           | 26%                                | 57%                                | 8%   | 0.79              | 0.47    | 99         | 54%                 | 0%        | 90%   | 68%  |
|            |                 | Double tinted | 0.31           | 25%                                | 23%                                | 5%   | 0.79              | 0.47    | 99         | 47%                 | 0%        | 89%   | 73%  |
| Affinity30 | 6mm             | Single Clear  | 0.50           | 10%                                | 17%                                | 0.36 | 0.68              | 0.94    | 99         | 47%                 | 8%        | 59%   | 57%  |
|            |                 | Single Tinted | 0.45           | 10%                                | 9%                                 | 22%  | 0.68              | 0.94    | 99         | 38%                 | 8%        | 59%   | 61%  |
|            |                 | Double clear  | 0.59           | 12%                                | 22%                                | 32%  | 0.68              | 0.45    | 99         | 27%                 | 4%        | 59%   | 49%  |
|            |                 | Double tinted | 0.45           | 11%                                | 11%                                | 19%  | 0.68              | 0.45    | 99         | 24%                 | 4%        | 60%   | 61%  |

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