

## Enjoy enhanced views, savings and comfort with 3M™ Sun Control Window Film Night Vision™ Series.

- Great heat rejection helps provide energy savings and improved comfort
- Enhanced views with low interior reflectivity, especially at night
- ▶ Helps reduce glare and eye discomfort
- ► Helps extend the life of furnishings by significantly reducing harmful UV rays, the largest cause of fading
- ► Excellent scratch-resistant coating
- ▶ 3M nano-technology enhances color stability
- ► Comprehensive warranty from 3M

| Energy Savings              | **** |
|-----------------------------|------|
| Heat Rejection              | **** |
| Glare Reduction             | **** |
| Interior Visible Reflection | ***  |

Best \*\*\*\*

Better \*\*\*

Good \*\*

Fair \*\*

In comparison to other  $3M^{\text{\tiny M}}$  Sun Control Window Films.

## Save energy by day. Enhance views by night.

















## 3M<sup>™</sup> Sun Control Window Film Night Vision<sup>™</sup> 25 Case Study — Embarcadero Center Climate Zone 3

345,000 sq ft installation of Night Vision 25

Payback period — less than 1 year

Customer issues:

- ▶ High energy costs and consumption
- ▶ Tenant comfort due to direct sun



## **Product Performance and Technical Data**

|                          |                 | Visible Light           |                         |             | Solar                             | U Value                               |               |           |                         |                      |                    |  |
|--------------------------|-----------------|-------------------------|-------------------------|-------------|-----------------------------------|---------------------------------------|---------------|-----------|-------------------------|----------------------|--------------------|--|
| Glass Type<br>(All 1/4") | Film Type       | Reflected<br>(Interior) | Reflected<br>(Exterior) | Transmitted | Total<br>Solar Energy<br>Rejected | Heat Gain<br>Coefficient<br>(G Value) | btu/<br>hft²F | w/<br>m²K | Solar Heat<br>Reduction | UV Light<br>Rejected | Glare<br>Reduction | Visible Light<br>to Solar Heat<br>Gain Ratio |
| Clear                    | Night Vision 15 | 11%                     | 38%                     | 15%         | 72%                               | 0.28                                  | 0.98          | 5.6       | 66%                     | 99%                  | 83%                | 0.5  |
|                          | Night Vision 25 | 7%                      | 19%                     | 24%         | 61%                               | 0.39                                  | 1.00          | 5.7       | 52%                     | 99%                  | 73%                | 0.6  |
|                          | Night Vision 35 | 7%                      | 13%                     | 36%         | 52%                               | 0.48                                  | 1.03          | 5.8       | 41%                     | 99%                  | 59%                | 0.7  |
| Tinted                   | Night Vision 15 | 11%                     | 16%                     | 9%          | 70%                               | 0.30                                  | 0.98          | 5.6       | 52%                     | 99%                  | 82%                | 0.3  |
|                          | Night Vision 25 | 7%                      | 10%                     | 14%         | 64%                               | 0.36                                  | 1.00          | 5.7       | 43%                     | 99%                  | 74%                | 0.4  |
|                          | Night Vision 35 | 6%                      | 8%                      | 22%         | 58%                               | 0.42                                  | 1.03          | 5.8       | 33%                     | 99%                  | 58%                | 0.5  |
| Double Clear             | Night Vision 15 | 11%                     | 39%                     | 14%         | 60%                               | 0.40                                  | 0.46          | 2.6       | 43%                     | 99%                  | 82%                | 0.4  |
|                          | Night Vision 25 | 8%                      | 24%                     | 22%         | 51%                               | 0.49                                  | 0.47          | 2.7       | 29%                     | 99%                  | 72%                | 0.4  |
|                          | Night Vision 35 | 8%                      | 19%                     | 32%         | 45%                               | 0.55                                  | 0.47          | 2.7       | 21%                     | 99%                  | 60%                | 0.6  |
|                          | Night Vision 15 | 11%                     | 17%                     | 8%          | 68%                               | 0.32                                  | 0.46          | 2.6       | 37%                     | 99%                  | 83%                | 0.3  |
|                          | Night Vision 25 | 8%                      | 12%                     | 13%         | 63%                               | 0.37                                  | 0.47          | 2.7       | 27%                     | 99%                  | 73%                | 0.4  |
| Double Tinted            | Night Vision 35 | 7%                      | 10%                     | 19%         | 59%                               | 0.41                                  | 0.47          | 2.7       | 19%                     | 99%                  | 60%                | 0.5  |

| LEED Certification Window films may be used toward the following LEED credits: |              |          |              |  |  |  |  |  |
|--|--------------|----------|--------------|--|--|--|--|--|
| ► SS-8   | ► MR 1.1-1.2 | ► EQ-7.1 | ► EQ-8.1-8.2 |  |  |  |  |  |
| ► EA-1   | ► MR 5.1-5.2 | ► EQ-7.2 | ▶ ID         |  |  |  |  |  |

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