

SunGuard[®] Advanced Architectural Glass

PICTURED ABOVE:
Richardson Innovation Centre
SunGuard[®] SNX 62/27 on UltraClear[®]



**GUARDIAN[®]
GLASS**
See what's possible[™]

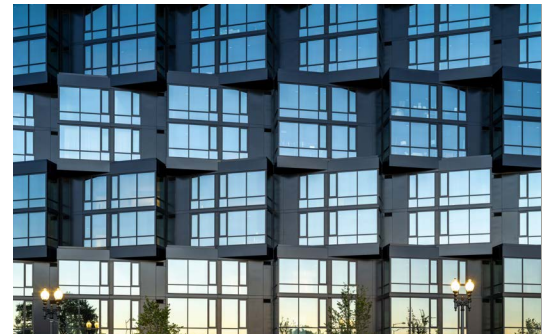
Explore and Express Your Vision

The comprehensive range of SunGuard® architectural glass coatings, colors and design solutions allows architects to explore fully the aesthetic and functional possibilities of light while helping to meet complex energy and performance requirements. Drawing on the cumulative expertise of coating experts and production teams throughout the world, Guardian continually applies science and cutting-edge technology to the development of new SunGuard products that expand the limits of aesthetics and performance.

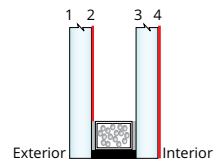
- SNX 62/27
- SNE 50/25
- SNR 43
- SN 68
- Neutral 78/65
- SNX 51/23
- SNR 50
- SNR 35
- SN 54
- IS 20

Demanding Performance

Whether your commercial glass project is located in a hot, sunny climate, a cold climate or somewhere in-between, Guardian Glass has a product to help meet the environmental demands. From spectrally-selective coatings with high visible light transmission to varying levels of reflectivity, SunGuard Advanced Architectural Glass delivers maximum energy savings that help meet or exceed energy code requirements.



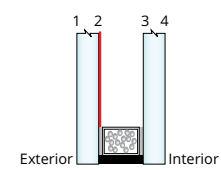
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SunGuard – Insulating Glass Data with IS 20(#4)

| Product | Substrate Outboard-Inboard | Appearance | Visible Light | | | | UV Transmittance % | SHGC | U-Value | Light to Solar Gain | Argon | | Air | |
|---|-------------------------------|--------------|-----------------|-------------|------|-----------------------------|-----------------------|---------|---------------------------|---------------------------|-------|---------|---------------------------|--|
| | | | Transmittance % | Reflectance | | Color Rendering Index | | | | | SHGC | U-Value | Light to Solar Gain | |
| | | | | Out % | In % | | SHGC | U-Value | Light to Solar Gain | | | | | |
| Coating #2 surface with IS 20 #4 surface | | | | | | | | | | | | | | |
| SNX 62/27 | Guardian UltraClear® | Ultra Clear | 62 | 12 | 13 | 94.9 | 8 | 0.26 | 0.20 | 2.43 | 0.26 | 0.23 | 2.41 | |
| | Clear-Clear | Clear | 60 | 12 | 13 | 92.9 | 6 | 0.25 | 0.20 | 2.37 | 0.26 | 0.23 | 2.33 | |
| SNX 51/23 | Guardian UltraClear | Neutral Blue | 51 | 14 | 15 | 94.2 | 12 | 0.22 | 0.20 | 2.34 | 0.22 | 0.23 | 2.30 | |
| | Clear-Clear | Neutral Blue | 49 | 14 | 14 | 91.9 | 10 | 0.22 | 0.20 | 2.27 | 0.22 | 0.23 | 2.22 | |
| SNE 50/25 | Guardian UltraClear | Blue-Silver | 48 | 19 | 18 | 91.3 | 21 | 0.24 | 0.20 | 1.99 | 0.25 | 0.23 | 1.97 | |
| | Clear-Clear | Blue-Silver | 47 | 19 | 18 | 88.9 | 16 | 0.24 | 0.20 | 1.96 | 0.24 | 0.23 | 1.93 | |
| SN 68 | Guardian UltraClear | Ultra Clear | 69 | 12 | 13 | 97.8 | 37 | 0.38 | 0.20 | 1.81 | 0.38 | 0.24 | 1.80 | |
| | Clear-Clear | Clear | 66 | 12 | 13 | 95.4 | 29 | 0.36 | 0.20 | 1.83 | 0.36 | 0.24 | 1.82 | |
| SN 54 | Guardian UltraClear | Ultra Clear | 55 | 15 | 21 | 97.6 | 20 | 0.28 | 0.20 | 1.98 | 0.28 | 0.24 | 1.96 | |
| | Clear-Clear | Clear | 53 | 15 | 20 | 96.2 | 15 | 0.27 | 0.20 | 1.96 | 0.27 | 0.24 | 1.93 | |
| SNR 50 | Guardian UltraClear | Light Silver | 48 | 27 | 17 | 93.8 | 24 | 0.24 | 0.20 | 1.99 | 0.25 | 0.24 | 1.97 | |
| | Clear-Clear | Light Silver | 47 | 26 | 17 | 91.3 | 18 | 0.24 | 0.20 | 1.97 | 0.24 | 0.24 | 1.94 | |
| SNR 43 | Guardian UltraClear | Light Silver | 43 | 29 | 15 | 93.5 | 22 | 0.22 | 0.20 | 1.99 | 0.22 | 0.23 | 1.97 | |
| | Clear-Clear | Light Silver | 42 | 28 | 15 | 91.1 | 17 | 0.21 | 0.20 | 1.96 | 0.22 | 0.23 | 1.92 | |
| SNR 35 | Guardian UltraClear | Light Silver | 33 | 36 | 20 | 92.1 | 14 | 0.16 | 0.20 | 2.10 | 0.16 | 0.24 | 2.06 | |
| | Clear-Clear | Light Silver | 32 | 35 | 19 | 89.7 | 11 | 0.16 | 0.20 | 2.02 | 0.16 | 0.24 | 1.97 | |

Find table notes on following page.



Guardian SunGuard® – Insulating Glass Data

| Product | Substrate Outboard-Inboard | Appearance | Visible Light | | | | UV | SHGC | U-Value | Light to Solar Gain | SHGC | U-Value | Light to Solar Gain |
|---|-------------------------------|--------------|-----------------|-------------|------|-----------------------|-----------------|-------|---------|---------------------------|------|---------|---------------------------|
| | | | Transmittance % | Reflectance | | Color Rendering Index | Transmittance % | | | | | | |
| | | | | Out % | In % | | | | | | | | |
| Coating #2 surface – except Neutral 78/65 on #3 surface | | | | | | | | | | | | | |
| | | | | | | | | Argon | | | Air | | |
| SNX 62/27 | Guardian UltraClear® | Ultra Clear | 64 | 11 | 13 | 95.0 | 8 | 0.26 | 0.24 | 2.44 | 0.27 | 0.29 | 2.40 |
| | Clear-Clear | Clear | 62 | 11 | 12 | 93.0 | 6 | 0.26 | 0.24 | 2.36 | 0.27 | 0.29 | 2.31 |
| | Green-Clear | Green | 52 | 9 | 12 | 85.1 | 3 | 0.23 | 0.24 | 2.25 | 0.24 | 0.29 | 2.13 |
| | CrystalGray-Clear | Light Gray | 44 | 8 | 11 | 89.8 | 3 | 0.21 | 0.24 | 2.08 | 0.22 | 0.29 | 1.98 |
| SNX 51/23 | Gray-Clear | Gray | 31 | 6 | 11 | 90.7 | 3 | 0.17 | 0.24 | 1.83 | 0.18 | 0.29 | 1.71 |
| | Guardian UltraClear | Neutral Blue | 53 | 14 | 14 | 94.2 | 13 | 0.23 | 0.24 | 2.34 | 0.23 | 0.29 | 2.27 |
| | Clear-Clear | Neutral Blue | 51 | 14 | 14 | 91.9 | 10 | 0.23 | 0.24 | 2.26 | 0.23 | 0.29 | 2.18 |
| | Green-Clear | Blue-Green | 43 | 11 | 13 | 84.1 | 5 | 0.20 | 0.24 | 2.12 | 0.21 | 0.29 | 1.99 |
| | CrystalGray-Clear | Light Gray | 36 | 9 | 13 | 88.8 | 6 | 0.18 | 0.24 | 1.96 | 0.20 | 0.29 | 1.85 |
| SNE 50/25 | Gray-Clear | Gray | 26 | 7 | 13 | 89.8 | 5 | 0.15 | 0.24 | 1.70 | 0.16 | 0.29 | 1.57 |
| | Guardian UltraClear | Blue-Silver | 50 | 19 | 18 | 91.4 | 22 | 0.25 | 0.24 | 1.99 | 0.25 | 0.29 | 1.96 |
| | Clear-Clear | Blue-Silver | 48 | 19 | 18 | 88.9 | 17 | 0.25 | 0.24 | 1.95 | 0.25 | 0.29 | 1.90 |
| SN 68 | CrystalGray-Clear | Blue-Gray | 34 | 12 | 17 | 86.0 | 9 | 0.20 | 0.24 | 1.71 | 0.21 | 0.29 | 1.62 |
| | Guardian UltraClear | Ultra Clear | 71 | 11 | 13 | 97.9 | 40 | 0.39 | .245 | 1.82 | 0.39 | 0.29 | 1.80 |
| | Clear-Clear | Clear | 68 | 11 | 12 | 95.4 | 30 | 0.37 | .245 | 1.82 | 0.38 | 0.29 | 1.80 |
| | Green-Clear | Green | 57 | 9 | 12 | 86.9 | 13 | 0.29 | .245 | 1.99 | 0.30 | 0.29 | 1.92 |
| | CrystalGray-Clear | Light Gray | 48 | 8 | 11 | 92.1 | 17 | 0.29 | .245 | 1.69 | 0.30 | 0.29 | 1.64 |
| SN 54 | Gray-Clear | Gray | 34 | 6 | 11 | 93.2 | 14 | 0.24 | .245 | 1.43 | 0.25 | 0.29 | 1.37 |
| | Guardian UltraClear | Ultra Clear | 56 | 15 | 21 | 97.6 | 21 | 0.28 | 0.24 | 1.98 | 0.29 | 0.29 | 1.95 |
| | Clear-Clear | Clear | 54 | 14 | 20 | 96.3 | 16 | 0.28 | 0.24 | 1.95 | 0.28 | 0.29 | 1.91 |
| | Green-Clear | Green | 46 | 11 | 19 | 88.2 | 7 | 0.23 | 0.24 | 1.99 | 0.24 | 0.29 | 1.89 |
| | CrystalGray-Clear | Light Gray | 39 | 9 | 19 | 93.5 | 9 | 0.22 | 0.24 | 1.75 | 0.23 | 0.29 | 1.67 |
| SNR 50 | Gray-Clear | Gray | 27 | 7 | 19 | 94.3 | 7 | 0.18 | 0.24 | 1.49 | 0.20 | 0.29 | 1.40 |
| | Guardian UltraClear | Light Silver | 50 | 27 | 17 | 93.8 | 25 | 0.25 | 0.24 | 2.00 | 0.25 | 0.29 | 1.96 |
| | Clear-Clear | Light Silver | 48 | 26 | 17 | 91.3 | 19 | 0.25 | 0.24 | 1.96 | 0.25 | 0.29 | 1.91 |
| | CrystalGray-Clear | Silver Gray | 34 | 15 | 16 | 88.2 | 10 | 0.20 | 0.24 | 1.71 | 0.21 | 0.29 | 1.63 |
| SNR 43 | Guardian UltraClear | Light Silver | 45 | 28 | 14 | 93.5 | 24 | 0.22 | 0.24 | 1.99 | 0.23 | 0.29 | 1.96 |
| | Clear-Clear | Light Silver | 43 | 28 | 14 | 91.1 | 17 | 0.22 | 0.24 | 1.94 | 0.23 | 0.29 | 1.89 |
| | Green-Clear | Green | 36 | 21 | 14 | 83.0 | 8 | 0.19 | 0.24 | 1.89 | 0.20 | 0.29 | 1.78 |
| | CrystalGray-Clear | Silver Gray | 31 | 16 | 14 | 87.9 | 9 | 0.18 | 0.24 | 1.68 | 0.19 | 0.29 | 1.59 |
| | Gray-Clear | Silver Gray | 22 | 11 | 13 | 89.2 | 8 | 0.15 | 0.24 | 1.41 | 0.17 | 0.29 | 1.31 |
| SNR 35 | Guardian UltraClear | Light Silver | 34 | 36 | 20 | 92.1 | 15 | 0.16 | 0.24 | 2.09 | 0.17 | 0.29 | 2.03 |
| | Clear-Clear | Light Silver | 33 | 35 | 19 | 89.8 | 11 | 0.17 | 0.24 | 2.00 | 0.17 | 0.29 | 1.92 |
| | Green-Clear | Green | 28 | 26 | 19 | 81.9 | 10 | 0.15 | 0.24 | 1.80 | 0.17 | 0.29 | 1.67 |
| | CrystalGray-Clear | Silver Gray | 23 | 20 | 19 | 86.7 | 6 | 0.14 | 0.24 | 1.63 | 0.15 | 0.29 | 1.51 |
| NU 78/65(#3) | Guardian UltraClear | Ultra Clear | 81 | 13 | 13 | 99.5 | 54 | 0.73 | 0.27 | 1.12 | 0.72 | 0.31 | 1.12 |
| | Clear-Clear | Clear | 78 | 13 | 13 | 96.9 | 39 | 0.66 | 0.27 | 1.18 | 0.66 | 0.31 | 1.18 |

- All insulating glass configurations are 6 mm/12.7 mm spacer/6 mm:
- Configurations with Guardian UltraClear® low-iron glass contain Guardian UltraClear outboard & inboard.
- All other insulating glass configurations contain substrates as indicated.
- The performance values shown are nominal and subject to variations due to manufacturing tolerances.
- Guardian performance data are calculated for center-of-glass only in accordance with LBNL Window 7 program.

- SNR 35, SNR 43, SNR 50 and IS 20 require heat-treatment.
- U-value calculated is winter nighttime.
- A slight shift in visible light reflectance or transmission may be noticed after heat-treatment.
- Guardian reserves the right to change product performance characteristics without notice or obligation.

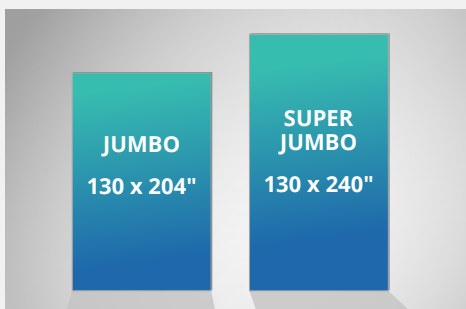


Design Tools

Design professionals in search of [3-part specifications](#), [BIM objects](#) and other design tools like our award-winning [Glass Analytics](#) can find resources on our website. For direct help, call 1-866-482-7374.

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