

# LOW-E GLASS CROSS REFERENCE CHART

## Clear Low-E Performance

1/4" Clear / 1/2" Spacer / 1/4" Clear (Guardian)

| Second Surface Low-E |           |               | Visible Light |                      |                      | SHGC | Winter U-Value<br>Center of Glass |       | IG Winter U-Value<br>Aluminum Spacer |       | IG Winter U-Value<br>TriSeal™ Spacer |       | Light to Solar Gain<br>(Air) |
|----------------------|-----------|---------------|---------------|----------------------|----------------------|------|-----------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|------------------------------|
| Mfg.                 | Product   | Type          | Transmittance | Exterior Reflectance | Interior Reflectance |      | Air                               | Argon | Air                                  | Argon | Air                                  | Argon |                              |
| AGC                  | ES73      | Hardcoat      | 75%           | 16%                  | 17%                  | 0.63 | 0.33                              | 0.29  | 0.38                                 | 0.34  | 0.36                                 | 0.32  | 1.19                         |
| Cardinal             | 272       | Double Silver | 69%           | 10%                  | 11%                  | 0.40 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.72                         |
| Guardian             | MC 37     | Double Silver | 67%           | 11%                  | 13%                  | 0.37 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.79                         |
| Guardian             | SN 68     | Double Silver | 68%           | 11%                  | 12%                  | 0.38 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.80                         |
| PPG                  | SB 60     | Double Silver | 70%           | 11%                  | 12%                  | 0.38 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.84                         |
| Cardinal             | 366       | Triple Silver | 62%           | 11%                  | 11%                  | 0.28 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 2.24                         |
| Guardian             | MC 27     | Triple Silver | 62%           | 11%                  | 12%                  | 0.27 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 2.32                         |
| Guardian             | SNX 62/27 | Triple Silver | 62%           | 11%                  | 12%                  | 0.27 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 2.32                         |
| PPG                  | SB 70XL   | Triple Silver | 62%           | 12%                  | 13%                  | 0.28 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 2.25                         |
| Guardian             | SNX 51/23 | Triple Silver | 51%           | 14%                  | 13%                  | 0.23 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 2.18                         |

## Tint Soft Coat Low-E Performance

1/4" Tint / 1/2" Spacer / 1/4" Clear (If no Low-E, Guardian)

| Tint     |              | Low-E    |              | Visible Light |                      |                      | SHGC | Winter U-Value<br>Center of Glass |       | IG Winter U-Value<br>Aluminum Spacer |       | IG Winter U-Value<br>TriSeal™ Spacer |       | Light to Solar Gain<br>(Air) |
|----------|--------------|----------|--------------|---------------|----------------------|----------------------|------|-----------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|------------------------------|
| Mfg.     | Product      | Mfg.     | Product      | Transmittance | Exterior Reflectance | Interior Reflectance |      | Air                               | Argon | Air                                  | Argon | Air                                  | Argon |                              |
| AGC      | Pure Bronze™ | AGC      | ES 25 #2     | 40%           | 8%                   | 16%                  | 0.27 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.50                         |
| PPG      | Solarbronze® | Guardian | SN 68 #3     | 40%           | 8%                   | 10%                  | 0.31 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.29                         |
| PPG      | Solarbronze® | PPG      | SB 60 #2     | 42%           | 7%                   | 11%                  | 0.28 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.53                         |
| Guardian | Gray         | Guardian | SN 68 #2     | 34%           | 6%                   | 11%                  | 0.25 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.37                         |
| Guardian | Gray         | Guardian | SN 68 #3     | 34%           | 7%                   | 9%                   | 0.30 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.18                         |
| PPG      | Solargray®   | PPG      | SB 60 #2     | 35%           | 7%                   | 11%                  | 0.25 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.41                         |
| Guardian | Green        | Guardian | SN 68 #2     | 58%           | 9%                   | 12%                  | 0.30 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.91                         |
| Guardian | Green        | Guardian | SN 68 #3     | 58%           | 10%                  | 10%                  | 0.35 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.64                         |
| PPG      | Solexia®     | PPG      | SB 60 #2     | 62%           | 10%                  | 12%                  | 0.32 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.92                         |
| Guardian | CrystalGray® | Guardian | SN 68 #2     | 48%           | 8%                   | 11%                  | 0.30 | 0.29                              | 0.25  | 0.34                                 | 0.31  | 0.32                                 | 0.28  | 1.64                         |
| Guardian | Solarbronze® | Guardian | SNX 62/27 #3 | 37%           | 7%                   | 10%                  | 0.26 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.39                         |
| PPG      | Solarbronze® | PPG      | SB 70 #2     | 41%           | 8%                   | 12%                  | 0.22 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.88                         |
| Guardian | Gray         | Guardian | SNX 62/27 #2 | 31%           | 6%                   | 11%                  | 0.18 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.71                         |
| Guardian | Gray         | Guardian | SNX 62/27 #3 | 31%           | 7%                   | 10%                  | 0.24 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.27                         |
| PPG      | Solargray®   | PPG      | SB 70 #2     | 34%           | 7%                   | 12%                  | 0.20 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.71                         |
| Guardian | Green        | Guardian | SNX 62/27 #2 | 52%           | 9%                   | 11%                  | 0.25 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 2.14                         |
| Guardian | Green        | Guardian | SNX 62/27 #3 | 52%           | 10%                  | 11%                  | 0.32 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.66                         |
| PPG      | Solexia®     | PPG      | SB 70 #2     | 59%           | 11%                  | 13%                  | 0.27 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 2.17                         |
| Guardian | CrystalGray® | Guardian | SNX 62/27 #2 | 44%           | 8%                   | 11%                  | 0.22 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.99                         |
| Guardian | CrystalGray® | Guardian | SNX 51/23 #2 | 36%           | 9%                   | 13%                  | 0.20 | 0.29                              | 0.24  | 0.34                                 | 0.30  | 0.32                                 | 0.27  | 1.85                         |

## Clear 2nd & 4th Surface Low-E Performance

1/4" Clear / 1/2" Spacer / 1/4" Clear

| Second Surface Low-E |           | Fourth Surface Low-E |         | Visible Light |                      |                      | SHGC | Winter U-Value<br>Center of Glass |       | IG Winter U-Value<br>Aluminum Spacer |       | IG Winter U-Value<br>TriSeal™ Spacer |       | Light to Solar Gain<br>(Air) |
|----------------------|-----------|----------------------|---------|---------------|----------------------|----------------------|------|-----------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|------------------------------|
| Mfg.                 | Product   | Mfg.                 | Product | Transmittance | Exterior Reflectance | Interior Reflectance |      | Air                               | Argon | Air                                  | Argon | Air                                  | Argon |                              |
| Guardian             | SN 68     | Guardian             | IS 20   | 66%           | 12%                  | 13%                  | 0.36 | 0.24                              | 0.20  | 0.27                                 | 0.23  | 0.26                                 | 0.22  | 1.82                         |
| Guardian             | SN 68     | AGC                  | ES 73   | 63%           | 12%                  | 15%                  | 0.36 | 0.23                              | 0.20  | 0.26                                 | 0.23  | 0.25                                 | 0.22  | 1.78                         |
| Guardian             | SNX 62/27 | Guardian             | IS 20   | 60%           | 12%                  | 13%                  | 0.26 | 0.23                              | 0.20  | 0.26                                 | 0.23  | 0.25                                 | 0.22  | 2.34                         |
| Guardian             | SNX 62/27 | AGC                  | ES 73   | 57%           | 12%                  | 14%                  | 0.25 | 0.23                              | 0.19  | 0.26                                 | 0.22  | 0.25                                 | 0.21  | 2.29                         |
| Guardian             | SNX 51/23 | Guardian             | IS 20   | 50%           | 14%                  | 14%                  | 0.22 | 0.23                              | 0.20  | 0.26                                 | 0.23  | 0.25                                 | 0.22  | 2.23                         |
| Guardian             | SNX 51/23 | AGC                  | ES 73   | 47%           | 14%                  | 16%                  | 0.22 | 0.23                              | 0.19  | 0.26                                 | 0.22  | 0.25                                 | 0.21  | 2.18                         |

## Clear Triple Pane Low-E Performance

1/4" Clear / 1/2" Spacer / 1/4" Clear / 1/2" Spacer / 1/4" Clear (Guardian)

| Second Surface Low-E |           | Fourth Surface Low-E |           | Visible Light |                      |                      | SHGC | Winter U-Value<br>Center of Glass |       | IG Winter U-Value<br>Aluminum Spacer |       | IG Winter U-Value<br>TriSeal™ Spacer |       | Light to Solar Gain<br>(Air) |
|----------------------|-----------|----------------------|-----------|---------------|----------------------|----------------------|------|-----------------------------------|-------|--------------------------------------|-------|--------------------------------------|-------|------------------------------|
| Mfg.                 | Product   | Mfg.                 | Product   | Transmittance | Exterior Reflectance | Interior Reflectance |      | Air                               | Argon | Air                                  | Argon | Air                                  | Argon |                              |
| Guardian             | SN 68     | Guardian             | SN 68     | 52%           | 13%                  | 15%                  | 0.29 | 0.16                              | 0.12  | 0.23                                 | 0.19  | 0.21                                 | 0.17  | 1.77                         |
| PPG                  | SB 60     | PPG                  | SB 60     | 56%           | 13%                  | 15%                  | 0.31 | 0.16                              | 0.12  | 0.23                                 | 0.19  | 0.21                                 | 0.17  | 1.82                         |
| Guardian             | SNX 62/27 | Guardian             | SNX 62/27 | 43%           | 13%                  | 14%                  | 0.20 | 0.15                              | 0.12  | 0.22                                 | 0.19  | 0.20                                 | 0.17  | 2.14                         |
| PPG                  | SB 70     | PPG                  | SB 70     | 44%           | 13%                  | 15%                  | 0.21 | 0.15                              | 0.12  | 0.22                                 | 0.19  | 0.20                                 | 0.17  | 2.11                         |

Manhattan, KS  
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Des Moines, IA



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