# Performance Results

Standard

**EN410**

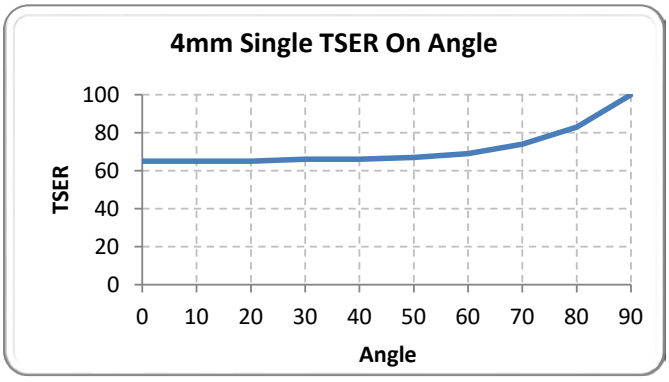
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**Sentinel Plus Stainless Steel 25 OSW**

| Performance results | 4mm Single Clear | 6mm Single Clear | 4mm Double Clear | 6mm Double Clear | 6mm Double Low-E S#2 | 6mm Double Low-E S#3 | 4mm Triple Clear | 4mm Triple LE S#2&5 |
|---|---|---|---|---|---|---|---|---|
| Visible light | | | | | | | | |
| Transmittance % | 24 | 24 | 22 | 21 | 18 | 21 | 20 | 19 |
| Reflectance exterior % | 28 | 28 | 29 | 29 | 28 | 29 | 29 | 29 |
| Reflectance interior % | 25 | 25 | 29 | 29 | 22 | 24 | 32 | 26 |
| Glare reduction % | 74 | 74 | 73 | 73 | 74 | 74 | 73 | 74 |
| Solar energy | | | | | | | | |
| Transmittance % | 23 | 22 | 20 | 18 | 11 | 14 | 17 | 12 |
| Absorptance % | 50 | 51 | 53 | 55 | 60 | 58 | 56 | 60 |
| Reflectance % | 27 | 27 | 27 | 27 | 29 | 28 | 27 | 28 |
| Solar heat gain coefficient (G-value) | ,35 | ,34 | ,27 | ,26 | ,14 | ,19 | ,23 | ,15 |
| Light to solar heat gain ratio (VLT/SHGC) | ,69 | ,69 | ,81 | ,82 | 1,26 | 1,10 | ,87 | 1,21 |
| Total solar energy rejected % | 65 | 66 | 73 | 74 | 86 | 81 | 77 | 85 |
| Total solar energy rejected % @60° | 69 | | | | | | | |
| Solar heat gain reduction % | 60 | 60 | 65 | 65 | 66 | 70 | 67 | 69 |
| Thermal energy | | | | | | | | |
| Emissivity | ,86 | ,86 | ,86 | ,86 | ,04 | ,86 | ,86 | ,04 |
| Winter U-factor (W/m²°C) | 5,7 | 5,7 | 2,8 | 2,8 | 1,1 | 1,1 | 1,8 | 0,6 |
| Winter heat loss reduction % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ultraviolet light | | | | | | | | |
| Blocked @ 300 to 380 nm % | >99 | >99 | >99 | >99 | >99 | >99 | >99 | >99 |
| Fade control | | | | | | | | |
| UV Tdw-ISO @ 300 to 700 nm % | 16 | 16 | 15 | 15 | 12 | 14 | 14 | 13 |
| Fade Reduction % | 81 | 80 | 80 | 79 | 79 | 79 | 79 | 78 |

| IR rejection | | |
|---|---|---|
| 780 to 2500nm | 86 | 87 |

| Physical properties | | |
|---|---|---|
| Thickness (microns) | 50 | microns |
| Tensile Strength ASTM D 882 | 2110 | $kg/cm^2$ |
| Elongation ASTM D 882 | >100 | % |
| Yield Stress (5%) ASTM D 882 | 1100 | $kg/cm^2$ |
| Break Strength ASTM D 882 | 11,0 | kg/cm |
| Yield Strength (5%) ASTM D 882 | 5,4 | kg/cm |
| Tear Strength (Graves) ASTM D 1004 | 1,5 | kg |
| Tensile Modulus ASTM D 882 | 35000 | $kg/cm^2$ |
| Puncture Strength ASTM D 4830 | 15,0 | kg |
| Peel Strength ASTM D 903 | >985 | g/cm |
| Poisson's Ratio ASTM D 882 | 0,38 | |
| Abrasion Resistance (100 Cycles) ASTM D 1003-92, ASTM D 1044 | <5 | % |




**Performance results notes:**
Calculated using LBNL Window 7.2 according to EN410 and EN673.
IR rejection = 1 - average unweighted transmittance

SAINT-GOBAIN