

## **GUARDIAN SUNGUARD INSULATING GLASS WITH TINTED SUBSTRATES**

Guardian's SunGuard Coated Glass products are very popular with design professionals because of the great performance and the many aesthetic options that are offered. They are popular with glaziers due to the service advantages of regional fabrication

SGC stocks the double silver SN 68 coating on clear glass, featuring a .29 U factor (.25 with argon), high light transmission and a very impressive SHGC given the high light transmission. It's a great product for retail and school applications, particularly in entrances, where high visibility and a welcoming appearance are desired.

SGC also stocks the triple silver SNX 62/27, featuring a slightly lower light transmission, the same .29 U factor, and an even better SHGC. This is a great product for a large window wall or curtainwall expanse where high light transmission is still desired, but occupant comfort is a higher priority as well as a desire to minimize cooling cost. SN 54 is a similar coating, offering a lower light transmission, and equivalent U factor and SHGC. The SNR 43 products reduce the light transmission even further and add more exterior reflectivity.

SGC does not stock glass in the SN series coated products with tinted substrates, nor do we stock any of the coated products outside the SN series. These items are brought in on a job basis. Guardian's minimum unit of sale of these products is the 1300 square foot glass pack. For commercial projects involving more than a few thousand feet, which can be cut with good "yield" from 1300 foot packs of glass 100" x 144" in size, specifying a tinted substrate with a coating achieves the best SHGC and is cost effective.

For small jobs under a couple thousand feet, however, custom tinted coated glass can be expensive. Since the glass has a shelf life, and since the odds of sale of the same glass on another project within a few months is remote, SGC costs the glass required for the job to the order.

Our recommendation for small orders, and Guardian's as well, particularly where cost and lead time is a concern, is to opt for an uncoated tinted glass for the outboard lite, and to select either SN 68 or SNX 62/27 on clear as the inboard lite. The U factor is the same if the low-e coating is on the number 2 or number 3 surface. The light transmission is just a few points higher if the low e coating is on the number 3 surface instead of the number 2 surface, which is not typically discernable. And the SHGC is not as good by just a few points if the coating is on the number 3 surface compared to the number 2 surface, which may not be critical on a job with very little glass area. But if the SHGC is critical, the use of the SNX 62/27 instead of the SN 68 will be very close to the performance of the SN 68 coating in the number 2 surface position on the outboard light.

The use of the triple silver SN-62/27 as the board lite with an uncoated tinted outboard lite on a small project is a great way to secure the desired look, achieve very impressive performance, with a fast lead time and regional sourcing, without generating a lot of glass waste or extra expense, or waiting for a non-stock glass product.