

## **SYRACUSE GLASS COMPANY TECHNICAL SERVICES**

<u>GLASS PERFORMANCE CALCULATIONS (Center-of-Glass)</u> – SGC will provide center-of-glass performance numbers – U-factors, Solar Heat Gain Coefficients, Visible Light Transmittance, Interior and Exterior Reflectance, etc. using web based software from Pilkington, Guardian, or PPG Industries.

ENERGY CODE PERFORMANCE CALCULATIONS – SGC will provide glass and framing performance numbers – U-factors, SHGC in accordance with NFRC 100 and NFRC 200– based on our insulating glass products used in combination with Tubelite T 14000 framing, Tubelite Thermal Doors, or 200 or 400 Series Curtainwall. We use the AAMA 507 standard, and independent laboratory energy performance simulations to produce a compliance statement that can be completed by the installer to demonstrate code compliance.

<u>GLASS SAMPLES AND SUBMITTALS</u>- SGC can provide 4"x 6" monolithic glass or 12" x 12" insulating glass samples with glass performance calculations, product data sheets, warranties or certifications.

<u>THERMAL STRESS CALCULATIONS</u> – Using Pilkington, Guardian or PPG software, with customer supplied information on job factors like elevation, framing color, overhangs and other exterior shading conditions, etc. SGC can produce a calculation of glass thermal stress and a recommendation on whether heat treating is required to prevent glass breakage.

<u>GLASS STRENGTH CALCULATIONS</u> – While we don't determine specific project design loads, SGC can use ASTM E 1300 software to determine the load resistance and center-of-glass deflection distance of virtually any glass type for given sizes, supported by framing on four or two sides.

<u>LEED SUBMITTALS</u> – SCG can provide glass performance documents, regional sourcing certifications, aluminum material recycled content certifications.

<u>STRUCTURAL SILICONE GLAZING CALCULATIONS</u> – If supplied with glass sizes and a project design load, SGC can calculate the minimum secondary sealant depth for silicone seal structurally glazed insulating glass units.

<u>CRL STOREFRONTS AND SHOWERS ON-LINE</u>- If we supply the glass and hardware, SGC can determine glass sizes, and hardware prep locations and clearances, and prepare fabrication drawings for shower enclosures or all glass entrances.

<u>GLASS OPTIMIZING</u> – If we supply the stock sheets, fax us the required finished sizes and minimum trim dimensions, and we'll provide the cutting diagrams.

<u>METAL STOCK LENGTH OPTIMIZING</u> – If we provide the stock lengths, fax us the cut sizes required, and we'll provide the cutting diagrams.