

Simulated Divided Lites (SDL)

The Synergy Group

Simulated Divided Lites (SDL) are engineered to replicate the appearance and dimensionality of traditional true divided lite construction while delivering the performance advantages of modern insulated glazing systems. Rather than separating individual panes, SDL bars are applied directly to both the interior and exterior glass surfaces, creating the depth, shadow lines, and visual articulation associated with authentic divided lite assemblies.

Each SDL configuration is developed with careful attention to proportion, alignment, and sightline consistency across the full window or door system. Spacer bars are aligned within the insulated glass unit to reinforce the perception of individual lites, ensuring the system reads correctly from both interior and exterior perspectives.

Available across all product lines—including Synergy, SynComm, and Ash Street—SDL profiles are manufactured to integrate seamlessly with each system’s construction, maintaining structural integrity, thermal performance, and long-term durability without compromising architectural intent.

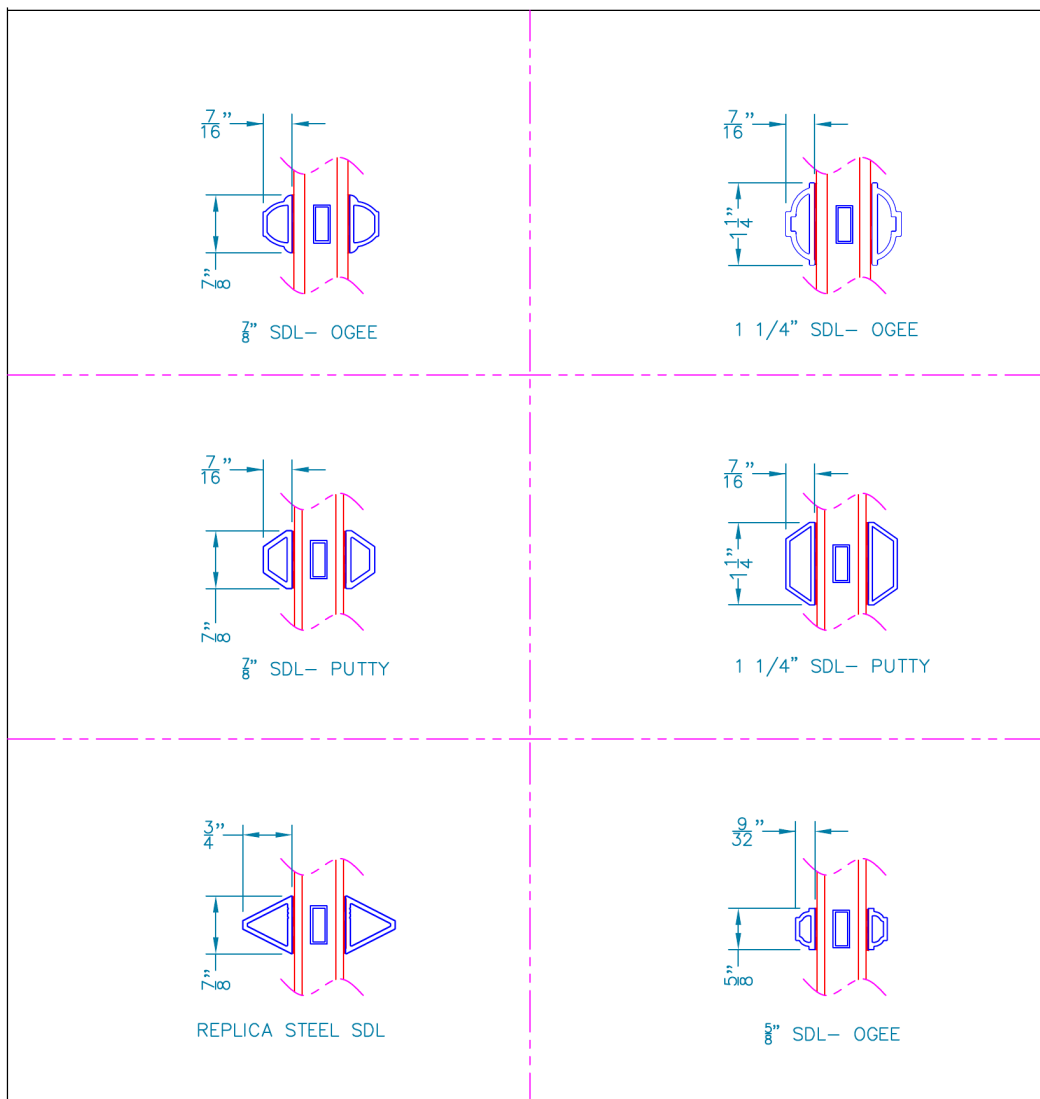


Aluminum / Aluminum Systems

All-aluminum systems prioritize precision, consistency, and minimal sightline expression. SDL profiles in these systems are engineered with narrower face dimensions, allowing for increased glass area and a more contemporary appearance.

Profiles maintain crisp shadow lines and clear grid definition, ensuring that the SDL pattern remains legible without overpowering the overall elevation. Profile options are adapted to aluminum fabrication while maintaining clean geometry.

Finishes are highly controlled through powder coating or anodizing processes, resulting in a uniform appearance, enhanced durability, and long-term resistance to environmental exposure.



Configuration

All SDL configurations are custom-developed to align precisely with project-specific elevations, mullion spacing, sightlines, and overall architectural intent. Each pattern is generated with consideration for proportion, symmetry, and the relationship between glass and frame, ensuring that the final composition integrates seamlessly with the surrounding structure. Grid layouts can range from historically accurate divided-lite patterns to more contemporary, minimal expressions, while bar profiles and face dimensions are engineered to achieve the desired visual weight without compromising system performance.

Beyond aesthetics, SDL applications are carefully coordinated with glazing specifications, spacer alignment, and unit fabrication tolerances. This ensures that applied bars visually correspond with internal components of the insulated glass unit, maintaining consistency from both interior and exterior viewpoints. Profile selection, adhesion methods, and finishing processes are all controlled to deliver long-term durability, resistance to environmental exposure, and minimal maintenance over the life of the product.

This methodology provides a disciplined and highly adaptable approach to introducing structure, depth, and rhythm to glazed openings. It allows designers to achieve the articulation and character of traditional divided lite construction while retaining the thermal efficiency, air and water performance, and structural reliability of modern insulated glazing systems. The result is a system that balances architectural authenticity with contemporary performance standards, without forcing compromise in either direction.