

# STERGIS- StormGate- Impact PVC Single Hung

## Architect's Specifications

**General:** Manufactured by Stergis Windows and Doors, Attleboro, Ma 02703 508.455.0661 www.stergis.com.

**Operation:** Lower sash shall be counterbalanced to remain as placed during window operation. Bottom sash shall tilt inwards for cleaning exterior glass surface. The top sash will be glazed into the main frame and have internal glazing access. Sash locks shall function to secure the opening and, through a cam-action mechanism, draw the interlocking meeting rails together for a tight seal. Window screens shall be of side load design and include provisions for spring loaded latches located at each end of the bottom rail.

**Materials:** All vinyl extrusions shall be rigid, 100% virgin uPVC. The jambs shall have a nominal wall thickness of .065" and shall include five tubular hollows for maximum strength and thermal efficiency. The sill shall have a nominal wall thickness of .065" and shall contain multiple hollows for strength. Sash profiles shall have a nominal wall thickness of .065". The interlock meeting rail will be reinforced with tempered aluminum to which the locks are firmly secured. Sash lift rails shall be integral to the sash extrusion. Sash meeting rails shall include an integral leg, which shall provide positive meeting rail interlock in the assembled unit.

**Frame Construction:** Frame profile shall be designed to install as a new construction with nailing fin and J channel or as a replacement type with head and sill expanders as job conditions require. Overall frame depth shall be 3 1/4". Window main frame header will be miter cut and welded with a minimum melt off of 5mm. The sill will be compound cut and welded construction for positive seal and esthetics. Drain weeps under the screen track will provide a quicker drainage of the sloped sill without compromise to performance.

**Sash Construction:** Sash frame shall be miter cut and fusion welded at the corners. Each welded sash top rail shall conceal a self-aligning spring-loaded sash release latch. Each welded sash shall have recessed, heavy wall pivot bars screwed in place by stainless screws at the bottom sash corners. Glazing shall be secured in place with a dual-durometer snap in a glazing bead along the exterior perimeter of sash. Widths shall have aluminum reinforcements at the meeting rails. Widths from 36 1/4" to 48" shall have reinforcements at all sash horizontals. Heights from 72" shall have reinforcements at all sash verticals.

**Available Finishes:** Shall be solid vinyl throughout in white or almond.

**Screen Construction:** Half-screen standard. Frame shall be of hollow extruded design with a .055" wall thickness and the wire shall be 18x16 mesh non-glare charcoal finished aluminum. Corners will be staked with die cast corners. Screen will remain in the lower sash position and is removed from the interior of the window.

**Glazing:** 3/4" overall laminated glass consisting of the following: One (1) exterior piece of 1/8" annealed glass / one (1) .285" aluminum reinforced butyl spacer system (as stated by manufacturer) / one (1) interior piece of 1/8" annealed glass / .090" Solutia laminate / one (1) interior piece of 1/8" annealed glass. Exterior glazed with an adhesive structural sealant Sikaflex-552 (as stated by the manufacturer) (refer to drawing # 142194DH\_DP50). The glazing utilized an extruded vinyl snap-in glazing bead measuring .570" wide.

**Weatherstripping:** A minimum of two courses of solid barrier fin-type weatherstripping shall be applied at the crack perimeter (excluding sill) of the window. The bottom sash rail shall fit the sill so that two fin and one closed-cell bulb weatherseals engage completely. The interlock will consist of two weatherseals attached to the full interlock from jamb to jamb

**Hardware:** Sash balances shall be factory calibrated block and tackle balances. Balance cords shall be anchored to the head of the jamb by use of a stainless steel clip. The slide shoe (balance shoe) will be attached directly to the balance assembly and ride with the sash in a vertical movement. The sash pivot bar will engage the balance shoe and lock the sash with in a consistent hold to the jamb allowing for no distorting during handling and installation. Sash locks shall be cam type and finished to match the vinyl extrusion color. Locks shall be securely anchored with color matched, self-tapping screws driven through the sash rail and into an extruded aluminum-reinforcing bar. Double locks on opening widths 26" or greater.

**Options:** Grids-- Standard, colonial, and diamond aluminum in-glass grids are available. Glazing--obscure, Low-E, Argon-filled Low-E, tinted, double strength, tempered, and Activ Glass are available. Field mulled units, stud pocket, oriel windows, transoms, custom shapes and full screens are available. A steep slope sill expander can be used when there are sills with drops over 3/4". Frame is available with molded nailing fin, molded fin with J channel, and extension jambs for 4 9/16" or 6 9/16" wall thickness. Flat casing, 2-1/2" Brickmold and 4" Exterior casing are available.

**TESTING:** **ASTM E 1886-02** "Standard Test Method for Performance of Exterior Windows Curtain Walls, Doors and Storm Shutters Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials."  
**ASTM E 1996-02** "Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Windborne Debris in Hurricanes"