

**Tough Tek Metals • 800-331-8200 • Fax 563-538-4392 • www.toughtekmetals.com**  
**Model 501 Full View Storm Door With Fixed Security Screen & Removable Glass Insert \* Pre-Hung**

### **SCOPE**

To furnish Steel Framed Storm Doors with a removable storm window, hardware, door closures, durable kick panel(s), an adjustable sill sweep, a unique pre-hung frame liner with integrally mounted weather seal. With a Stainless Steel Security Screen as manufactured by Lansing Housing Products dba Tough Tek Metals.

### **GENERAL**

1. Materials - The master frame shall be of roll formed, tubular, lock-seam construction formed from 22 gauge hot-dipped, zinc impregnated, galvanized steel. All roll formed profiles shall be engineered with specific and exclusive use as component parts for door fabrication.
2. Frame liners and door sweeps shall be formed from 6063-T5 aluminum.
3. The kick panel shall be of 18 gauge galvanized sheet steel, embossed for added rigidity.
4. Frame liner shall be of extruded aluminum. The head and side frame liners shall be designed to receive a flexible weather seal for protection against inclement weather and dust infiltration.. The head frame liner shall be so designed and extruded to also function as a drip cap over the top of the door.
5. The door shall be manufactured with not less than four (4) hinges. Leaf hinges shall be 430 stainless steel alloy, .072 wall thickness and shall be integrally assembled into the Z-bar frame liner with stainless steel pins pivoting on oil-lite bronze bushings.
6. The bottom of the doors shall have an aluminum extrusion that will accept a durable vinyl plastic door sweep, adjustable to a minimum of one (1) inch.

### **CONSTRUCTION**

1. The hollow master frame of the door shall be of miter joint construction, rigidly fastened with 16 gauge gussets. The corners are uniformly welded on both the inside and the outside edge.
2. The transom rail shall be of roll-formed tubular, lock seam, 22 gauge galvanized steel, accurately machined to fit the frame and rigidly affixed to both sides of the door. The kick plate(s) shall be form fitted and secured at the top and bottom. 18 gauge spline shall be attached on both sides of kick plate(s) for added rigidity.
3. The tempered safety glass steel insert frames shall be of mitered joint construction, machine fitted and fastened at each corner by staking into die cast corner gussets.
4. Glazing shall be of virgin polyvinyl plastic to permit easy replacement of glass. Weatherstripping shall be used to prevent rattle and insect passage as well as to provide for positive contact between inserts and main frame.

### **SCREENING**

1. Stainless steel wire mesh .028" diameter shall be made an integral part of the storm door as required. Material shall be alloy 304 stainless steel.
2. The stainless steel screen will be folded to 90 degrees on four sides and placed in the upper door frame. The screen will be secured to the door frame with four 18 gauge angles, with #8 x 3/4 screws.

### **FINISH**

1. All exposed surfaces of all metal parts shall be free of surface blemishes. All sections either assembled or fabricated in factory, shall have 4 wash coats and finish coat applied after such assembly or fabrication is completed.
2. All mainframe Miter welded corners shall be pre-treated with a rust inhibitor prior to powder coat painting.
3. All prefinish treatments and wash coats shall be bake oven processed at 400 degrees F. Air-dry finish shall be unacceptable as offering an inferior finish for high density usage.
4. All exposed areas of stainless wire cloth and frames shall have a chemical pre-treatment process applied, with a finish of polyester powder coat paint, electrostatically applied, and cured to a hard durable finish. Powder coat paint finish shall be a minimum of 1.5 mil thickness.

### **INSTALLATION KIT**

An installation kit shall be furnished with each door. The kit shall include all necessary zinc plated steel Phillips head screws, adjustable door closer, chain with hold up spring, push button type latch and brochure describing detailed installation procedures.