

**Tough Tek Metals • 800-331-8200 • Fax 563-538-4392 • www.toughtekmetals.com**  
**Model 405 Steel Security Screen Door \* Pre-Hung**

**SCOPE**

To furnish Steel Framed Screen Doors with hardware, door closures, durable kick panel(s), an adjustable sill sweep, a unique pre-hung frame liner with integrally mounted weather seal, and 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 of 430 stainless steel alloy and .072 wall thickness 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 door sweep, adjustable to a minimum of one (1) inch.

**CONSTRUCTION**

1. The corners of the 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 panel(s) shall be form fitted and secured at the top and bottom. 18 gauge spline shall be attached on both sides of kick panel(s) for added rigidity.

**SCREENING**

1. Screen shall be provided as required, and be of manufacturers standard approved design.
2. .018", .023" or .028" diameter stainless steel wire shall be made an integral part of the screen insert as required. Material shall be alloy 304 stainless steel.
3. 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 be properly cleaned prior to powder coat paint.
2. All prefinished 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.
3. All exposed areas of stainless wire cloth and frames shall have 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, and chain with hold up spring, push button type latch and brochure describing detailed installation procedures.