1. **General:**

Provide ProVia Aluminum Storm Door 100 Series Crossbuck Half-Lite.

2. **Description:**

An aluminum half-lite storm door with an embossed stainless steel kickpanel manufactured by ProVia. It is a double hollow 1¼" thick aluminum door frame with a reinforced kickpanel lower section, glass insert held in place by color matched clips and rivnuts with a fixed stainless steel screen.

3. **Materials:**

Door master frame, mullions and insert sections shall be extruded from 6063-T6 aluminum alloy having a tensile strength of 30,000 p.s.i. and a yield strength of at least 25,000 p.s.i., with a minimum wall thickness of .065" for main frame members. The door sweep spline shall be manufactured from polyvinyl chloride plastic or its equal.

All fastening devices incorporated in the product shall be of aluminum, stainless steel or other non-corrosive materials compatible with aluminum. Cadmium or zinc-plated steel, where used, shall be in accordance with ASTM B766 or ASTM B633. Screws, door hardware, etc., shall be supplied to make a complete installation.


4. **Construction:**

The main frame shall be made of double hollow extrusions with a minimum 3½" face and 1¼" thickness as standard with the manufacturer. The main frame and mullions shall be provided with grooves which accept a snap-in extruded channel which holds the stainless steel kick panel in place. Main frame members shall be accurately machine cut to form rigidly mitered corner joints. Main frame corners shall have (1) each Molded Corner Gusset with 10-16 x ⅝" #8 Steel Hex Head Screws. Frame corners shall be of double corner key construction with 4 screws in each corner. Mullions to be machined to fit tightly. The bottom of the door shall have an exterior expander channel with grooves to accept 1 to 3 extruded vinyl door sweep depending upon hardware options. Expanders shall be adjustable to extend 1". 
5. **Screen:**

Stainless steel wire screen of .023" gauge tensile wire. Wire finish to be black. Wire to be held in place by an extruded aluminum retainer with screws placed on 3" centers. All screws to be concealed by a snap cover.

6. **Door Lite Insert:**

Door inserts to be of extruded aluminum. Glazing shall be of the wrap around marine type glazing (no metal to glass contact), using 1/8" double strength tempered safety glass. Vinyl glazing channel shall be of one piece and shall tightly hug glass panel in such a way that no measurable air infiltration will occur at edges of glass panel. Material shall be of sufficient quality for re-use when re-glazing becomes necessary.

7. **Kick panel:**

Reinforced kick panel of 3-ply construction consists of one (1) .028" thick embossed stainless steel 409® outer skin, one (1) .025" thick embossed aluminum inside skin and one (1) .250" thick tempered Masonite™ hardboard core with an overall thickness of 5/16". Stainless steel 409® meets requirement specifications of: AISI 409, ASTM A176, ASTM A240, ASTM A268, ASTM A791, ASTM A803, DIN 1.4512, DIN 1.4720, and UNS S409000.

8. **“Z”-Bar:**

“Z”-Bar shall be of extruded aluminum of .045" thickness with a weatherstrip groove to receive woolpile weatherstripping to seal against weather, dust infiltration and noise. The head frame shall be designed and extruded to function as a drip cap over the top of the door. Hinges to be attached to the “Z”-Bar. Exterior installation screws are hidden by the snap-on screw cover on the “Z”-Bar.
9. **Hinges:**

Each door is to be supported by no less than four (4) integral leaf hinges of not less than 4" in length utilizing the raised knuckle of the extruded “Z”-Bar to receive an extruded aluminum hinge leaf. They will be joined to the knuckle by two plated steel pins pivoting in four Oilite® brass bushings. The two (2) pins are held securely in place by a plated steel compression spring.

10. **Hardware:**

Door is supplied with a complete hardware kit which includes: black contemporary curve lever handle set with separate deadbolt, heavy duty door closer, and safety chain.

11. **Finish:**

To be selected from ProVia’s sixteen (16) available colors:

Snow Mist White, Cafe’ Cream, Tudor Brown, Rustic Bronze, Chateau, Sterling Grey, Sandpiper Beige, Coal Black, Sandstone, Clay, Mountain Berry (Red), Geneva Blue, Forest Green, Primrose Yellow, Vallis Red, and Enzian Blue.

Finish to be ProVia’s factory applied baked enamel, meeting AAMA standard 2603-02 for organic finishes on aluminum. ProVia uses a baked on enamel, Polycron III finish.

12. **Dimensions:**

Main frame shall have a width across the flat surface of 3½" with a thickness of 1¼" and wall thickness of .065". Insert frame and inserts to have wall thickness of .040". Expanders have a wall thickness of .050" with a depth of 1½". “Z”-Bar wall thickness is .045" with a side flange width for bearing against the door buck with a 1" return for Western Style “Z”-Bar or ¾" for Eastern style “Z”-Bar.