The FL-400 series entrances are the most versatile doors we have to offer. This heavy duty entrance is typically used in high traffic and abused areas, such as; schools, universities, waste water treatment plants, highway rest and welcome centers, secure government training facilities, etc. The flexibility inherent with these entrances allows many options for vision lites without compromising quality or strength. This door type has been our most popular entrance system to date. It is unique in construction from nearly every flush door manufacturer. The door is comprised of 4” aluminum planks interlocked with one another. This eliminates de-lamination of face sheets and increases a building’s security. The FL-400 door exceeds the specifications and structural integrity of any flush sheet door on the market. These entrances are constructed to take heavy abuse and last many years.

**FL-400 Features**

- **MaintenanceFree**- All entrances come with our standard 10 year warranty.
- **RetroFit**- Entrances can replace any existing opening and improve efficiency.
- **SecureWall**- Face thickness is 1/8” with 1/4” internal reinforcement every 4 inches.
- **InterLock**- Doors are interlocked together and completely sealed from the elements.
- **CustomIntegration**- Configurations to match architectural decor of building.
- **SecureGlaze**- Extruded non-removable exterior glazing stops.
- **MissileImpact**- Missile Impact tested in accordance with ASTM E 1886.
- **EcoFriendly**- Secondary billet, acid-etch anodizing, and zero VOC emissions painting.
**FL-400 Series**

**Flush Plank Doors**

### Features:
- Hinge and lock stile edges have 3/16” (.1875”) thick.
- 3/8” (.375) steel tie rod 3 per door (2 for FG door type)
- 3/8” (.375”) thick wall every 4 inches. Minimum 3/8” (0.375”) interlock every 4 inches.
- Fluted pattern standard. Smooth pattern also available.
- 1/8” (.125”) Closer reinforcement (Eliminates through-bolting).
- Custom finishes available.
- 1-1/2” (1.5”) Polyisocyanurate rigid board stock.

* “R” Value 11.23; U Value .089

### Advantages:
- No back up plates necessary for butt hinges. This eliminates mortising into stile and weakening it.
- No additional charge for larger vision lites in doors.
- Constructed with interlocking extrusions. No delamination of face sheets.
- No need for hardware backups necessary.
- A true 1/8” wall thickness. Almost double the thickness of face sheet manufactured doors.
- Cross Aluminum will provide factory installation of any commercial door hardware as manufactured by other suppliers.

### FL-400 Options

The FL-400 entrances are constructed in a way that allows many visually-appealing options. Custom sizes and configurations of vision lites are available upon request. A few examples are shown below.

- **FL-400 NG**  
  Narrow Glass
- **FL-400 HG**  
  Half Glass
- **FL-400 DG**  
  Double Glass
- **FL-400 SG**  
  Square Glass
- **FL-400 SG-3**  
  Square Glass x 3
- **FL-400 SG-8**  
  Square Glass x 8

### General Composition
- Flush plank doors are 1-3/4” thick.
- Stiles are 4” wide, with a fluted surface and optional smooth surface.
- Door Face Thickness is 1/8” thick with 1/4” thick reinforcing wall every 4”.
- Flush planks doors are individual extrusions interlocked together. Minimum 3 tie rods per door.*

*Note: Full Glass Doors will typically have 2 rods.

### Glazing and Glass
- Glass stops will always match finish on door unless specified otherwise.
- Exterior glazing is a part of the plank extrusion increasing security. Exterior glazing is non-removable.
- All interior glass stops are screw applied and only removable from the interior. Interior glass stops have 1/8” thick walls.
- Glass infill 1/4” through 1-5/16”.

### Versatility
- The FL-400 doors have been fabricated to 6’ wide and up to 18’ tall.
- FL-400 entrances can be manufactured to have narrow lites, half lites, double lites, full lites, etc.

### Finishes
- Available in Class I and Class II anodized finishes.
- Kynar painted fluoropolymer finishes with 10 year warranties. AAMA 2605
- Color charts and warranties on finishes are available on request.

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**Tests:**
- ASTM E 283 Air Infiltration
- ASTM E 330 Uniform Load Structural
- ASTM E 331 Water Penetration
- ASTM E 1886 Missile Impact Cyclic Pressure
- ASTM E 1996 Missile Impact

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