TOTAL DOOR® CATALOG
INDEX

Section 1 – Brochures

Section 2 – Configurations & Hardware

- Standard Doors & System Configurations 2 - 1
- Standard Doors: Configurations, Fire Labels & Maximum Sizes 2 - 2
- Lever Mechanisms & Trim: Finishes & Specifications 2 - 3
- Grip (Push-Pull Mechanisms & Trim: Finishes & Specifications) 2 - 4
- Exit Devices: Standard Finishes & Specifications 2 - 5
  - Flush Panic Finishes & Specifications 2 - 6
- Closer Matrix 2 - 7
- Frames 2 - 8
- Door Function Selector 2 - 9
- Door Function Selector - Exit Devices 2 - 11

Section 3 – Performance Data

- Comparative Performance 3 - 1
- R or U Factor 3 - 2
- Sound Transmission Coefficient (STC) 3 - 2
- Material Safety Data Sheets (MSDS) 3 - 2
- Hurricane Rating – Total Door® Storm Sentry™ 3 - 3
- CABO Approval Number 3 - 3
- Additional Agencies Approving ITS 3 - 3
- ITS Report Numbers 3 - 3
- List of Tested Products 3 - 4
- Labeled Total Door® Frames 3 - 5
- Fire Labeling for Existing Frames 3 - 5
- Total Door® Installation & Fire Code Compliance 3 - 5
- Field Undercutting of Labeled Doors 3 - 5
- Labeled HPL & Wood Veneer Total Doors® 3 - 6
- Total Door Limited Warranty 3 - 7
- Procedure for Issue 3 - 8
Section 4 – Specs & CADS

Specifications
- Cross Corridor Pair 4 - 2
- Cross Corridor Double Egress Pair 4 - 8
- Elevator Shaft Protection 4 - 14

Section 5 – Door System Options/Frames

Additional Door Models
- Model 80 5 - 1
- Hurricane/ Blast Doors 5 - 2
- Dutch Door 5 - 2
- Lead Lined Doors 5 - 2
- Electric Doors 5 - 3
- Quick release Door 5 - 4

Options
- Gasketing - Sound, Weather & Smoke 5 - 6
- Glazing 5 - 6
- Lite Kits 5 - 6
- Louvers 5 - 6
- Lites for Labeled Doors: Maximum Sizes 5 - 7
- Plates - Kick, Mop, Armor & Edge Guards 5 - 8
- Removable Mullions 5 - 8
- Sound Package 5 - 8
- Labeled Psychiatric Hinge 5 - 8

Frames
- FR200 Cased Sub-Buck Pre-Finished Frame

Section 6 – Miscellaneous
## Section 2 – Configurations / Hardware / Cut Sheets

<table>
<thead>
<tr>
<th>Item</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Doors &amp; System Configurations</td>
<td>2 - 1</td>
</tr>
<tr>
<td>Standard Doors: Configurations, Fire Labels &amp; Maximum Sizes</td>
<td>2 - 2</td>
</tr>
<tr>
<td>Lever Mechanisms &amp; Trim: Finishes &amp; Specifications</td>
<td>2 - 3</td>
</tr>
<tr>
<td>Grip (Push-Pull Mechanisms &amp; Trim: Finishes &amp; Specifications</td>
<td>2 - 4</td>
</tr>
<tr>
<td>Exit Devices: Standard Finishes &amp; Specifications</td>
<td>2 - 5</td>
</tr>
<tr>
<td>Flush Panic Finishes &amp; Specifications</td>
<td>2 - 6</td>
</tr>
<tr>
<td>Closer Matrix</td>
<td>2 - 7</td>
</tr>
<tr>
<td>Frames</td>
<td>2 - 8</td>
</tr>
<tr>
<td>Door Function Selector</td>
<td>2 - 9</td>
</tr>
<tr>
<td>Door Function Selector - Exit Devices</td>
<td>2 - 11</td>
</tr>
<tr>
<td>Cut Sheets:</td>
<td></td>
</tr>
<tr>
<td>E29 Escutcheon for Electric Access</td>
<td></td>
</tr>
<tr>
<td>Q19 Escutcheon</td>
<td></td>
</tr>
<tr>
<td>PF 200 Flush Panic Exit Device</td>
<td></td>
</tr>
<tr>
<td>Lever #60</td>
<td></td>
</tr>
<tr>
<td>Lever #82</td>
<td></td>
</tr>
<tr>
<td>Lever #83</td>
<td></td>
</tr>
<tr>
<td>Lever #84</td>
<td></td>
</tr>
<tr>
<td>Grip M32</td>
<td></td>
</tr>
<tr>
<td>Grip M33</td>
<td></td>
</tr>
<tr>
<td>Grip M35</td>
<td></td>
</tr>
<tr>
<td>Grip M52 Push</td>
<td></td>
</tr>
<tr>
<td>P14 / P14STP Panic Exit Device</td>
<td></td>
</tr>
<tr>
<td>Panic Edge Protector</td>
<td></td>
</tr>
<tr>
<td>SP14 Push Pad</td>
<td></td>
</tr>
<tr>
<td>TDC96 / TDC96p Concealed Closer</td>
<td></td>
</tr>
<tr>
<td>TDH100 Electromagnetic Holder</td>
<td></td>
</tr>
<tr>
<td>TDH200 Mag Holder</td>
<td></td>
</tr>
<tr>
<td>TDC5051 Closer</td>
<td></td>
</tr>
</tbody>
</table>
Door Standards
Standard Specifications

The TOTAL DOOR SYSTEM can be easily retrofitted to virtually any flat surface, including masonry, poured concrete and steel structural members.

### Door Bodies

#### Skins
- 20, 18 or 16 gauge Electro galvanized steel

#### Cores
- Solid polystyrene foam continuously bonded to door skins. Temperature rise cores also available.

#### Stiles / Rails
- 16 gauge vertical stiles
- 5-1/2" 18 gauge steel top and bottom rails

#### Finishes
- Two-part polyurethane in any color
- Prime paint
- Various wood species
- Architectural film
- Architectural Metal, Aluminum, Stainless steel, Brass
- Others available on request

### Hardware

#### Hinge and Locking Channel
The Total Door System is equipped with heavy gauge high security continuous steel hinge and locking channel with a two-part polyurethane finish in Openings standard black or white sand.

Custom colors available on request.

#### Trim and Locks
The Total Door System is available with levers, grips and/or exit devices.

### Total Door System Configurations

[SINGLE Diagram]

[PAIR Diagram]

[REMOVABLE MULLION Diagram]

[DOUBLE EGRESS Diagram]
### Configurations, Fire Labels and Maximum Sizes

#### Negative & Positive Pressure Fire Resistance

<table>
<thead>
<tr>
<th></th>
<th>Non Label</th>
<th>20 Min</th>
<th>B &amp; C</th>
<th>A</th>
<th>T-Rise B</th>
<th>T-Rise A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>20 Gauge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>4' 2-3/16&quot; x 10'</td>
<td>4' 2-3/16&quot; x 10'</td>
<td>4' 2-3/16&quot; x 9'</td>
<td>4' x 8'</td>
<td>4' to 4' 2-3/16&quot; x 9'</td>
<td>N/A</td>
</tr>
<tr>
<td>PR &amp; DE</td>
<td>8' 4-3/8&quot; x 10'</td>
<td>8' 4-3/8&quot; x 10'</td>
<td>8' 4-3/8&quot; x 9'</td>
<td>8' x 8'</td>
<td>8' to 8' 4-3/8&quot; x 9'</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>18 Gauge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>4' x 9'</td>
<td>4' x 9'</td>
<td>4' x 9'</td>
<td>4' x 8'</td>
<td>4' x 9'</td>
<td>4' x 8'</td>
</tr>
<tr>
<td>PR &amp; DE</td>
<td>8' x 9'</td>
<td>8' x 9'</td>
<td>8' x 9'</td>
<td>8' x 8'</td>
<td>8' x 9'</td>
<td>8' x 8'</td>
</tr>
<tr>
<td><strong>16 Gauge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>4' x 8'</td>
<td>4' x 8'</td>
<td>4' x 8'</td>
<td>4' x 8'</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>PR &amp; DE</td>
<td>8' x 8'</td>
<td>8' x 8'</td>
<td>8' x 8'</td>
<td>8' x 8'</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Solid Wood Core</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4' x 9'</td>
<td>4' x 9'</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>PR &amp; DE</td>
<td>8' x 9'</td>
<td>8' x 9'</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Removable mullions are only available on non-label doors up to 10' steel; 9' wood core.

A Label = 3 Hours  
B Label = 1-1/2 Hours  
C Label = 3/4 Hours

2-2
Lever Mechanism and Trim

Standard Specifications

Total Door’s lever locking mechanisms are an integral part of the Total Door assembly and are factory installed.

**LEVER LOCKING MECHANISMS**

- Rated to 3 hours.
- ADA compliant.
- Available in all functions including exit devices and electric functions.
- Operate with any standard cam mortise cylinder.
- Have a normal life expectancy of 5 million cycles versus only 800 thousand required by BHMA and ANSI standards for mortise locks.
- Lock mechanisms have a Limited Lifetime Warranty.

**Available Lever Mechanism Trim**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>BHMA#</th>
<th>Available Finishes</th>
<th>Fire Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3/8&quot; 5-3/16&quot; 11/16&quot;</td>
<td>605</td>
<td>Bright Brass</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>606</td>
<td>Satin Brass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>629</td>
<td>Bright Stainless</td>
<td></td>
</tr>
<tr>
<td></td>
<td>630</td>
<td>Satin Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>710</td>
<td>Dark Bronze Anodized</td>
<td></td>
</tr>
<tr>
<td>2-1/16&quot; 5&quot; 1&quot;</td>
<td>605</td>
<td>Bright Brass</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>606</td>
<td>Satin Brass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>629</td>
<td>Bright Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>630</td>
<td>Satin Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>710</td>
<td>Dark Bronze Anodized</td>
<td></td>
</tr>
<tr>
<td>2-9/16&quot; 5-1/8&quot; 1&quot;</td>
<td>605</td>
<td>Bright Brass</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>606</td>
<td>Satin Brass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>629</td>
<td>Bright Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>630</td>
<td>Satin Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>710</td>
<td>Dark Bronze Anodized</td>
<td></td>
</tr>
<tr>
<td>2-5/16&quot; 5-1/8&quot; 1&quot;</td>
<td>605</td>
<td>Bright Brass</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>606</td>
<td>Satin Brass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>629</td>
<td>Bright Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>630</td>
<td>Satin Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>710</td>
<td>Dark Bronze Anodized</td>
<td></td>
</tr>
<tr>
<td>1/4&quot; 1-3/16&quot; 6-3/4&quot;</td>
<td>605</td>
<td>Bright Brass</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>606</td>
<td>Satin Brass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>629</td>
<td>Bright Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>630</td>
<td>Satin Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>710</td>
<td>Dark Bronze Anodized</td>
<td></td>
</tr>
<tr>
<td>1/4&quot; 7-5/8&quot; 6-3/4&quot;</td>
<td>605</td>
<td>Bright Brass</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>606</td>
<td>Satin Brass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>629</td>
<td>Bright Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>630</td>
<td>Satin Stainless Steel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>710</td>
<td>Dark Bronze Anodized</td>
<td></td>
</tr>
</tbody>
</table>
Total Door Grip mechanisms and trim offer convenience, simplicity in design and resistance to extreme abuse and forced entry. Ideal where the design demands functional trim that complements or blends with its surroundings or where the doors and hardware will be exposed to constant wear and tear; schools for example.

**Grip Mechanisms and Trim**
- Fire Rated to 3 hours.
- ADA compliant.
- Available in all functions except G13.
- Operate with any standard mortise cylinder and A/R cam.
- Factory installed as an integral part of the Total Door system.
- No exterior fasteners; trim can’t loosen or fall off.
- Normal life expectancy of 5 million cycles versus only 800 thousand required by BHMA and ANSI standards for mortise locks.
- Lock mechanisms have a Limited Lifetime Warranty.

**Available Trim**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>BHMA#</th>
<th>Available Finishes</th>
<th>Fire Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>M32 Grip</td>
<td>1-7/8”</td>
<td>1” 2-11/16” 5-3/4”</td>
<td>628 Satin Anodized Aluminum</td>
</tr>
<tr>
<td></td>
<td>1-5/8”clearance</td>
<td></td>
<td>710 Dark Bronze Anodized</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28M Mirror Anodized</td>
</tr>
<tr>
<td>M33 Grip</td>
<td>1-1/16”</td>
<td>1” 2-11/16” 5-3/4”</td>
<td>628 Satin Anodized Aluminum</td>
</tr>
<tr>
<td></td>
<td>1-1/32”clearance</td>
<td></td>
<td>710 Dark Bronze Anodized</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28M Mirror Anodized</td>
</tr>
<tr>
<td>M35 Grip</td>
<td>2-1/4”</td>
<td>1/2” 2-11/16” 5-3/4”</td>
<td>628 Satin Anodized Aluminum</td>
</tr>
<tr>
<td></td>
<td>1-5/8”clearance</td>
<td></td>
<td>710 Dark Bronze Anodized</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28M Mirror Anodized</td>
</tr>
<tr>
<td>M52 Push</td>
<td>3/16”</td>
<td>1” 2-11/16” 5-3/4”</td>
<td>628 Satin Anodized Aluminum</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>710 Dark Bronze Anodized</td>
</tr>
</tbody>
</table>
Total Door manufactures the simplest, most durable and most design friendly exit device system in the industry. It requires no lubrication and has only two moving parts including the exit bar.

**EXIT DEVICES**
- Fire rated to 3 hours.
- ADA compliant.
- Available in all functions including electric.
- Available with cylinder dogging and/or electric remote dogging.
- Projection of only 1-5/16".
- Cycle to over 5 million cycles versus 500 thousand required by BHMA and ANSI standards for exit devices.
- Inserts available in virtually any finish.
- Factory installed as an integral part of the Total Door system.
- Available with levers or push-pull grips.
- Limited Lifetime Warranty

### Available Exit Devices and Trim

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>BHMA#</th>
<th>Available Finishes</th>
<th>Fire Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>P14STP Exit Device</td>
<td>Standard 6-11/16” 1-5/16”</td>
<td>628 710</td>
<td>Satin Anodized Aluminum Dark Bronze Anodized</td>
</tr>
<tr>
<td></td>
<td>Based on Door Width*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;24&quot; for widths of 2’4” and wider</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;15” for widths of 1’6” to 2’3-15/16”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6-11/16” for width under 1’6”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Custom size panic will be available on request to match existing installations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP14 Push Pad</td>
<td>6-11/16” 6-11/16” 1-5/16”</td>
<td>628 710</td>
<td>Satin Anodized Aluminum Dark Bronze Anodized</td>
</tr>
<tr>
<td></td>
<td>If the doors are electric, the SP14 must be 9”</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not a legal panic device</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP13/ABU Panic Edge Protector</td>
<td>1-9/16” 6-11/16” 1-5/16”</td>
<td>628</td>
<td>Satin Anodized Aluminum</td>
</tr>
</tbody>
</table>
Flush Exit Device
Standard Specifications

Total Door manufactures the simplest, most durable and most design friendly exit device system in the industry. It requires no lubrication and has only two moving parts including the exit bar.

EXIT DEVICES

- Fire rated to 3 hours.
- ADA compliant.
- Projection of only 5/8” when closed and 1/8” when open.
- Cycle tested to over 5 million cycles versus 500 thousand required by BHMA and ANSI standards for exit devices.
- Inserts available in virtually any finish.
- Factory installed as an integral part of the Total Door system.
- Available with levers or operating grips.
- Limited Lifetime Warranty.

Available Exit Devices

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>BHMA#</th>
<th>Available Finishes</th>
<th>Fire Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF200 Flush Panic Exit Device</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two Sizes 4-3/8”</td>
<td>628</td>
<td>Satin Anodized Aluminum</td>
<td>All</td>
</tr>
<tr>
<td>Available – Based on Door Width*</td>
<td>710</td>
<td>Dark Bronze Anodized</td>
<td></td>
</tr>
<tr>
<td>5/8” Closed</td>
<td>711</td>
<td>Black Anodized</td>
<td></td>
</tr>
<tr>
<td>1/8” Open</td>
<td></td>
<td>Custom inserts available to match door finish</td>
<td></td>
</tr>
</tbody>
</table>

*24” for widths of 2'5-1/16” and wider
14” for widths of 1'7” thru 2'5”
## Total Door Closer Matrix

<table>
<thead>
<tr>
<th>TOTAL DOOR CLOSERS</th>
<th>Maximum Degrees</th>
<th>Mounting location</th>
<th>Best Application</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDC-96</td>
<td>135</td>
<td>mortised with track</td>
<td>Interior swing</td>
<td>See tech data sheets 76A &amp; 76B. Track doubles as head stop. 1' 6&quot; minimum width.</td>
</tr>
<tr>
<td>TDC-96p – Pocketed</td>
<td>135</td>
<td>mortised with track</td>
<td>Pocketed</td>
<td>Track mounted to wall. 1' 6&quot; minimum width.</td>
</tr>
<tr>
<td>TDC 5051</td>
<td>180</td>
<td>door-push or pull Top Jamb</td>
<td>Interior/exterior</td>
<td>Standard Mount (Pull Side) 90 - 140 degrees Top Jamb Mount (Push Side) 120 degrees Parallel Mount (Push Side) 90, 100, 140 or 180 degree CUSH and CUSH-H (Push Side) available parallel arm only, with a maximum 110 degree.</td>
</tr>
<tr>
<td>Model</td>
<td>Weight</td>
<td>Mounting</td>
<td>Type</td>
<td>Note</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td>----------</td>
<td>---------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>TS93</td>
<td>2'-8&quot;</td>
<td>Wall</td>
<td>Pocketed</td>
<td>Track mount</td>
</tr>
<tr>
<td>180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7400</td>
<td>1'-6&quot;</td>
<td>Wall</td>
<td>Pocketed</td>
<td>Note: 7414 spring range from 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7436 Spring range from 3-6 Pivot arm</td>
</tr>
</tbody>
</table>
TOTAL DOORS® do not require any special frame preparation. They may be used with a plain cased opening – even in label conditions – or they may be used with single or double rabbetted frames and masonry openings. In replacement situations, old hinge and strike cutouts need only to be filled in. This does not invalidate the frame label.

Information on frame sources and recommendations are available directly from Total Door.
**TOTAL DOOR**

Section 2 – Standards

Door Function Selector

<table>
<thead>
<tr>
<th>TITLE</th>
<th>FUNCTION NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passage</td>
<td>L01</td>
<td>Door is operated from either side at all times.</td>
</tr>
<tr>
<td></td>
<td>G01</td>
<td></td>
</tr>
<tr>
<td>Egress</td>
<td>L01½</td>
<td>Door is operated by inside trim device only. Outside trim is always inoperative. No cylinder.</td>
</tr>
<tr>
<td></td>
<td>G01½</td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td>L02</td>
<td>Door is operated from either side except when outside locked by inside turn piece. Operation of inner lever unlocks both sides. Also unlocked by turn piece or emergency key outside.</td>
</tr>
<tr>
<td>Privacy</td>
<td>G02</td>
<td>Door is operated from either side, except when both sides are locked by inside turn piece. Door unlocked by turn piece inside or emergency key outside.</td>
</tr>
<tr>
<td>Patio</td>
<td>L02P</td>
<td>Door is operated from either side except when both sides are locked by inside turn piece.</td>
</tr>
<tr>
<td></td>
<td>G02P</td>
<td></td>
</tr>
<tr>
<td>Entry (Apt. or Office Suite)</td>
<td>L04</td>
<td>Door is operated from either side except when outside is locked by turn piece inside or key outside. Inside trim is always operational.</td>
</tr>
<tr>
<td></td>
<td>G04</td>
<td></td>
</tr>
<tr>
<td>TITLE</td>
<td>FUNCTION NO.</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Classroom</td>
<td>L05 G05</td>
<td>Door is operated from either side except when outside is locked by key from outside. Inside trim is always operational.</td>
</tr>
<tr>
<td>Storeroom</td>
<td>L07 G07</td>
<td>Door is operated from either side except when outside is locked by key outside; key cannot be withdrawn in unlocked position. Inside trim is always operational.</td>
</tr>
<tr>
<td>Apartment (Building Entry)</td>
<td>L09 G09</td>
<td>Door is operated from either side except when outside is locked by key outside or key inside. Inside trim is always operational.</td>
</tr>
<tr>
<td>Dormitory or Convalescent</td>
<td>L13 G14</td>
<td>Door is operated from either side except when outside is locked by key outside or turn-piece inside. Operation of inside lever automatically unlocks outside. Door also unlocks by turn-piece or key. (Not available with grips)</td>
</tr>
<tr>
<td>Store Door</td>
<td>L14 G14</td>
<td>Door is operated from either side except when locked by key from either side.</td>
</tr>
<tr>
<td>Deadlock</td>
<td>L17 G17</td>
<td>Door is operated from either side except when both sides are locked by key outside or turn-piece inside.</td>
</tr>
<tr>
<td>Deadlock</td>
<td>L18 G18</td>
<td>Door is operated from either side except when both sides are locked by key outside.</td>
</tr>
</tbody>
</table>
TOTAL DOOR

Section 2 – Standards

Panic Exit Device Door Function Selector

<table>
<thead>
<tr>
<th>FUNCTION NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP01</td>
<td>Door is operated by outside trim and panic exit device at all times.</td>
</tr>
<tr>
<td>GP01</td>
<td>Door is operated by outside trim and panic exit device at all times.</td>
</tr>
<tr>
<td>LFP01</td>
<td>Door is operated by outside trim and panic exit device at all times.</td>
</tr>
<tr>
<td>GFP01</td>
<td>Door is operated by outside trim and panic exit device at all times.</td>
</tr>
<tr>
<td>LP01D</td>
<td>Door is operated by outside trim and panic exit device at all times.</td>
</tr>
<tr>
<td>GP01D</td>
<td>Door is operated by outside trim and panic exit device at all times.</td>
</tr>
<tr>
<td>LFP01D</td>
<td>Door is operated by outside trim and panic exit device at all times.</td>
</tr>
<tr>
<td>GFP01D</td>
<td>Door is operated by outside trim and panic exit device at all times.</td>
</tr>
<tr>
<td>LP01½</td>
<td>Door is operated by panic exit device only. Outside trim is always inoperative. No cylinder.</td>
</tr>
<tr>
<td>GP01½</td>
<td>Door is operated by panic exit device only. Outside trim is always inoperative. No cylinder.</td>
</tr>
<tr>
<td>LFP01½</td>
<td>Door is operated by panic exit device only. Outside trim is always inoperative. No cylinder.</td>
</tr>
<tr>
<td>GFP01½</td>
<td>Door is operated by panic exit device only. Outside trim is always inoperative. No cylinder.</td>
</tr>
<tr>
<td>LP01½D</td>
<td>Door is operated by panic exit device only. Outside trim is always inoperative. No cylinder.</td>
</tr>
<tr>
<td>GP01½D</td>
<td>Door is operated by panic exit device only. Outside trim is always inoperative. No cylinder.</td>
</tr>
<tr>
<td>LFP01½D</td>
<td>Door is operated by panic exit device only. Outside trim is always inoperative. No cylinder.</td>
</tr>
<tr>
<td>GFP01½D</td>
<td>Door is operated by panic exit device only. Outside trim is always inoperative. No cylinder.</td>
</tr>
<tr>
<td>LP05</td>
<td>Door is operated by outside trim and panic exit device inside. Outside is locked by key from outside.</td>
</tr>
<tr>
<td>GP05</td>
<td>Door is operated by outside trim and panic exit device inside. Outside is locked by key from outside.</td>
</tr>
<tr>
<td>LFP05</td>
<td>Door is operated by outside trim and panic exit device inside. Outside is locked by key from outside.</td>
</tr>
<tr>
<td>GFP05</td>
<td>Door is operated by outside trim and panic exit device inside. Outside is locked by key from outside.</td>
</tr>
<tr>
<td>LP05D</td>
<td>Door is operated by outside trim and panic exit device inside. Outside is locked by key from outside.</td>
</tr>
<tr>
<td>GP05D</td>
<td>Door is operated by outside trim and panic exit device inside. Outside is locked by key from outside.</td>
</tr>
<tr>
<td>LFP05D</td>
<td>Door is operated by outside trim and panic exit device inside. Outside is locked by key from outside.</td>
</tr>
<tr>
<td>GFP05D</td>
<td>Door is operated by outside trim and panic exit device inside. Outside is locked by key from outside.</td>
</tr>
<tr>
<td>LP07</td>
<td>Door is operated by outside trim and panic exit device inside. Key cannot be withdrawn from cylinder in unlocked position.</td>
</tr>
<tr>
<td>GP07</td>
<td>Door is operated by outside trim and panic exit device inside. Key cannot be withdrawn from cylinder in unlocked position.</td>
</tr>
<tr>
<td>LFP07</td>
<td>Door is operated by outside trim and panic exit device inside. Key cannot be withdrawn from cylinder in unlocked position.</td>
</tr>
<tr>
<td>GFP07</td>
<td>Door is operated by outside trim and panic exit device inside. Key cannot be withdrawn from cylinder in unlocked position.</td>
</tr>
<tr>
<td>LP07D</td>
<td>Door is operated by outside trim and panic exit device inside. Key cannot be withdrawn from cylinder in unlocked position.</td>
</tr>
<tr>
<td>GP07D</td>
<td>Door is operated by outside trim and panic exit device inside. Key cannot be withdrawn from cylinder in unlocked position.</td>
</tr>
<tr>
<td>LFP07D</td>
<td>Door is operated by outside trim and panic exit device inside. Key cannot be withdrawn from cylinder in unlocked position.</td>
</tr>
<tr>
<td>GFP07D</td>
<td>Door is operated by outside trim and panic exit device inside. Key cannot be withdrawn from cylinder in unlocked position.</td>
</tr>
<tr>
<td>FUNCTION NO.</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>PEO</td>
<td>Door is operated by panic exit device only. Outside of door is flush – no trim of any kind.</td>
</tr>
<tr>
<td>PFEO</td>
<td>Door is operated by small push device – approx. 6-5/8” wide or 9” wide on electric functions. May have dogging feature added. Outside trim may be operated as permitted by specified lock function, e.g., SP01, SP05, SP07, SP07D. Not a legal exit device.</td>
</tr>
</tbody>
</table>

Note:  
1) L=Lever, G=Grip, P=Standard Panic, FP=Flush Panic, D=Dogging  
2) Dogging function not permitted on label doors.  
3) Non-Fire label panics are supplied with dogging if requested.  
4) Total-Door panic exit devices are approved for use on all labeled Total-Doors and are Life Safety Rated.
## Section 3 – Performance Data

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparative Performance</td>
<td>3-1</td>
</tr>
<tr>
<td>R or U Factor</td>
<td>3-2</td>
</tr>
<tr>
<td>Sound Transmission Coefficient (STC)</td>
<td>3-2</td>
</tr>
<tr>
<td>Material Safety Data Sheets (MSDS)</td>
<td>3-2</td>
</tr>
<tr>
<td>Hurricane Rating – Total Door® Storm Sentry™</td>
<td>3-3</td>
</tr>
<tr>
<td>CABO Approval Number</td>
<td>3-3</td>
</tr>
<tr>
<td>Additional Agencies Approving Warnock Hersey</td>
<td>3-3</td>
</tr>
<tr>
<td>ITS Report Numbers</td>
<td>3-3</td>
</tr>
<tr>
<td>List of Test Products</td>
<td>3-4</td>
</tr>
<tr>
<td>Labeled Total Door® Frames</td>
<td>3-5</td>
</tr>
<tr>
<td>Fire Labeling for Existing Frames</td>
<td>3-5</td>
</tr>
<tr>
<td>Total Door® Installation &amp; Fire Code Compliance</td>
<td>3-5</td>
</tr>
<tr>
<td>Field Undercutting of Labeled Doors</td>
<td>3-6</td>
</tr>
<tr>
<td>Labeled Wood Veneer Total Doors®</td>
<td>3-6</td>
</tr>
<tr>
<td>Total Door Limited Warranty</td>
<td>3-7</td>
</tr>
<tr>
<td>Procedure for Issue</td>
<td>3-8</td>
</tr>
</tbody>
</table>
COMPARATIVE PERFORMANCE

TOTAL-DOOR vs. STANDARD DOORS & HARDWARE

The attached chart shows performance standards as established by ANSI, BHMA, DHI, SDI, FHDA, NWMA, NFPA, California Title 19, Section 80.15, “Construction Standards and Performance Tests of Emergency Exit and Panic Hardware SFM-33.3" and Federal Guide Specifications for standard doors and hardware.

Standard doors and hardware are not tested as a system, but rather as individual components, each tested in isolation under perfect conditions in a laboratory. TOTAL DOOR, on the other hand, has been tested as it is used in the field, that is, as a complete system – door, body, hinge, frame, locking mechanism, panic device, locking channel, etc.

It is significant and important to note that W.H.I. cycle tested a labeled pair of doors with panics to 10 times the standard number of cycles (1,000,000) and found only insignificant wear (.003"). The doors required no lubrication, and no maintenance during the long test.

ANSI MINIMUM FEDERAL PERFORMANCE STANDARDS VS. TOTAL DOOR

![Chart showing performance comparison between BHMA/ANSI Standards and Total Door® standards.](chart_image)
TOTAL DOOR

Section 3 – Test & Performance Data

R or U Factor

Standard construction steel doors have insulating values as follows:

\[
\begin{align*}
U &= 0.21 \\
R &= 4.76 
\end{align*}
\]

Insulating doors should be gasketed to prevent air infiltration.

Sound Transmission Coefficient

According to test results TOTAL DOOR® when fully gasketed will provide STC (sound transmission coefficient) rating as follows:

- 18 gauge steel x polystyrene core = 33 STC
- 18 gauge steel x acoustic core = 35 STC

Material Safety Data Sheets

Openings products do not contain hazardous materials, so we do not supply Material Safety Data Sheets (MSDS). We do, however, have on file MSDS on all the various components.
TOTAL DOOR
Section 3 – Test & Performance Data

Hurricane Rating – Total Door® Storm Sentry™

Storm Sentry™ door, rating from Certified Testing Laboratories (CTL) and Miami-Dade County Notice of Acceptance (NOA)
03-0822.01
03-0822.02

The CABO Approval Number for ICBO, BOCA and SBC

Openings is listed under ITS which is CABO (Council of American Building Officials) approved for all three national building codes:
- Building Officials and Code Administrators (BOCA)
- International Conference of Building Officials (ICBO)
- Southern Building Code Congress International (SBC)
- CABO info has been combined into ICC – evaluation services
- ICC #AA690 – State of California
- Site to view is www.icc-es.org

Underwriters Laboratories R7764

ITS Testing Agency approved by the City of Los Angeles, RR#24080

ITS Approval by Additional Agencies

ITS, our fire rating testing laboratory, has been evaluated and approved by other agencies as well, including the following:
- Standards Council of Canada
- Fire Marshall of the State of California #3555-0855:100, 101 & 102
- City of Los Angeles RR #24080
- Materials & Equipment Acceptance Division, City of New York MEA 260-94-M
- City of Chicago

ITS Report Numbers

We operate under the umbrella of ITS/WHI approvals.

ITS report numbers for Openings Total Door® are:

Steel Type

Particle Core Type
  Report Numbers: 495-0046 (2/77) 495-0617 (6/84)
  495-PSV-0122 (5/81) 485-PSV-0817 (1/90)
Total Door listed products based on ITS/WHI testing

This document certifies that Intertek Testing Services has fire, smoke infiltration, and cycle tested the TOTAL DOOR manufactured by Openings, of Waterford, Michigan, and has certified the following for positive pressure fire resistance compliance under UBC Standard 7-2 (1997) Parts I and II and UL 10C (1998), and NFPA 252 (1999).

(Standard doors and hardware are not tested as a system, but rather as individual components, each tested in isolation under perfect conditions in a laboratory. TOTAL DOOR, on the other hand, has been tested as it is used in the field, that is, as a complete system – door, body, hinge, frame, locking mechanism, panic device, locking channel, etc.):

Frames:

All frame constructions shown in UL-63 are usable with Total Door. Total Doors may be used with all labeled frames of any manufacturer. Total Doors may be retrofitted to any existing labeled frames that are structurally sound.

FR-200 Six piece, prime or prefinished frame, 20 minute to 1 1/2 hour, cased with applied head stop, for masonry or drywall, with a maximum door opening of 8' 0" x 10' 0".

Tubular 2" x 2" or larger steel tube, 20 minute to 3 hour, with applied head stop, for single, pair or double egress, to maximum size of 8' 4-3/8" x 10' 0".

Note: Total Doors, single, pair or double egress, up to 1 1/2 hour, may be mounted directly on masonry without the use of a metal frame.

Doors:

3 hour Steel doors, hollow core, with temperature rise over 650 degrees F., honeycomb, polystyrene or metal or stiffened with;
  a) 20, 18 or 16 Gauge skins
  b) Single swing with maximum size of 4' 0" x 8' 0"
  c) Pairs and double egress with maximum size of 8' 0" x 8' 0"
  d) Levers, operating push/pull grips and panic devices, all without the use of coordinators, flush bolts, astragals, vertical rods or floor strikes.

3 hour Steel doors, hollow core, with temperature rise less than 250 degrees F., with;
  a) 20, 18 or 16 Gauge skins
  b) Single swing with maximum size of 4' 0" x 8' 0"
  c) Pairs and double egress with maximum size of 8' 0" x 8' 0"
  d) Levers, operating push/pull grips and panic devices, all without the use of coordinators, flush bolts, astragals, vertical rods or floor strikes.

1 1/2 & 3/4 hour Steel doors, hollow core, with temperature rise less than 250 degrees F., with;
  a) 20, 18 or 16 Gauge skins
  b) Single swing with maximum size of 4' 2-3/16" x 9' 0"
  c) Pairs and double egress with maximum size of 8' 4-3/8" x 9' 0"
  d) Levers, operating push/pull grips and panic devices, all without the use of coordinators, flush bolts, astragals, vertical rods or floor strikes.
1 1/2 & ¾ hour  Steel doors, hollow core, with temperature rise over 650 degrees F., honeycomb, polystyrene or metal stiffened with;
   a) 20, 18 or 16 Gauge skins
   b) Single swing with maximum size of 4' 2-3/16" x 9' 0"
   c) Pairs and double egress with maximum size of 8' 4-3/8" x 9' 0"
   d) Levers, operating push/pull grips and panic devices, all without the use of coordinators, flush bolts, astragals, vertical rods or floor strikes.

20 minute (with hose stream), Steel doors, hollow core, honeycomb, polystyrene or metal stiffened with;
   a) 20, 18 or 16 Gauge skins
   b) Single swing with maximum size of 4' 2-3/16" x 10' 0"
   c) Pairs and double egress with maximum size of 8' 4-3/8" x 10' 0"
   d) Levers, operating push/pull grips and panic devices, all without the use of coordinators, flush bolts, astragals, vertical rods or floor strikes.

20 minute Fire rated solid core wood doors with wood veneer, HPL, MDO and FRP
   a) Single swing with maximum size of 4' 0" x 9' 0"
   b) Pairs and double egress with maximum size of 8' 0" x 9' 0"
   c) Levers, operating push/pull grips and panic devices, all without the use of coordinators, flush bolts, astragals, vertical rods or floor strikes.

Blast doors Very low range blast doors, one pound per square inch (VLR) are available in all labels except temperature rise, in sizes to 3'0" x 8'0", and in non-labeled removable mullion pairs up to 3'0" x 8'0".

Closers. Mortised closers are approved for all fire ratings including three (3) hour.

Electric Electric doors, with inclusion of a solenoid for remote control of locking/latching is approved on all labels as part of the door system. A separate label for the solenoid is not required.

Holders Mortised semi-concealed electromagnetic holder mounted in the door for all labels.

Lead One-sixteenth inch lead-lined doors are available in all labels on steel doors of up to 28 square feet in single swing. Pairs of doors may be any size up to 4'0" x 7'0" with maximum 1/32" thick lead.

Lights Labeled vision lights on all fire doors with lite kits labeled for Positive Pressure, under standard Firelite & Pemko procedures when acceptable to the Authority having Jurisdiction.

Kickplates Kickplates of any height, when using Openings standard bonded wraparound kickplates without mechanical fasteners for all labels.

PANICS Panic exit devices have been tested for compliance to UL305 door for all labels.

POCKETS Pocket door applications using any closer labeled for positive pressure. When the closer is mounted on the wall, the wall must be reinforced and the closer installed per the TOTAL DOOR installation drawings. The certification applies to 90 degree through 180 degree installations.

• WWW.TOTALDOOR.COM • Sales (800) 852-6660 •

3-4a
Smoke & Draft  The S mark signifying the acceptance to UBC Standard 7-2 (1997) Part II may be applied to the label.

Special finishes: All labeled steel doors including temperature rise may have Architectural film, genuine wood veneers, FRP, stainless steel, aluminum or brass faces one or both sides.
Monday, January 4, 2010

**Total Door listed products based on Certified Testing Laboratories**

The following doors were tested by Certified Testing Laboratories, 7252 Narcoossee Road, Orlando, Fl 32822, and have the ratings indicated.

Blast doors have a rating of 180 pounds per square foot (1.25 PSI) on single swing up to 3' 0" x 7' 2" and pairs up to 6' 0" x 7' 2" both in swing and out swing.

Hurricane doors have design load ratings of 70 and 80 pounds per square foot on single swing up to 3' 0" x 7' 2" and on pairs up to 6' 0" x 7' 2" both in swing and out swing.

file; whi160
Labeled Frames for TOTAL DOOR®

The TOTAL DOOR® hinge and locking system actually stiffen the frame. That is why even pair and double egress configurations pass fire tests using a simple cased (non-rabbetted) frame with ZERO deflection of the door to frame during the fire test. Conventional labeled steel doors separate from the frame over 2” and are still given a fire label. By always testing with a generic cased frame, we are automatically allowed by WHI and UL to use single or double rabbetted frames because they are considered stronger and stiffer than a cased frame.

A labeled TOTAL DOOR® can be installed in any WHI or UL rated frame. Even if the hinge reinforcements are broken, if the frame is structurally sound, you can properly install a WHI labeled TOTAL DOOR®.

Fire Labeling Existing Door Frames

ITS can label existing door frames that are missing labels. On retrofit jobs, you do not have to replace the frame simply to obtain a labeled frame.

ITS will examine and inspect door frames and if found to be eligible, they will affix a fire rating label to the door frame.

ITS requests that a representative accompany them to locate the door openings to be inspected. Also during the inspection, they will require the assistance of a locksmith, door tradesman or building mechanic to provide assistance in fastening labels to the frame by drilling two 1/8” holes and installing drive rivets. WHI also requests that a local building inspector be on site to observe its examination, inspection and labeling procedures.

You can contact ITS at: (608) 836-4400, Fax (608) 831-9279

TOTAL DOOR® labels are found on the TOP edge of the door.

TOTAL DOOR® Installation & Fire Code Compliance

With the TOTAL DOOR® product line, the installation instructions and caveats are part of the listed procedure. In other words, violating the TOTAL DOOR® installation instructions voids the label of the opening. If TOTAL DOOR® is not installed by a factory certified installer, the warranty will be void. In the event that a warranty is issued without careful inspection, its issuance is invalid.

If the opening is not labeled, the Fire Marshal is obligated to deny issuance of an occupancy permit. If he is unaware of this, an anonymous communication to UL or ITS will make the Fire Marshal aware of the condition.
Field Undercutting of Labeled Doors

Warnock Hersey has ruled that 1 ½ hour B, 3/4 hour (C), and 20 Minute Rated steel TOTAL DOORS® may be cut off in the field a maximum of 3/4”. Three hour (A) label doors may not be cut off at all.

Application of Architectural Films and Wood Veneers to Labeled Steel TOTAL DOORS®

The construction and bonding processes that Total Door uses in the factory labeled wood veneer steel doors can only be done under license and with testing lab follow-up.

Field application of cladding or wood veneers to labeled TOTAL DOORS® will void any fire rating.
LIMITED WARRANTY

This limited warranty covers the materials and workmanship of its products manufactured after January 1, 1997 as follows for two and one-half (2-1/2) years from the ship date or two (2) years from the installation date, whichever occurs first:

- Door Bodies - two (2) years.
- Electrical Components - two (2) years.
- Locks: mortise lock bodies and push/pull mechanisms (Q289SA, M22SA & M24SA) - for the lifetime of the original installation.
- Exit Devices Panic Buttons (P16SA) - for the lifetime of the original installation.
- Hanger Rods (H17, H50 - Standard Black or white) - for the lifetime of the original installation.
- Retainers (R12SA) - for the lifetime of the original installation.
- Flush Panic Actuator (PF221B with X35 Screw) - for the lifetime of the original installation
- Hinge (H-13) - for the lifetime of the original installation

This limited warranty shall apply only if the product is properly stored, installed and maintained in accordance with Openings' written instructions. Openings will, at its option, replace, repair or refund the purchase price paid to Openings for products which in its opinion, are found to be defective in workmanship or material under normal use and service within the above defined time periods. Openings' sole responsibility is as stated herein and it shall not be liable for consequential, indirect or incidental damages.

This limited warranty is in place of all other warranties, express or implied, and excludes any warranties of fitness or merchantability. No agent, representative, dealer, or employee of Openings has the authority to increase or alter the obligations of this limited warranty.

Notice Requirement

Purchaser is responsible for inspection of product upon receipt and for giving written notice to supplier and Openings within 30 days of discovery of unsatisfactory performance.

Storage and Handling Instructions

1. Store Total Doors flat on a level surface in a dry, well ventilated building, separated by spacer blocks provided with original shipment so that no projecting hardware touches any part of an adjacent door.
2. Cover doors to keep clean and avoid discoloration. Cover must allow air circulation.
3. Wood doors or steel doors with plastic laminate or wood faces should not be subjected to extremes of heat and/or humidity conditions. Relative humidity should not be less than 30% or more than 60%.
4. For wood doors, follow manufacturer's special handling and finishing instructions that apply to wood doors.
5. Handle with clean gloves and do not drag doors across one another or across other surfaces.

Installation

Total Door Systems must be installed in full compliance with manufacturer's written instructions.

Maintenance

To assure coverage under this limited warranty, the following must be maintained: the adjustment of hardware and fasteners attached to or fitted into the doors or frame, the finishes on all wood surfaces and the moisture protection on exterior doors.

Exclusions

This limited warranty does not include:

- Total Doors that are not installed by a factory certified installer, employed by supplier. If a warranty was previously issued the warranty is void.
- Any products which, in the opinion of Openings, have been modified, repaired or altered in any way without the express written consent of the Company.
- The appearance of field finished doors.
- The appearance of high gloss surfaced doors.
- Natural variations in the color or texture of wood.
- Doors with cutouts for lights, louvers or other hardware nearer than six inches to the door edge, or doors with less than six inches between cutouts.
- Normal wear and tear including wear-through of finishes or deterioration for reasons other than material and workmanship.
- Items by other manufacturers.
- Plastic laminate or wood surfaced doors exposed to relative humidity of less than 30% or greater than 60%.
- Field Painting of Hinge Verticals (H12 or H13 or H14 or H15)
- Field Paint of Locking Channel Verticals (L11)

Exclusions for Exterior Doors

An exterior door is one that cannot be controlled on both sides for temperature and humidity. The following conditions will void the limited warranty:

- Use of concealed closers.
- Wood or plastic faced or wood core doors.
- Doors and frames not properly protected by flashing or drip caps.
- Doors that are not sealed top and bottom.

Total Door an Openings Company  800.852.6660 phone  www.totaldoor.com

3-7
TOTAL DOOR® WARRANTY

Procedure for Issue

To receive a TOTAL DOOR® Limited Warranty the distributor must forward the following information to TOTAL DOOR®:

1. Total Door Order #
2. Job Site Name
3. Date of Installation
4. Name of Distributor
5. Name of Installer (individual's name)
Additional Specifications and CADs may be found on our website www.totaldoor.com

Part a – Specifications

Cross Corridor Pair 4-2
Cross Corridor Double Egress Pair 4-8
Elevator Shaft Protection 4-14
SECTION 08170
INTEGRATED METAL DOOR OPENING SYSTEMS
Cross Corridor Pair Application

PART 1 GENERAL

1.01 GENERAL NOTE
A. The General Conditions, Supplementary General Conditions, and Division 1 - General Requirements are hereby made a part of this Section as fully as if repeated herein.

1.02 SUMMARY
A. Section Includes
   1. Integrated metal door opening assemblies with doors, operating hardware, accessories, and installation for a complete assembly.

1.03 RELATED SECTIONS
A. Section 01 33 00, Submittal Procedures.
B. Section 01 25 13, Product Substitution Procedures.

1.04 REFERENCES
K. SDI 111 A - Recommended Steel Door Frame Details, Steel Door Institute; 2002.
N. UL 305 - Standard for Panic Hardware, Underwriters Laboratories Inc., 1997
1.05 SYSTEM DESCRIPTION

A. Performance Requirements
   1. Integrated metal door opening assemblies: Exceed minimum performance standards.
      a. Steel Doors: In accordance with ANSI/SDI A250.8, Grade 1, but not less than
         5,000,000 cycles.
      b. Exit Devices: In accordance with ANSI/BHMA A156.3, Grade 1, but not less than
         5,000,000 cycles.
      c. Closers: In accordance with ANSI/BHMA A156.4, Grade 1.
      d. Mortise Locks/Latches: In accordance with ANSI/ BHMA A156.13, Grade 1, but not less
         than 5,000,000 cycles.
      e. Full-height Hinges: In accordance with ANSI/ BHMA A156.26, Grade 1, but not less
         than 5,000,000 cycles.

1.06 SUBMITTALS

A. Shop Drawings
   1. In accordance with Section 01 33 00.
   2. Indicate each door and frame condition; frame type, profile and installation detail; items of
      finish hardware, finishes and electrical rough-in requirements.

B. Samples
   1. In accordance with Section 01 33 00.

1.07 QUALITY ASSURANCE

A. Qualifications
   1. Manufacturer: Firm with not less than 5 years successful experience in fabrication of
      integrated metal door opening assemblies with full-height latch/lock and full-height hinge.
   2. Supplier: Authorized distributor of manufacturer.
   3. Installer: Manufacturer certified, employed by supplier.

B. Regulatory Requirements
   1. Rated door assemblies shall have been tested to meet conditions of NFPA 252 as required
      by NFPA 101 section 6-2.3.3.

1.08 DELIVERY, STORAGE AND HANDLING

A. Packaging: Polyvinyl wrapped, palette by floor, and clearly marked for each opening.

B. Delivery: Deliver to site in original unopened containers and pallets bearing system
   manufacturers name, and brand.

C. Store: Horizontally on level surface, not less than 2 inches off floor in a clean, dry well-ventilated
   area protected from sunlight, extreme heat, dryness and moisture.

D. Receiving, off loading, and site distribution should be handled by an authorized Total
   Door Distributor unless otherwise stipulated by contract. If the G.C. or other
   entity handles all or any portion of the receiving, off loading, and site distribution, they
   are held responsible for any and all damages that may result from potential miss
   handling of the product.

1.09 PROJECT CONDITIONS

A. Do not bring door systems to site until building temperature and humidity ranges are compatible
   with recommended values for preservation of wood moisture content as listed by AWI AWQS.
   Building shall be stabilized at 30 to 60 percent humidity.
1.10 WARRANTY
A. Integrated metal door opening assembly: Manufacturer’s standard 2 year warranty against defects in material and workmanship.
B. Locksets, hanger rods, and panic exit devices: Manufacturer’s lifetime limited warranty against defects in material and workmanship.
C. Unfinished wood veneers on metal doors are subject to atmospheric changes and moisture collection and shall be finished within 10 days from factory ship date or warranty on lamination is made void.
D. Store doors in a clear, dry ventilated space having controlled temperature and a relative humidity range between 30 and 60 percent. Stack doors flat and off the floor to prevent warpage.

PART 2 PRODUCTS
2.01 MANUFACTURERS
A. Integrated metal door systems
   2. Substitutions: Refer to Section 01 25 13, Not permitted.
B. Hardware
   2. Substitutions: Refer to Section 01 25 13, Not permitted

2.02 MATERIALS
A. Frames
   1. To be supplied by others.
   2. In accordance with ANSI/SDI A250.8, SDI 111A, and SDI 112.
   3. Construction: All-welded unit, type.
B. Frame Anchorage Devices
   1. To securely fasten to wall construction without distortion or stress.
   2. In accordance with fire resistance rating indicated in Contract Documents.
C. Door Systems
   1. In accordance with ANSI/SDI A250.8.
   2. General Use, Interior
      a. Stiles: Steel, galvannealed, 16 gauge, spot welded.
      b. Top and Bottom Rails: 5-1/2 inch 18 gauge steel rails.
      e. Faces: Steel, stretcher leveled, without seams or spot welds, galvannealed and bonderized, 20, gauge.
   3. Fire Rated
      a. Stiles: Steel, galvannealed, 16 gauge, spot welded.
      b. Top and Bottom Rails
      c. Cores
         1) Solid polystyrene continuously bonded to faces.
      d. Weld pattern: Enhanced in accordance with manufacturers standard details.
4. Gasketing
   a. U.L. approved for fire doors.
   b. Jambs: Factory applied to latch/locking and full-height hinge channels.

FINISHES

D. Frames: Factory prime painted for field-applied finish.

E. Hinge and Locking Channel
   1. Finish: 2 part infrared baked polyurethane paint.
      a. Color to be selected by Architect.

F. Door Faces, Interior
   a. Finish: To be selected by Architect, refer to door schedule.

2.03 FABRICATION

A. Unless modified by Contract Documents, construct integrated metal door opening assemblies in accordance with manufacturer’s published specifications and applicable Code requirements.

B. Factory assemble with full-height hinges and latching/locking channels, locksets, exit devices, closers, lite kits, glazing, kickplates, stretcher plates, and armor plates.

PART 3  EXECUTION

3.01 EXAMINATION

A. Field Conditions
   1. Prior to commencing installation, examine parts of building structure, which are to receive door systems and component parts.
   2. Report, in writing, conditions which would prevent proper execution or endanger permanency of the work to the Architect.

B. Field Dimensions
   1. Where possible, verify frame tolerances before fabrication of door systems.
   2. Notify Architect of variances with reviewed shop drawings.

C. Corrective measures, when necessary, shall be determined and approved prior to commencing fabrication.

D. Coordinate door opening assembly details with adjacent work to assure proper attachments, clean junctions, etc.

3.02 INSTALLATION

A. Install work in accordance with Contract Documents and reviewed shop drawings.
   1. Install door systems and hardware in accordance with manufacturer’s recommendations.
   2. Deliver frames to be installed by others.

B. Frames
   1. Set plumb and square in accordance with DHI standards.
      a. Out-of-square at frame head: Not to exceed 1/16 inch.
      b. Out-of-plumb for each frame jamb: Not to exceed 1/16 inch.
      c. Out-of-alignment for each side in plan: Not to exceed 1/16 inch.
      d. Twist dimension: Not to exceed 1/16 inch.
   2. Brace until adjacent wall is constructed.
   3. Securely anchor to adjacent wall.
   4. Furnish and install clips, fastenings, and anchorages and conceal unless otherwise noted.
C. Door Systems
   1. Hang to maintain manufacturer’s installation tolerances.
   2. Adjust to freely swing without binding, sticking, or sagging, and to eliminate excessive clearances.

D. Hardware: When installation is otherwise complete, adjust hardware for proper operation and function.

PART 4 SYSTEM SCHEDULE

**Typical Cross Corridor hold open**

<table>
<thead>
<tr>
<th>Set</th>
<th>2 ea Full Height Hinges</th>
<th>H-13 Rigidized</th>
<th>Color TBD</th>
<th>Total Door</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 ea Full Height Latch Channel</td>
<td>L- 11</td>
<td>Color TBD</td>
<td>Total Door</td>
</tr>
<tr>
<td></td>
<td>2 ea Operating Pulls</td>
<td>M32</td>
<td>US28</td>
<td>Total Door</td>
</tr>
<tr>
<td></td>
<td>2 ea Exit Device</td>
<td>PF200 (Flush Panic)</td>
<td>630</td>
<td>Total Door</td>
</tr>
<tr>
<td></td>
<td>2 ea Closer</td>
<td>TDC96P</td>
<td>Alum</td>
<td>Total Door</td>
</tr>
<tr>
<td></td>
<td>2 ea Mag Holder</td>
<td>TDH100</td>
<td>628</td>
<td>Total Door</td>
</tr>
<tr>
<td></td>
<td>2 ea Positive Pressure ‘B’ label</td>
<td>Temperature rise</td>
<td>Total Door</td>
<td></td>
</tr>
</tbody>
</table>
PART 1  GENERAL

1.01  GENERAL NOTE
A. The General Conditions, Supplementary General Conditions, and Division 1 - General Requirements are hereby made a part of this Section as fully as if repeated herein.

1.02  SUMMARY
A. Section Includes
   1. Integrated metal door opening assemblies with doors, operating hardware, accessories, and installation for a complete assembly.

1.03  RELATED SECTIONS
A. Section 01 33 00, Submittal Procedures.
B. Section 01 25 13, Product Substitution Procedures.

1.04  REFERENCES
K. SDI 111 A - Recommended Steel Door Frame Details, Steel Door Institute; 2002.
1.05 SYSTEM DESCRIPTION

A. Performance Requirements
   1. Integrated metal door opening assemblies: Exceed minimum performance standards.
      a. Steel Doors: In accordance with ANSI/SDI A250.8, Grade 1, but not less than
         5,000,000 cycles.
      b. Exit Devices: In accordance with ANSI/BHMA A156.3, Grade 1, but not less than
         5,000,000 cycles.
      c. Closers: In accordance with ANSI/BHMA A156.4, Grade 1.
      d. Mortise Locks/Latches: In accordance with ANSI/ BHMA A156.13, Grade 1, but not less
         than 5,000,000 cycles.
      e. Full-height Hinges: In accordance with ANSI/ BHMA A156.26, Grade 1, but not less
         than 5,000,000 cycles.

1.06 SUBMITTALS

A. Shop Drawings
   1. In accordance with Section 01 33 00.
   2. Indicate each door and frame condition; frame type, profile and installation detail; items of
      finish hardware, finishes and electrical rough-in requirements.

B. Samples
   1. In accordance with Section 01 33 00.

1.07 QUALITY ASSURANCE

A. Qualifications
   1. Manufacturer: Firm with not less than 5 years successful experience in fabrication of
      integrated metal door opening assemblies with full-height latch/lock and full-height hinge.
   2. Supplier: Authorized distributor of manufacturer.
   3. Installer: Manufacturer certified, employed by supplier.

B. Regulatory Requirements
   1. Rated door assemblies shall have been tested to meet conditions of NFPA 252 as required
      by NFPA 101 section 6-2.3.3.

1.08 DELIVERY, STORAGE AND HANDLING

A. Packaging: Polyvinyl wrapped, palette by floor, and clearly marked for each opening.

B. Delivery: Deliver to site in original unopened containers and pallets bearing system
   manufacturers name, and brand.

C. Store: Horizontally on level surface, not less than 2 inches off floor in a clean, dry well-ventilated
   area protected from sunlight, extreme heat, dryness and moisture.

D. Receiving, off loading, and site distribution should be handled by an authorized Total Door
   Distributor unless otherwise stipulated by contract. If the G.C. or other entity handles all or any
   portion of the receiving, off loading, and site distribution, they are held responsible for any and all
   damages that may result from potential miss handling of the product.

1.09 PROJECT CONDITIONS

A. Do not bring door systems to site until building temperature and humidity ranges are compatible
   with recommended values for preservation of wood moisture content as listed by AWI AWQS.
   Building shall be stabilized at 30 to 60 percent humidity.
1.10 WARRANTY

A. Integrated metal door opening assembly: Manufacturer’s standard 2 year warranty against defects in material and workmanship.

B. Locksets, hanger rods, and panic exit devices: Manufacturer’s lifetime limited warranty against defects in material and workmanship.

C. Unfinished wood veneers on metal doors are subject to atmospheric changes and moisture collection and shall be finished within 10 days from factory ship date or warranty on lamination is made void.

D. Store doors in a clear, dry ventilated space having controlled temperature and a relative humidity range between 30 and 60 percent. Stack doors flat and off the floor to prevent warpage.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Integrated metal door systems
   2. Substitutions: Refer to Section 01 25 13, Not permitted.

B. Hardware
   2. Substitutions: Refer to Section 01 25 13, Not permitted

2.02 MATERIALS

A. Frames
   1. To be supplied by others.
   2. In accordance with ANSI/SDI A250.8, SDI 111A, and SDI 112.
   3. Construction: All-welded unit, type.

B. Frame Anchorage Devices
   1. To securely fasten to wall construction without distortion or stress.
   2. In accordance with fire resistance rating indicated in Contract Documents.

C. Door Systems
   1. In accordance with ANSI/SDI A250.8.
   2. General Use, Interior
      a. Stiles: Steel, galvannealed, 16 gauge, spot welded.
      b. Top and Bottom Rails: 5-1/2 inch 18 gauge steel rails.
      c. Cores: Solid polystyrene continuously bonded to faces.
      e. Faces: Steel, stretcher leveled, without seams or spot welds, galvannealed and bonderized, 20 gauge.
   3. Fire Rated
      a. Stiles: Steel, galvannealed, 16 gauge, spot welded.
      b. Top and Bottom Rails
      c. Cores
         1) Solid polystyrene continuously bonded to faces.
      d. Weld pattern: Enhanced in accordance with manufacturers standard details.
4. Gasketing
   a. U.L. approved for fire doors.
   b. Jambs: Factory applied to latchlocking and full-height hinge channels.

FINISHES

D. Frames: Factory prime painted for field-applied finish.
E. Hinge and Locking Channel
   1. Finish: 2 part infrared baked polyurethane paint.
      a. **Color to be selected by Architect.**
F. Door Faces, Interior
   a. **To be selected by Architect, refer to door schedule.**

2.03 FABRICATION

A. Unless modified by Contract Documents, construct integrated metal door opening assemblies in accordance with manufacturer's published specifications and applicable Code requirements.

B. Factory assemble with full-height hinges and latchinglocking channels, locksets, exit devices, closers, lite kits, glazing, kickplates, stretcher plates, and armor plates.

PART 5 EXECUTION

3.01 EXAMINATION

A. Field Conditions
   1. Prior to commencing installation, examine parts of building structure, which are to receive door systems and component parts.
   2. Report, in writing, conditions which would prevent proper execution or endanger permanency of the work to the Architect.

B. Field Dimensions
   1. Where possible, verify frame tolerances before fabrication of door systems.
   2. Notify Architect of variances with reviewed shop drawings.

C. Corrective measures, when necessary, shall be determined and approved prior to commencing fabrication.

D. Coordinate door opening assembly details with adjacent work to assure proper attachments, clean junctions, etc.

3.02 INSTALLATION

A. Install work in accordance with Contract Documents and reviewed shop drawings.
   1. Install door systems and hardware in accordance with manufacturer's recommendations.
   2. Deliver frames to be installed by others.

B. Frames
   1. Set plumb and square in accordance with DHI standards.
      a. Out-of-square at frame head: Not to exceed 1/16 inch.
      b. Out-of-plumb for each frame jamb: Not to exceed 1/16 inch.
      c. Out-of-alignment for each side in plan: Not to exceed 1/16 inch.
      d. Twist dimension: Not to exceed 1/16 inch.
   2. Brace until adjacent wall is constructed.
   3. Securely anchor to adjacent wall.
   4. Furnish and install clips, fastenings, and anchorages and conceal unless otherwise noted.
C. Door Systems
   1. Hang to maintain manufacturer's installation tolerances.
   2. Adjust to freely swing without binding, sticking, or sagging, and to eliminate excessive clearances.

D. Hardware: When installation is otherwise complete, adjust hardware for proper operation and function.

PART 6 SYSTEM SCHEDULE

**Typical Double Egress Cross Corridor hold open**
Set _1 (180/90) degree pocketed application

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item Description</th>
<th>Code</th>
<th>Color</th>
<th>Total Door</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 ea</td>
<td>Full Height Hinges</td>
<td>H-13</td>
<td>TBD</td>
<td>Total Door</td>
</tr>
<tr>
<td>2 ea</td>
<td>Full Height Latch Channel</td>
<td>L-11</td>
<td>TBD</td>
<td>Total Door</td>
</tr>
<tr>
<td>2 ea</td>
<td>Exit Device</td>
<td>PF200</td>
<td>Flush Panic</td>
<td>630</td>
</tr>
<tr>
<td>2 ea</td>
<td>Closer</td>
<td>TDC180P</td>
<td>Alum</td>
<td>Total Door</td>
</tr>
<tr>
<td>2 ea</td>
<td>Mag Holder</td>
<td>TDH200</td>
<td></td>
<td>628</td>
</tr>
<tr>
<td>2 ea</td>
<td>Positive Pressure label (includes Smoke &amp; Draft)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3/4" MIN. CLEARANCE REQUIRED FROM CEILING OR TOP OF POCKET TO FRAME RABBET (BOTH SIDES OF FRAME)

FIELD APPLIED STOP

WOOD BLOCKING IN WALL FOR CLOSER/MAG REINFORCEMENT, KEEP TIGHT TO EDGE OF FRAME TOP EDGE FLUSH WITH DOOR

PF200 FLUSH PANIC/FIRE EXIT DEVICE

TOTAL DOOR SHOWN IN CLOSED POSITION

STD. UNDERCUT 3/4"

CONCRETE SLAB

DOOR POCKET

1/2" THROAT DIM. 1/2"

5-3/4"

1/2" 5/8" EQ. 2" EQ. 5/8"

3 1/8"

JAMB SECTION

NOT TO SCALE

VERTICAL SECTION

NOT TO SCALE

NOTE:
SEE TECH DATA SHEETS #5, 19S, 19T, 19U & 19V FOR ADDITIONAL DETAILS

DRYWALL

HOLLOW METAL FRAME

WOOD OR METAL STUDS

TDC96P CLOSER

2"X6" MIN. WOOD BLOCKING FOR CLOSER/MAG REINFORCEMENT IN WALL. BY G.C.

MAG HOLDER

FULL HEIGHT SEMI-CONCEALED HINGE

HEAD STRIKE ABOVE

DOORS IN CLOSED POSITION

LOCKING CHANNEL

2-3/16"

5 1/4"

HORIZONTAL SECTION

NOT TO SCALE

Project: Manufacturer: Total Door® Location: 6145 Delfield Drive, Waterford, MI 48329 Job #: DE-PK-90 Sheet No: FP

90 Degree Pocketed - Double Egress Panic Exit only

Door No: Date: Drawn by: Total Door®
PART 1 GENERAL

1.01 GENERAL NOTE
A. The General Conditions, Supplementary General Conditions, and Division 1 - General Requirements are hereby made a part of this Section as fully as if repeated herein.

1.02 SUMMARY
A. Section Includes
   1. Integrated metal door opening assemblies with doors, operating hardware, accessories, and installation for a complete assembly.

1.03 RELATED SECTIONS
A. Section 01 33 00, Submittal Procedures.
B. Section 01 25 13, Product Substitution Procedures.

1.04 REFERENCES
K. SDI 111 A - Recommended Steel Door Frame Details, Steel Door Institute; 2002.
N. UL 305 - Standard for Panic Hardware, Underwriters Laboratories Inc., 1997
1.05 SYSTEM DESCRIPTION

A. Performance Requirements
   1. Integrated metal door opening assemblies: Exceed minimum performance standards.
      a. Steel Doors: In accordance with ANSI/SDI A250.8, Grade 1, but not less than 5,000,000 cycles.
      b. Exit Devices: In accordance with ANSI/BHMA A156.3, Grade 1, but not less than 5,000,000 cycles.
      c. Closers: In accordance with ANSI/BHMA A156.4, Grade 1.
      d. Mortise Locks/Latches: In accordance with ANSI/BHMA A156.13, Grade 1, but not less than 5,000,000 cycles.
      e. Full-height Hinges: In accordance with ANSI/BHMA A156.26, Grade 1, but not less than 5,000,000 cycles.

1.06 SUBMITTALS

A. Shop Drawings
   1. In accordance with Section 01 33 00.
   2. Indicate each door and frame condition; frame type, profile and installation detail; items of finish hardware, finishes and electrical rough-in requirements.

B. Samples
   1. In accordance with Section 01 33 00.

1.07 QUALITY ASSURANCE

A. Qualifications
   1. Manufacturer: Firm with not less than 5 years successful experience in fabrication of integrated metal door opening assemblies with full-height latch/lock and full-height hinge.
   2. Supplier: Authorized distributor of manufacturer.
   3. Installer: Manufacturer certified, employed by supplier.

B. Regulatory Requirements
   1. Rated door assemblies shall have been tested to meet conditions of NFPA 252 as required by NFPA 101 section 6-2.3.3.

1.08 DELIVERY, STORAGE AND HANDLING

A. Packaging: Polyvinyl wrapped, palette by floor, and clearly marked for each opening.

B. Delivery: Deliver to site in original unopened containers and pallets bearing system manufacturers name, and brand.

C. Store: Horizontally on level surface, not less than 2 inches off floor in a clean, dry well-ventilated area protected from sunlight, extreme heat, dryness and moisture.

D. Receiving, off loading, and site distribution should be handled by an authorized Total Door Distributor unless otherwise stipulated by contract. If the G.C. or other entity handles all or any portion of the receiving, off loading, and site distribution, they are held responsible for any and all damages that may result from potential miss handling of the product.

1.09 PROJECT CONDITIONS

A. Do not bring door systems to site until building temperature and humidity ranges are compatible with recommended values for preservation of wood moisture content as listed by AWI AWQS. Building shall be stabilized at 30 to 60 percent humidity.
1.10 WARRANTY

A. Integrated metal door opening assembly: Manufacturer's standard 2 year warranty against defects in material and workmanship.

B. Locksets, hanger rods, and panic exit devices: Manufacturer's lifetime limited warranty against defects in material and workmanship.

C. Unfinished wood veneers on metal doors are subject to atmospheric changes and moisture collection and shall be finished within 10 days from factory ship date or warranty on lamination is made void.

D. Store doors in a clear, dry ventilated space having controlled temperature and a relative humidity range between 30 and 60 percent. Stack doors flat and off the floor to prevent warpage.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Integrated metal door systems
   2. Substitutions: Refer to Section 01 25 13, Not permitted.

B. Hardware
   2. Substitutions: Refer to Section 01 25 13, Not permitted

2.02 MATERIALS

A. Frames
   1. To be supplied by others.
   2. In accordance with ANSI/SDI A250.8, SDI 111A, and SDI 112.
   3. Construction: All-welded unit, type.

B. Frame Anchorage Devices
   1. To securely fasten to wall construction without distortion or stress.
   2. In accordance with fire resistance rating indicated in Contract Documents.

C. Door Systems
   1. In accordance with ANSI/SDI A250.8.
   2. General Use, Interior
      a. Stiles: Steel, galvannealed, 16 gauge, spot welded.
      b. Top and Bottom Rails: 5-1/2 inch 18 gauge steel rails.
      c. Cores: Solid polystyrene continuously bonded to faces.
      e. Faces: Steel, stretcher leveled, without seams or spot welds, galvannealed and bonderized, 20, gauge.
   3. Fire Rated
      a. Stiles: Steel, galvannealed, 16 gauge, spot welded.
      b. Top and Bottom Rails
      c. Cores
         1) Solid polystyrene continuously bonded to faces.
      d. Weld pattern: Enhanced in accordance with manufacturers standard details.
4. Gasketing  
   a. U.L. approved for fire doors.  
   b. Jambs: Factory applied to latch/locking and full-height hinge channels.  
   c. Floor: Factory applied sweep.

FINISHES

D. Frames: Factory prime painted for field-applied finish.

E. Hinge and Locking Channel  
   1. Finish: 2 part infrared baked polyurethane paint.  
      a. Color to be selected by Architect.

F. Door Faces, Interior  
   a. Finish: To be selected by Architect, refer to door schedule.

2.03 FABRICATION

A. Unless modified by Contract Documents, construct integrated metal door opening assemblies in accordance with manufacturer's published specifications and applicable Code requirements.

B. Factory assemble with full-height hinges and latching/locking channels, locksets, exit devices, closers, lite kits, glazing, kickplates, stretcher plates, and armor plates.

PART 7 EXECUTION

3.01 EXAMINATION

A. Field Conditions  
   1. Prior to commencing installation, examine parts of building structure, which are to receive door systems and component parts.  
   2. Report, in writing, conditions which would prevent proper execution or endanger permanency of the work to the Architect.

B. Field Dimensions  
   1. Where possible, verify frame tolerances before fabrication of door systems.  
   2. Notify Architect of variances with reviewed shop drawings.

C. Corrective measures, when necessary, shall be determined and approved prior to commencing fabrication.

D. Coordinate door opening assembly details with adjacent work to assure proper attachments, clean junctions, etc.

3.02 INSTALLATION

A. Install work in accordance with Contract Documents and reviewed shop drawings.  
   1. Install door systems and hardware in accordance with manufacturer’s recommendations.  
   2. Deliver frames to be installed by others.

B. Frames  
   1. Set plumb and square in accordance with DHI standards.  
      a. Out-of-square at frame head: Not to exceed 1/16 inch.  
      b. Out-of-plumb for each frame jamb: Not to exceed 1/16 inch.  
      c. Out-of-alignment for each side in plan: Not to exceed 1/16 inch.  
      d. Twist dimension: Not to exceed 1/16 inch.  
   2. Brace until adjacent wall is constructed.  
   3. Securely anchor to adjacent wall.  
   4. Furnish and install clips, fastenings, and anchorages and conceal unless otherwise noted.
C. Door Systems
   1. Hang to maintain manufacturer’s installation tolerances.
   2. Adjust to freely swing without binding, sticking, or sagging, and to eliminate excessive clearances.

D. Hardware: When installation is otherwise complete, adjust hardware for proper operation and function.

PART 4 SYSTEM SCHEDULE

**Typical Elevator Shaft hold open**

Set _____

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Model</th>
<th>Color</th>
<th>Notes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ea</td>
<td>Full Height Hinges</td>
<td>H-13</td>
<td>Rigidized</td>
<td>Color TBD</td>
<td>Total Door</td>
</tr>
<tr>
<td>1 ea</td>
<td>Full Height Latch Channel</td>
<td>L- 11</td>
<td></td>
<td>Color TBD</td>
<td>Total Door</td>
</tr>
<tr>
<td>1 ea</td>
<td>Operating Pull</td>
<td>M33</td>
<td>US28</td>
<td>Total Door</td>
<td></td>
</tr>
<tr>
<td>1 ea</td>
<td>Operating Push</td>
<td>M52</td>
<td>US28</td>
<td>Total Door</td>
<td></td>
</tr>
<tr>
<td>1 ea</td>
<td>Closer</td>
<td>ST2701</td>
<td>Alum</td>
<td>LCN</td>
<td></td>
</tr>
<tr>
<td>1 ea</td>
<td>Mag Holder</td>
<td>TDH100</td>
<td>628</td>
<td>Total Door</td>
<td></td>
</tr>
<tr>
<td>1 ea</td>
<td>Positive Pressure label (includes Smoke &amp; Draft)</td>
<td></td>
<td></td>
<td>Total Door</td>
<td></td>
</tr>
<tr>
<td>1 ea</td>
<td>Mortised sweep</td>
<td></td>
<td></td>
<td>Total Door</td>
<td></td>
</tr>
</tbody>
</table>
ELEVATOR SHAFT PROTECTION

- Hollow metal frame for total door
- Min. 3/4" clearance required from ceiling or top of pocket to frame rabbet
- Sealant, continuous along joint between door frame and elevator frame
- Field applied smoke seal
- Wood blocking in wall for closer/mag reinforcement. Keep tight to edge of frame top edge flush with door
- Total door continuous hinge
- Total door shown in 90° open position
- Elevator frame
- Std. undercut 3/4"

1. Vertical Section
   - Not to scale
   - Masonry wall total door closer
   - Elevator frame opening
   - Elevator frame
   - Sealant
   - Hollow metal frame
   - TDH 100
   - Latch stop
   - Total door in closed position
   - Full height semi concealed hinge shim and fire caulk as required

2. Horizontal Section
   - Not to scale

Project: Manufacturer: Total Door®
Location: 40 W. Howard, Pontiac, Michigan 48342
Job #: Single Door - Pocketed 90 Degree Elevator Application
Sheet No: EL-180-RH
Door No: Drawn by:
Date: Total Door®
## Section 5 – Door System Options/Frames

### Additional Door Models
- Model 80: 5-1
- Blast Doors: 5-2
- Dutch Door: 5-2
- Lead Lined Doors: 5-2
- Electric Doors: 5-3
- Definitions: 5-4
- Suggestions: 5-5

### Options
- Gasketing - Sound, Weather & Smoke: 5-6
- Glazing: 5-6
- Lite Kits: 5-6
- Louvers: 5-6
- Lites for Labeled Doors: Maximum Sizes: 5-7
- Plates - Kick, Mop, Armor & Edge Guards: 5-8
- Removable Mullions: 5-8
- Sound Package: 5-8
- Labeled Psychiatric Hinge: 5-8

### Frames
- FR200 Cased Sub-Buck Pre-Finished Frame
TOTAL DOOR

Section 5 – Additional Door Models and Options

Door Model #80

No locking channel, no mechanism, no grips nor levers.

Latch stiles are flush. Doors may be single, pair or double egress.

Available in wood or steel.

Use

Whenever free-swinging doors are required, such as passage from dining room to kitchen pantries. No locking or latching function is required.

Limitations

1. To 4080 or 8080 - 20 gauge.

2. To 3’10” x 8’0” or 7’8” x 8’0” - 18 gauge or wood core.

3. No abuse package.

4. Non-labeled only.

5. Available with stainless steel edge guard upon request.
Blast Doors

Blast doors, up to 180 PSF.

These doors are available as single up to 3'-0 x 8'-0 in A label and with 16 gauge steel skins. Blast doors are also available without label with removable mullion for frames up to 6'-0 x 8'-0.

Available in all functions.

Dutch Doors – Non-Label Only

Lead Lined Doors

Lead lined doors are available in either label or non-label.

The lead thickness may be specified only as either 1/32” or 1/16”. A 1/16” thickness is the maximum possible for TOTAL DOOR® since it matches the radiation shielding capacity of the steel verticals.

Lead lined doors are offered in singles and pairs (1/32 only) and with standard delivery.

Nominal size of lead lined TOTAL DOOR® should not exceed 28 square feet per leaf.

Available in all labels.

Testing of the doors generally done by the state after the installation has been completed.
Electric Doors

Remotely controlled electric doors are available as follows:

- Single, pair or double egress.
- Non-label or A, B, and C label or 20 minute label in steel only.
- Remote unlatching for use with automatic door operators.
- Remote unlocking – fail safe or fail secure.

Remotely Controlled Electrical Doors

The following is an attempt to explain in layman’s terms the operation and function of the Openings electrically controlled TOTAL DOOR®.

I. Basic Components

A. Power transfer devices from the frame to the door.

This power transfer is accomplished by means of a 4 wire current transfer block which is concealed and inaccessible when the door is closed. This device is a part of the system provided by Openings and is installed and pre-wired at the factory. The 4 wire conductor carries power to the solenoid and, if desired, signals when the solenoid armature is fully seated, indicating that unlatching or locking/unlocking of the door has been completed.

B. Internal door wiring is by Openings.

C. Solenoid: The power surge solenoid is used in all electric TOTAL DOORS®.

Two very important features of this solenoid are:

1. The force exerted by the solenoid at the beginning of its stroke is approximately 200 ounces (12-1/2 lbs.). This force is approximately four times larger than necessary for operation.

2. After completing its work and when fully seated, the armature actuates a switch to transfer from a pulling force of 150 watts to a holding force of 12 watts. This switch accomplishes two things. It prevents excessive heat build-up in the door when under constant power and it permits the coil to signal the system that it has completed its work. For example, in automatic door operation, the automatic door cycle does not commence until the switch signals that unlatching has been completed.
Section 5 – Additional Door Models and Options

D. **Power Supply #100:** A 24 volt D.C. 5 amp (120VA) power supply operating on 110 volts A.C. Power Supply #100 is available from Openings as a separate item.

E. **Design Limitations:** Electric operation can be combined with levers and/or standard panics. Not available with grips or flush panics.

F. **Control:** All electric doors’ solenoids lock, unlock or unlatch, based upon being powered or not. Any device which closes or opens a switch will achieve the doors’ intended function. This device can be a keyed wall cylinder switch, a card reader, P.I.N. pad, a voice recognition system, fire alarm, time clock, motion detector, carpet, etc…

G. **Label Approval:** All of the above devices and combinations are listed as assemblies for A, B, C and 20 minute label TOTAL DOORS®.

II. Definitions

A. **Fail Secure:** (E SEC) Power interruption, intentional or accidental, puts the mechanism into a locked mode. Use of the fail secure control must not violate local codes. One Model #100 power supply may handle two doors.

B. **Fail Safe:** (ESAF) Power interruption, intentional or accidental, puts the mechanism into an unlocked mode. One Model #100 power supply may handle two doors.

C. **Remote Unlatching:** (E UNL) Power to the solenoid unlatches the door as long as the power is on. Power off allows the door to revert to its previous mode. One Model #100 power supply may handle two doors. Not useable with PEO.

D. **Electric Panic:** (E PAN) Power to the solenoid locks the panic as long as the power is on. Power off allows activation of the panic to unlatch the door.
III. Suggestions

E. **Automatically Operated Doors:** This operation requires use of our “Remote Unlatching” (E UNL). Example of operation: The floor mat, wall switch, or motion sensor sends power to the door solenoid: after unlatching is completed the operator is signaled by the door to open. Can be used with single, pair or double egress doors, any label and may be normally locked or just latched.

F. **Stair Hall Doors:** This application normally calls for electric fail safe operation (E SAF). Doors are normally electrically locked from the stair side and electrically unlocked when power is interrupted, by a smoke detector or fire alarm. The door may be left unlocked by means of a key cylinder of time clock and may be accessed momentarily by P.I.N. pad, card reader, key or other.

G. **Security Rooms:** This application normally calls for electric fail secure (E SEC). Doors are electrically unlocked. When power is interrupted doors may be locked one or both sides. Momentary access may be by key, P.I.N. pad, card reader or other. The door may be left unlocked by key or access system if desired.

H. **Delayed Egress, Locking Panic System:** Exit device is locked. Activating the panic will start an irreversible predetermined time delay once complete will allow egress through the door.

I. **Electric Panic:** (E PAN) application is for psychiatric, detention facilities and delayed egress applications wherein the panic is locked by 24 volt D.C., 5.0 amp power source. Interruption of power unlocks the panic. One Model #100 power supply may handle two doors.
   1. A request to exit switch can be installed in the panic device for request to exit or delayed egress functions.

**NOTE:** Electric remote control doors can be connected in series or in parallel on the 120 volt side of the power supply with any of the following devices supplied by others – time clocks, smoke alarms, fire alarms, key switches, card readers, floor mats or combination locks.
Gasketing – Sound, Weather and Smoke

(See page 3-2 for STC and R ratings)

All Gasketing is U.L. approved for fire doors and is identical whether used for sound, weather or smoke control purposes.

Head gasketing is shipped loose and must be field applied. Vertical Gasketing and floor sweeps are factory applied. Installation is included in the published price. Gasketing package A includes locking channel, hinge, and header gasketing.

Glazing

All lite kits may be glazed with fire rated wire glass, ceramic glazing, tempered glass or non-rated laminated safety glass.

Lite Kits

All Openings lite kits are made of 16 gauge cold rolled electro-galvanized steel with T.I.G. welded mitered corners. Finish is baked-on epoxy. Lites are available for all glass thicknesses up to 1-1/8”. Lite frames project only 1/16” beyond the door skin. Labeled lite kits of other manufacturers can also be used.

Louvers

Not available on 20 minute doors.
One size for interior use only: 18” x 12”, non-rated AFDL.
## Section 5 - Lites for Labeled Doors: Maximum Sizes

<table>
<thead>
<tr>
<th>Label</th>
<th>Max. Square Inch Visible Glass Per Door</th>
<th>Max. Number of Lites</th>
<th>Max. Visible Glass Widths</th>
<th>Max. Visible Glass Lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>B</td>
<td>100&quot;</td>
<td>4</td>
<td>12&quot;</td>
<td>46&quot;</td>
</tr>
<tr>
<td>C</td>
<td>1296&quot;</td>
<td>No Limit</td>
<td>34&quot;</td>
<td>84&quot;</td>
</tr>
<tr>
<td>20 MINUTE</td>
<td>2994&quot;</td>
<td>No Limit</td>
<td>34&quot;</td>
<td>84&quot;</td>
</tr>
</tbody>
</table>

### Wire Glass

Not for use in Educational or Sports facilities

<table>
<thead>
<tr>
<th>Label</th>
<th>Max. Square Inch Visible Glass Per Door</th>
<th>Max. Number of Lites</th>
<th>Max. Visible Glass Widths</th>
<th>Max. Visible Glass Lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>B</td>
<td>100&quot;</td>
<td>4</td>
<td>12&quot;</td>
<td>46&quot;</td>
</tr>
<tr>
<td>C</td>
<td>1296&quot;</td>
<td>No Limit</td>
<td>34&quot;</td>
<td>84&quot;</td>
</tr>
<tr>
<td>20 MINUTE</td>
<td>2994&quot;</td>
<td>No Limit</td>
<td>34&quot;</td>
<td>84&quot;</td>
</tr>
</tbody>
</table>

### FIRELITE PLUS & NT

<table>
<thead>
<tr>
<th>Label</th>
<th>Max. Square Inch Visible Glass Per Door</th>
<th>Max. Number of Lites</th>
<th>Max. Visible Glass Widths</th>
<th>Max. Visible Glass Lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100</td>
<td>No Limit</td>
<td>12&quot;</td>
<td>33&quot;</td>
</tr>
<tr>
<td>B</td>
<td>IBC - 100&quot;</td>
<td>No Limit</td>
<td>36&quot;</td>
<td>56&quot;</td>
</tr>
<tr>
<td>C</td>
<td>3204&quot;</td>
<td>No Limit</td>
<td>36&quot;</td>
<td>89&quot;</td>
</tr>
<tr>
<td>20 MINUTE</td>
<td>3204&quot;</td>
<td>No Limit</td>
<td>36&quot;</td>
<td>89&quot;</td>
</tr>
<tr>
<td>Label</td>
<td>Door Type</td>
<td>Max. Square Inch Visible Glass Per Door</td>
<td>Max. Visible Glass Widths</td>
<td>Max. Visible Glass Lengths</td>
</tr>
<tr>
<td>----------</td>
<td>-----------</td>
<td>----------------------------------------</td>
<td>---------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUPERLITE IW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B (1 1/2 hr)</td>
<td>Steel</td>
<td>100&quot;</td>
<td>10&quot;</td>
<td>33&quot;</td>
</tr>
<tr>
<td>C (3/4 hr)</td>
<td>Steel</td>
<td>2856&quot;</td>
<td>36&quot;</td>
<td>84&quot;</td>
</tr>
<tr>
<td>C (3/4 hr)</td>
<td>Wood</td>
<td>1296&quot;</td>
<td>36&quot;</td>
<td>54&quot;</td>
</tr>
<tr>
<td>20 MINUTE</td>
<td>Steel</td>
<td>3289&quot;</td>
<td>36&quot;</td>
<td>92&quot;</td>
</tr>
<tr>
<td>20 MINUTE</td>
<td>Wood</td>
<td>2856&quot;</td>
<td>36&quot;</td>
<td>84&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUPERLITE I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 MINUTE</td>
<td>Steel</td>
<td>3431&quot;</td>
<td>35&quot;</td>
<td>95&quot;</td>
</tr>
<tr>
<td>20 MINUTE</td>
<td>Wood</td>
<td>3299&quot;</td>
<td>36&quot;</td>
<td>91&quot;</td>
</tr>
</tbody>
</table>

**Note:** Temperature Rise labels: 100 sq. inches maximum for all labels, 14” maximum visible width, 35" maximum visible height.

Lite kit cut out size is 2" larger than visible glass size.

Door size may limit maximum visible height and width.

PEMKO Procedures and Glazing Tape used on all Lites.

5-7a
Plates, Kick, Mop, Stretcher, Armor and Hospital Edge Guards

All of the above plates and edge guards are bonded to the door face and wrapped around the door edge to provide a mechanical interlock to the door edge. Kick, mop, and stretcher plates use no screws or other visible fasteners.

Edge guards are riveted in the factory. Installation is included in the published price.

Standard finish is 630. Finish surfaces are protected by a heavy gauge adhesive plastic film.

Standard heights kick-plates and mop-plates are available up to 40”.

Removable Mullion

Use in high security – high abuse area – not fire rated, exterior doors for example.

Removable mullions are only available on non-label doors up to 8’.

Sound Package

TOTAL DOOR® may be ordered with special muting of the operating components. This Sound Package includes the standard Gasketing Package A (no floor sweep).

Labeled Psychiatric Hinge

Openings labeled Psychiatric Hinge allows for quick removal of a door from the push side should the door become blocked from the pull side. This is accomplished by removing the screws from the Psychiatric Hinge backing plate.

Size restriction: 3'8" x 8'0"
Handling: R or Left – Straight Hand Only