Features

- 190 narrow stile has 2-1/8" vertical stile, 2-1/4" top and 3-7/8" bottom rail
- 350 medium stile has 3-1/2" vertical stile, 3-1/2" top and 6-1/2" bottom rail
- 500 wide stile has 5" vertical stile, 5" top and 6-1/2" bottom rail
- Door is 1-3/4" deep
- Dual moment welded corner construction
- Single or double acting
- Offset pivots, butt hinges, continuous geared hinge or center pivots
- Surface mounted or concealed closers
- MS locks or panic hardware
- Architects Classic push/pulls
- Infills range from 1/4" to 1"
- Adjustable astragal utilizing pile weathering with polymeric fin at meeting stiles
- Sealair® bulb polymeric weatherstripping in door frames
- Permanodic® anodized finishes in 7 choices
- Painted finishes in standard and custom choices

Optional Features

- Numerous push/pull finishes
- Paneline® exit device, Paneline® EL exit device, Panic Guard® security astragal or Paneline®/Panic Guard®
- Wide variety of bottom rail, cross rail and muntins

Product Applications

- 190 narrow stile - engineered for moderate traffic in applications such as offices, stores and apartment buildings
- 350 medium stile - provides extra strength for schools, institutions and other high traffic applications
- 500 wide stile - creates a monumental visual statement for banks, libraries or buildings that experience heavy traffic conditions

For specific product applications, Consult your Kawneer representative.
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Metric (SI) conversion figures are included throughout these details for reference. Numbers in parentheses ( ) are millimeters unless otherwise noted.

The following metric (SI) units are found in these details:

- m – meter
- cm – centimeter
- mm – millimeter
- s – second
- Pa – pascal
- MPa – megapascal

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#1 MECHANICAL FASTENING is accomplished by attaching a 5/16" (7.9) thick extruded aluminum channel clip to the vertical stile with 1/4"-20 heat strengthened bolts and 3/16" thick steel nut plates for a high strength welding base for attachment horizontal member.

#2 SIGMA* DEEP PENETRATION PLUG WELDS are made top and bottom after the horizontal is properly positioned over the channel clip to help provide the strongest door corner joint currently available.

#3 SIGMA* FILLET WELDS along both top and bottom webs of the rail extrusion complete the Dual Moment corner construction.

* An arc welding process known as Shielded Inert Gas Metal Arc (SiGMA) or also known as Metal Inert Gas (MIG).

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NOTE:
1. SERIES 190 NARROW STILE DOORS ARE DETAILED. MEDIUM STILE 350 DOORS AND WIDE STILE 500 DOORS ALSO MAY BE USED.
2. TRIFAB® VG 450 CENTER, 1-3/4" X 4-1/2" (44.5 X 114.3) FRAMING IS DETAILED WITH THE DOORS FOR REFERENCE. OTHER KAWNEER FRAMING SERIES OR CURTAIN WALL SYSTEMS MAY BE USED. REFER TO THE CATALOG INDEX FOR THE APPROPRIATE DETAIL SECTION.

SCALE 3" = 1' 0"

NOTE:
1. SERIES 190 NARROW STILE DOORS ARE DETAILED. MEDIUM STILE 350 DOORS AND WIDE STILE 500 DOORS ALSO MAY BE USED.
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## STOCK SIZES (TRIFAB® 400 & TRIFAB® VG 450 CENTER FRAMES)

### WITHOUT TRANSOM

<table>
<thead>
<tr>
<th>Door Opening Dimension</th>
<th>Overall Frame Dimension</th>
<th>Masonry Opening Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'-0&quot; x 7'-0&quot; (914 x 2134)</td>
<td>3'-3 1/2&quot; x 7'-1 3/4&quot; (1003 x 2178)</td>
<td>3'-4&quot; x 7'-2&quot; (1016 x 2185)</td>
</tr>
<tr>
<td>3'-6&quot; x 7'-0&quot; (1067 x 2134)</td>
<td>3'-9 1/2&quot; x 7'-1 3/4&quot; (1156 x 2178)</td>
<td>3'-10&quot; x 7'-2&quot; (1168 x 2185)</td>
</tr>
<tr>
<td>6'-0&quot; x 7'-0&quot; (1829 x 2134)</td>
<td>6'-3 1/2&quot; x 7'-1 3/4&quot; (1918 x 2178)</td>
<td>6'-4&quot; x 7'-2&quot; (1930 x 2185)</td>
</tr>
</tbody>
</table>

### WITH TRANSOM

<table>
<thead>
<tr>
<th>Door Opening Dimension</th>
<th>Overall Frame Dimension</th>
<th>Masonry Opening Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unchanged from above.</td>
<td>Add 3'-1 3/4&quot; (959) to above heights.</td>
<td>Add 3'-1 3/4&quot; (959) to above heights.</td>
</tr>
</tbody>
</table>

### STOCK SIZES (TRIFAB® VG 451 CENTER FRAMES)

### WITHOUT TRANSOM

<table>
<thead>
<tr>
<th>Door Opening Dimension</th>
<th>Overall Frame Dimension</th>
<th>Masonry Opening Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'-0&quot; x 7'-0&quot; (914 x 2134)</td>
<td>3'-4&quot; x 7'-2&quot; (1016 x 2185)</td>
<td>3'-4 1/2&quot; x 7'-2 1/4&quot; (1029 x 2191)</td>
</tr>
<tr>
<td>3'-6&quot; x 7'-0&quot; (1067 x 2134)</td>
<td>3'-10&quot; x 7'-2&quot; (1168 x 2185)</td>
<td>3'-10 1/2&quot; x 7'-2 1/4&quot; (1181 x 2191)</td>
</tr>
<tr>
<td>6'-0&quot; x 7'-0&quot; (1829 x 2134)</td>
<td>6'-4&quot; x 7'-2&quot; (1930 x 2185)</td>
<td>6'-4 1/2&quot; x 7'-2 1/4&quot; (1943 x 2191)</td>
</tr>
</tbody>
</table>

### WITH TRANSOM

<table>
<thead>
<tr>
<th>Door Opening Dimension</th>
<th>Overall Frame Dimension</th>
<th>Masonry Opening Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unchanged from above.</td>
<td>Add 3'-1 1/2&quot; (953) to above heights.</td>
<td>Add 3'-1 1/2&quot; (953) to above heights.</td>
</tr>
</tbody>
</table>
## 190/350/500 STANDARD ENTRANCES
### AUGUST, 2006
### EC-97903-05

**ENTRANCE OFFERINGS**

<table>
<thead>
<tr>
<th>Doors</th>
<th>Narrow stile 190 doors prepared for attachment hardware.</th>
<th>Medium stile 350 or wide stile 500.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door Sizes</td>
<td>Stock sizes shown on page 5.</td>
<td>Any size up to 4'-0&quot; x 8'-0&quot; (1219 x 2438).</td>
</tr>
<tr>
<td>Glass Stops</td>
<td>Beveled glass stops for 1/4&quot; (6.4) or 3/16&quot; (4.0) infill.</td>
<td>Square glass stops for 3/16&quot; (4.0) or 1/4&quot; (6.4) infill. Also 1&quot; (25.4) stops.</td>
</tr>
<tr>
<td>Door Frames</td>
<td>Trifab® 400 - 1-3/4&quot; x 4&quot; (44.5 x 101.6) for single glazing.</td>
<td>Any Kawneer framing system suitable for door frames may be selected, but manufactured per order.</td>
</tr>
<tr>
<td></td>
<td>Trifab® VG 450 or Trifab® VG 451 Center - 2&quot; x 4-1/2&quot; (50.8 x 114.3) for double glazing.</td>
<td></td>
</tr>
</tbody>
</table>

**Push-Pulls**

<table>
<thead>
<tr>
<th>Single Acting</th>
<th>- Architects Classic Hardware &quot;CO-9&quot; Pull and &quot;CP-II&quot; Push Bar.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Acting</td>
<td>- Architects Classic Hardware &quot;CO-9&quot; Pull and &quot;CP&quot; Push Bar.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Single Acting</th>
<th>- Architects Classic Hardware &quot;CO-12&quot; and &quot;CP-II&quot; push bar.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Acting</td>
<td>- Architects Classic Hardware &quot;CO-12&quot; and &quot;CP&quot; push bar.</td>
</tr>
</tbody>
</table>

**Door Closers**

<table>
<thead>
<tr>
<th>Single Acting</th>
<th>- Norton 1605 BC surface closer with back-check and with or without adjustable hold-open.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Acting</td>
<td>- Kawneer SAM-II single acting manual concealed overhead closer (&quot;Husky® II&quot;).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Single Acting</th>
<th>- LCN 4040 surface closer with or without adjustable hold-open.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Acting</td>
<td>- Kawneer overhead concealed closer with 90 degree or 105 degree hold-open or without hold-open. For heavy traffic &amp; high wind applications, a supplemental door stop is recommend.</td>
</tr>
</tbody>
</table>

**Pivots / Butts**

<table>
<thead>
<tr>
<th>Single Acting</th>
<th>Kawneer top and bottom offset pivots (or) Kawneer top and bottom 4 1/2&quot; x 4&quot; (114.3 x 101.6) ball bearing butt hinge with non-removable pin (NRP).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Acting</td>
<td>Kawneer bottom center pivots for use with concealed overhead closer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Single Acting</th>
<th>Rixson M-19 or IVES #7215-INT intermediate offset pivot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Acting</td>
<td>Kawneer top center (walking beam) pivot for use with floor closers.</td>
</tr>
</tbody>
</table>

**Intermediate Pivots/Butts**

| Single Acting | Kawneer intermediate offset pivot (or) Kawneer 4-1/2" x 4" (114.3 x 101.6) ball bearing butt hinge with non-removable pin (NRP). |

| Single Acting | Rixon EL intermediate offset pivot (or) Kawneer EL 4-1/2" x 4" (114.3 x 101.6) ball bearing butt hinge with wire transfer or EPT (Electric Power Transfer). |

**Power Transfers**

| Single Acting | SP 1000 Power Supply: For use with EL exit devices. |

**Power Supply**

| Adams-Rite 1850A deadlock with two 1-5/32" (29.4) diameter 5 pin cylinders. |
| Adams-Rite #4510 latch lock. |
| Adams-Rite #1850A-500 short throw deadlock. |
| Adams-Rite #1850A-505 hookbolt lock. |
| Adams-Rite #4015 two-point Lock. |
| Adams-Rite #4085 three-point Lock. |
| Adams-Rite #4089 exit indicator. |
| Kawneer cylinder guard. |
| Kawneer thumbturn (in lieu of cylinder). |
APPLICATION CRITERIA

As indicated on Page 5, the standard sizes of swing doors are 3'-0" x 7'-0" (914.4 x 2133.6) or 3'-6" x 7'-0" (1067 x 2134) for single doors and 6'-0" x 7'-0" (1828.8 x 2133.6) for pairs of doors. When these sizes are exceeded the following criteria should be administered.

1. Larger doors should not be subject to heavy traffic or strong prevailing wind conditions.
2. Larger doors should use a door closer with a good back check action.
3. When a door exceeds 8'-0" (2438.4) in height, a cross rail or push bar should be used to reinforce the vertical stiles.
4. When an offset hung door exceeds 7'-6" (2286.0) in height, an intermediate butt or offset pivot should be used.
5. Tall doors should be prevented from racking by proper utilization of hardware, including door closers, door holders and door stops.

NOTE: SOME OF THESE CRITERIA ARE OF A SUBJECTIVE NATURE. CONTACT YOUR FACTORY REPRESENTATIVE FOR APPLICATION ASSISTANCE.
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

ARCHITECTS CLASSIC (PUSH PULL SETS)

SINGLE ACTING DOORS USE A PULL HANDLE AND PUSH BAR AS STANDARD. DOUBLE ACTING DOORS USE CP PUSH BARS BACK TO BACK AS STANDARD.

ARCHITECTS CLASSIC (COMPONENTS)

* CP-II PUSH BAR IS NOT TO BE USED FOR BACK TO BACK MOUNTING ON D/A DOORS.

EXIT DEVICES

PANICS AND PULLS

KAWNEER PANELINE®/ PANELINE® EL

ARCHITECTS CLASSIC (COMPONENTS)

* CP-II PUSH BAR IS NOT TO BE USED FOR BACK TO BACK MOUNTING ON D/A DOORS.

ARCHITECTS CLASSIC (COMPONENTS)

* CP-II PUSH BAR IS NOT TO BE USED FOR BACK TO BACK MOUNTING ON D/A DOORS.

STYLE "CPN" PULL ON EXTERIOR OF DOOR

SEE PAGE 11 FOR COMPLETE PANELINE® INFORMATION
The Paneline concealed rod exit device for 190, 350 and 500 doors will accommodate variations in stile width and door width as shown in the following illustrations. Sidelites adjacent to Paneline equipped doors not requiring exit devices may be fitted with fixed panels as detailed below to match the general appearance of the Paneline cross rail.

The Optional Paneline® EL device is designed for electrified access control and is compatible with most key pad and card reader systems.

See Hardware Section for complete description of Paneline hardware, including finish of units.

Paneline uses mortise cylinder in lieu of the normal rim-type. Dummy Paneline units are not for use with any type of lock.
**SCALE 3" = 1'-0"**

**NOTE:** DOBLE GLAZING NOT RECOMMENDED

**SWING TYPE**

- 8'-3 1/2" (2527.3) FRAME WIDTH
- 3'-6"x7'-0" FRAME HEIGHT
- 8'-0" (2438.4) DOOR OPENING

**BIFOLD TYPE**

- 9'-3 1/2" (2832.1) FRAME WIDTH
- 3'-0"x7'-0" FRAME HEIGHT
- 9'-0" (2734.2) DOOR OPENING

**MAXIMUM ALLOWABLE SIZES**

- DOOR OPENING WIDTH TO 9'-0" (2743.2)
- DOOR OPENING HEIGHT TO 8'-0" (2438.4)
- OVERALL FRAME HEIGHT TO 8'-1 3/4" (2482.9) W/O TRANSOM
- OVERALL FRAME HEIGHT TO 12'-0" (3657.6) WITH TRANSOM

**AUTO SHOWROOM PACKAGE**

- DOORS ......................... 190 NARROW STILE, 350 MEDIUM STILE AND 500 WIDE STILE DOORS.
- FRAME ......................... TRIFAB® VG 450 CENTER.
- CLOSER ......................... NORTON 1605 SURFACE CLOSER (ACTIVE LEAF ONLY).
- BUTT HINGES ................. ONE PAIR 4-1/2" x 4" (114.3 x 101.6) BALL BEARING BUTTS ON ACTIVE LEAF, ONE AND ONE HALF PAIR ON INACTIVE LEAVES AT HINGE JAMB. CONTINUOUS HINGE ON INACTIVE LEAVES.
- LOCKS ........................ ADAMS-RITE MS1850A WITH (2) CYLINDERS ON ACTIVE LEAF.
- FLUSHBOLTS ................. ONE PAIR EDGE MOUNTED FOR INACTIVE LEAVES (FACE MOUNTED ON #2 INACTIVE LEAF OF BIFOLD TYPE).
- THRESHOLD .................... 1/2" x 4" (12.7 x 101.6) ALUMINUM.
- RISER BLOCK ................. EXTRUDED ALUMINUM BLOCK APPLIED TO BOTTOM RAIL OF EACH INACTIVE LEAF.
- OPTIONAL CASTER ... IN LIEU OF RISER BLOCK, FACE APPLIED CASTER TO LEADING STILE OF INACTIVE LEAF.
SCALE 3" = 1' 0"

OVERALL FRAME
DOOR OPENING

SWING TYPE

OVERALL FRAME
DOOR OPENING

BIFOLD TYPE

OPTIONAL
CONTINUOUS HINGE
JAMB

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Available in Canada only

SCALE 3" = 1' 0"

HORIZONTAL / VERTICAL INTERMEDIATE RAILS

INFILL OPTIONS

ACCESSORY ITEMS

THRESHOLDS

APPLICATION

FOR SINGLE ACTING DOOR

FOR CENTER HUNG CONCEALED CLOSER

APPLIED STOP FOR SINGLE ACTING DOOR

FOR PANIC GUARD® EXIT DEVICE

FOR CENTER HUNG FLOOR CLOSERS

*SOME BUILDING CODES LIMIT THRESHOLD HEIGHT TO 1/2" (12.7) MAX.
PUSH-PULLS

<table>
<thead>
<tr>
<th>Style</th>
<th>Description</th>
<th>Architects Clasic CO-12 Pull</th>
<th>BF3 Push Shield with symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Application</td>
<td>Door with or without exit device</td>
<td>Door cross rail (omit w/exit device)</td>
</tr>
<tr>
<td></td>
<td>Length/Size</td>
<td>12&quot; OC Pull attachment</td>
<td>15-7/8&quot; x 7-7/8&quot; (403.2 x 200.0) 1/8&quot; (3.2) Thick</td>
</tr>
<tr>
<td></td>
<td>Height Location</td>
<td>44-5/16&quot; from Top Mounting Hole to Btm. of Door</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Projection</td>
<td>3-1/4&quot; (82.6) Projection</td>
<td>1/8&quot; (3.2)</td>
</tr>
<tr>
<td></td>
<td>Material / Finish</td>
<td>See Hardware Section A8</td>
<td>Black Plastic Pebble Finish</td>
</tr>
</tbody>
</table>

Note: The word "Pull" and the symbol of access anodized on the exterior surface of the optional cross rail are standard - black on clear rail, clear on dark bronze or black rail. Anodized letters on push bar accent are clear on black. Letters and symbols on plastic push shield are engraved and filled with white epoxy enamel.

SCALE 3" = 1'-0"

BOTTOM RAILS
Standard rail heights shown may be used on 190, 350 and 500 doors. Custom heights available.
Panic Guard® entrances close the "Security Gap" without compromising safety. Kawneer's patented Panic Guard entrance design resists probing between meeting stiles by placing a full-length, movable astragal bar that locks into place to provide security. When the panic bar is depressed (from the inside only), the astragal bar retracts into the meeting stile to provide a quick, safe exit. When the doors close the astragal bar moves back into place, interlocking the two panic leaves. Panic Guard utilizes the D.O.M. 1990 crossbar panic device. See Hardware Section for complete description of Panic Guard.

NOTE: Threshold shown is for Panic Guard entrance only.

*NOTE: SOME BUILDING CODES LIMIT THRESHOLD HEIGHT TO 1/2″ (12.7) MAX.
The Paneline concealed rod exit device for Panic Guard Entrances will accommodate variations in stile width and door width as shown in the following illustrations. Sidelites adjacent to Paneline equipped doors not requiring exit devices may be fitted with fixed panels as detailed below to match the general appearance of the Paneline cross rail. **NOTE: PANELINE® EL IS NOT AVAILABLE ON PANIC GUARD.**

See Hardware Section for complete description of Paneline hardware, including finish of units.

Paneline uses mortise cylinder in lieu of the normal rim-type. Dummy Paneline units should not use any type of lock.

**INTERIOR ELEVATION**

**NOTE:** Sidelites must be stop glazed above and below rail.

*ALTERNATE CROSSRAIL FOR VESTIBULE DOORS (Without Exit Device or Lock)*

**190 DOOR**

**DOOR OPENING WIDTH**

- 8'-0" (2438.4) **MAX.**
- 6'-0" (1828.8) **MIN.**
- 6'-0" (1828.8) **ADA MIN.**

- **PUSH**

**DOOR STILE TRIM FILLER WIDTH**

Varies with stile width

**STYLED "CPN" PULL ON EXTERIOR OF DOOR**

**EXTERIOR VIEW OF 190 DOOR (350-500 SIMILAR)**

WITH "CPN" PULL AND STANDARD CYLINDER GUARD SHOWN

- **ACTIVE PUSH PANEL FIXED WIDTH**

**350 DOOR**

**DOOR OPENING WIDTH**

- 8'-0" (2438.4) **MAX.**
- 5'-9 5/16" (1761.0) **MIN.**
- 6'-0" (1828.8) **MIN.**

- **PUSH**

**PIVOT STILE TRIM FILLER WIDTH**

Varies with door width

**500 DOOR**

**DOOR OPENING WIDTH**

- 8'-0" (2438.4) **MAX.**
- 6'-0" (1828.8) **MIN.**
- 6'-0" (1828.8) **ADA MIN.**

- **PUSH**
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