Features

- Trifab™ 400 is 4" (101.6) deep with a 1-3/4" (44.5) sightline
- Center plane glass applications
- Flush glazed from either the inside or outside
- Screw Spline, Shear Block or Stick fabrication
- 1/8" (3.2), 1/4" (6.4), or 3/8" (9.7) infill options
- Permanodic™ anodized finishes in seven choices
- Painted finishes in standard and custom choices

Product Applications

- Storefront, Ribbon Window or Punched Openings
- Single-span
- Integrated entrance framing allowing Kawneer standard entrances or other specialty entrances to be incorporated
- Kawneer windows or GLASSvent™ Windows for Storefront Framing are easily incorporated

For specific product applications, consult your Kawneer representative.
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.

© Kawneer Company, Inc., 2010
Trifab™ 400 Framing System

INDEX

PICTORIAL VIEWS.................................................................4-6
BASIC FRAMING MEMBERS...............................................7,8
ENTRANCE FRAMING........................................................9,10
MISCELLANEOUS FRAMING.............................................11
GLASSvent™ FOR STOREFRONT FRAMING ......................12
WINDLOAD CHARTS...........................................................13-19
DEADLOAD CHARTS..........................................................20

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
THE SPLIT VERTICAL IN THE SCREW SPLINE SYSTEM ALLOWS A FRAME TO BE INSTALLED FROM UNITIZED ASSEMBLIES. SCREWS ARE DRIVEN THROUGH THE BACK OF THE VERTICALS INTO SPLINES EXTRUDED IN THE HORIZONTAL FRAMING MEMBERS. THE INDIVIDUAL UNITS ARE THEN SNAPPED TOGETHER TO FORM A COMPLETED FRAME.
THE SHEAR BLOCK SYSTEM OF FABRICATION ALLOWS A FRAME TO BE PRE ASSEMBLED AND INSTALLED AS A SINGLE UNIT. HORIZONTALS ARE ATTACHED TO THE VERTICALS WITH SHEAR BLOCKS.
**Trifab™ 400 Framing System**

**PICTORIAL VIEW (STICK ASSEMBLY)**

**MARCH, 2019**

**EC 97911-197**

---

**THE STICK SYSTEM OF FABRICATION ALLOWS ON-SITE ASSEMBLY. HEAD AND SILL RECEPTORS ARE FASTENED TO THE SURROUND. VERTICAL MULLIONS ARE THEN INSTALLED IN THESE RECEPTORS AND ARE HELD IN PLACE BY SNAP-IN INSERTS. INTERMEDIATE HORIZONTAL MEMBERS ARE ATTACHED TO THE VERTICALS WITH SHEAR BLOCKS. FLASHING IS NOT REQUIRED.**

**NOTE:**

IF END REACTION OF THE MULLION (MULLION SPACING (ft.) TIMES HEIGHT (ft.) TIMES SPECIFIED WINDLOAD (psf) DIVIDED BY TWO) IS MORE THAN 500 LBS. THE OPTIONAL HEAVYWEIGHT HEAD/SILL RECEPTOR 400006 MUST BE USED. (See Page 11 for details)

---

** Vương Quốc**: 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.

© Kawneer Company, Inc., 2010

---

**PICTORIAL VIEW (STICK ASSEMBLY)**

---

**THE STICK SYSTEM OF FABRICATION ALLOWS ON-SITE ASSEMBLY. HEAD AND SILL RECEPTORS ARE FASTENED TO THE SURROUND. VERTICAL MULLIONS ARE THEN INSTALLED IN THESE RECEPTORS AND ARE HELD IN PLACE BY SNAP-IN INSERTS. INTERMEDIATE HORIZONTAL MEMBERS ARE ATTACHED TO THE VERTICALS WITH SHEAR BLOCKS. FLASHING IS NOT REQUIRED.**

**NOTE:**

IF END REACTION OF THE MULLION (MULLION SPACING (ft.) TIMES HEIGHT (ft.) TIMES SPECIFIED WINDLOAD (psf) DIVIDED BY TWO) IS MORE THAN 500 LBS. THE OPTIONAL HEAVYWEIGHT HEAD/SILL RECEPTOR 400006 MUST BE USED. (See Page 11 for details)
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.

Additional information and CAD details are available at www.kawneer.com
INSIDE GLAZING MEMBERS

TRIFAB 400 CAN BE INSTALLED FOR INSIDE GLAZING SIMPLY BY REVERSING THE SYSTEM SUCH THAT THE REMOVABLE GLASS STOPS ARE LOCATED AT THE HEAD AND ON THE INTERIOR SIDE.

SCREW SPLINE SYSTEM

SHEAR BLOCK SYSTEM

STICK SYSTEM

ALTERNATE MULLION & SIDELITE BASE MEMBERS

* SIDELITE BASES SHOWN FOR USE WITH SCREW SPLINE & SHEAR BLOCK SYSTEMS ONLY.
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.

© Kawneer Company, Inc., 2010

Additional information and CAD details are available at www.kawneer.com

TRIFAB™ 400 FRAMING INCORPORATING KAWNEER "190" DOORS.

NOTE: OTHER TYPES OF KAWNEER DOORS MAY BE USED WITH THIS FRAMING SYSTEM. SEE ENTRANCE DETAILS FOR ADDITIONAL INFORMATION.

ELEVATIONS ARE NUMBER KEYED TO DETAILS

4 TRANSOM AREA
5
Transom area for both double and single acting doors with glass surround. Jambs above transom bar are routed out to accept glass holding Insert 450033 with or without steel reinforcing.

400110 Steel Reinforcing shown dashed)

6 SINGLE ACTING DOOR
7

8 DOUBLE ACTING DOOR
9

10 SINGLE ACTING DOOR WITHOUT TRANSOM
10 DOUBLE ACTING DOOR WITHOUT TRANSOM

SINGLE ACTING DOOR

DOUBLE ACTING DOOR

SINGLE ACTING DOOR WITH TRANSOM

DOUBLE ACTING DOOR WITH TRANSOM
**Trifab™ 400 Framing System**

**ENTRANCE FRAMING (Open Back)**

Additional information and CAD details are available at www.kawneer.com

**OPEN BACK FRAMING INCORPORATING KAWNEER "190" DOORS**

**NOTE:** OTHER TYPES OF KAWNEER DOORS MAY BE USED WITH THIS FRAMING SYSTEM. SEE ENTRANCE DETAILS FOR ADDITIONAL INFORMATION.

Transom area for both double and single acting doors with glass surround. Jambs above transom bar are routed out to accept glass holding Insert 450033 with or without steel reinforcing. (400110 Steel Reinforcing shown dashed)

**ELEVATIONS ARE NUMBER KEYED TO DETAILS**

**SINGLE ACTING DOOR**

Flat Filler 450126 (3” Long) used at perimeter fastener locations or Pocket Filler 450CG002, 450CG028 for sidelites.

**NOTE:** Sidelite mullions must be orientated to provide at least one (1 MPa deep vertical pocket per lite to facilitate glazing.
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.

Additional information and CAD details are available at www.kawneer.com

Trifab™ 400 Framing System

MISCELLANEOUS FRAMING

ONE POCKET CORNER
TWO POCKET CORNER
THREE POCKET CORNER
FOUR POCKET CORNER

ADJUSTABLE BRAKE METAL CORNER
135° INSIDE CORNER
135° OUTSIDE CORNER
155° to 180° PIVOT MULLION

HEAVYWEIGHT HEAD and SILL RECEPTOR (Stick Assembly)

HEAD and JAMB COMPENSATING RECEPTOR EXTERIOR INSTALLED (Screw Spline or Shear Block Assembly)

BRAKE METAL ADAPTOR (Vertically/Horizontally)

PERIMETER FILLER
SNAP-IN DOOR STOP
SNAP-IN FLUSH POCKET FILLER

4" x 4" TUBE
1-3/4" x 4" TUBE
1-3/4" x 1-3/4" TUBE

© Kawneer Company, Inc., 2010
Additional information and CAD details are available at www.kawneer.com
WIND LOAD CHARTS

Mullions are designed for deflection limitations in accordance with AAMA TIR-A11 of L/175 up to 13'-6" and L/240 +1/4" above 13'-6". These curves are for mullions WITH HORIZONTALS and are based on engineering calculations for stress and deflection. Allowable wind load stress for ALUMINUM 15,152 psi (104 MPa), STEEL 30,000 psi (207 MPa). Charted curves, in all cases are for the limiting value. Wind load charts contained herein are based upon nominal wind load utilized in allowable stress design. A conversion from Load Resistance Factor Design (LRFD) is provided. To convert ultimate wind loads to nominal loads, multiply ultimate wind loads by a factor of 0.6 per ASCE/SEI 7. A 4/3 increase in allowable stress has not been used to develop these curves. For special situations not covered by these curves, contact your Kawneer representative for additional information.

If the end reaction of the mullion [mullion spacing (ft.) times height (ft.) times specified wind load (psf) divided by two] is more than 500 lbs., the optional Mullion Anchors must be used. Consult Application Engineering. *(Mullion Anchor not used with Lightweight Receptor.)*

DEADLOAD CHARTS

Horizontal or deadload limitations are based upon 1/8" (3.2) maximum allowable deflection at the center of an intermediate horizontal member. The accompanying charts are calculated for 1/4" (6.4) thick glass supported on two setting blocks at the loading points shown.
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.

© Kawneer Company, Inc., 2010

---

### Allowable Stress Design Load vs. LRFD Ultimate Design Load

<table>
<thead>
<tr>
<th></th>
<th>Allowable Stress Design Load</th>
<th>LRFD Ultimate Design Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>15 PSF (720)</td>
<td>25 PSF (1200)</td>
</tr>
<tr>
<td>B</td>
<td>20 PSF (960)</td>
<td>33 PSF (1580)</td>
</tr>
<tr>
<td>C</td>
<td>25 PSF (1200)</td>
<td>42 PSF (2000)</td>
</tr>
<tr>
<td>D</td>
<td>30 PSF (1440)</td>
<td>50 PSF (2400)</td>
</tr>
<tr>
<td>E</td>
<td>40 PSF (1920)</td>
<td>67 PSF (3200)</td>
</tr>
</tbody>
</table>

---

### Trifab™ 400 Framing System

#### WINDLOAD CHARTS

**WITH HORIZONTALS**

**WIDTH IN METERS**

- 1
- 1.5
- 2

**HEIGHT IN FEET**

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**WIDTH IN FEET**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

---

**WITHOUT HORIZONTALS**

**WIDTH IN METERS**

- 1
- 1.5
- 2

**HEIGHT IN FEET**

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**WIDTH IN FEET**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

---

**WITH HORIZONTALS**

**WIDTH IN METERS**

- 1
- 1.5
- 2

**HEIGHT IN FEET**

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**HEIGHT IN METERS**

- 1.5
- 2
- 2.5
- 3
- 3.5
- 4

**WIDTH IN FEET**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

---

**WITHOUT HORIZONTALS**

**WIDTH IN METERS**

- 1
- 1.5
- 2

**HEIGHT IN FEET**

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**HEIGHT IN METERS**

- 1.5
- 2
- 2.5
- 3
- 3.5
- 4

**WIDTH IN FEET**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

---

**WITH HORIZONTALS**

**WIDTH IN METERS**

- 1
- 1.5
- 2

**HEIGHT IN FEET**

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**HEIGHT IN METERS**

- 1.5
- 2
- 2.5
- 3
- 3.5
- 4

**WIDTH IN FEET**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

---

**WITHOUT HORIZONTALS**

**WIDTH IN METERS**

- 1
- 1.5
- 2

**HEIGHT IN FEET**

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**HEIGHT IN METERS**

- 1.5
- 2
- 2.5
- 3
- 3.5
- 4

**WIDTH IN FEET**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

---

I = 2.291 (95.36 X 10^4)

S_e = 1.145 (18.76 X 10^3)

---

I = 2.291 (95.36 X 10^4)

S_e = 1.145 (18.76 X 10^3)

---

I = 0.970 (40.37 X 10^3)

S_e = 0.535 (8.77 X 10^3)
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.

© Kawneer Company, Inc., 2010

# Trifab™ 400 Framing System

## WINDLOAD CHARTS

### Allowable Stress Design Load | LRFD Ultimate Design Load
--- | ---
A = 15 PSF (720) | 25 PSF (1200)
B = 20 PSF (960) | 33 PSF (1580)
C = 25 PSF (1200) | 42 PSF (2000)
D = 30 PSF (1440) | 50 PSF (2400)
E = 40 PSF (1920) | 67 PSF (3200)

---

### WITH HORIZONTALS

#### WIDTH IN METERS

<table>
<thead>
<tr>
<th>Width</th>
<th>Height in Feet</th>
<th>Height in Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>1.25</td>
</tr>
<tr>
<td>1.5</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>1.83</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>2.14</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>2.44</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>2.75</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>3.06</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>3.37</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>3.68</td>
</tr>
<tr>
<td>9</td>
<td>13</td>
<td>3.99</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>4.29</td>
</tr>
</tbody>
</table>

#### WITH HORIZONTALS

<table>
<thead>
<tr>
<th>Width</th>
<th>Height in Feet</th>
<th>Height in Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>1.25</td>
</tr>
<tr>
<td>1.5</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>1.83</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>2.14</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>2.44</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>2.75</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>3.06</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>3.37</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>3.68</td>
</tr>
<tr>
<td>9</td>
<td>13</td>
<td>3.99</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>4.29</td>
</tr>
</tbody>
</table>

---

### WITHOUT HORIZONTALS

#### WIDTH IN METERS

<table>
<thead>
<tr>
<th>Width</th>
<th>Height in Feet</th>
<th>Height in Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>1.25</td>
</tr>
<tr>
<td>1.5</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>1.83</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>2.14</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>2.44</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>2.75</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>3.06</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>3.37</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>3.68</td>
</tr>
<tr>
<td>9</td>
<td>13</td>
<td>3.99</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>4.29</td>
</tr>
</tbody>
</table>

#### WITHOUT HORIZONTALS

<table>
<thead>
<tr>
<th>Width</th>
<th>Height in Feet</th>
<th>Height in Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>1.25</td>
</tr>
<tr>
<td>1.5</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>1.83</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>2.14</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>2.44</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>2.75</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>3.06</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>3.37</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>3.68</td>
</tr>
<tr>
<td>9</td>
<td>13</td>
<td>3.99</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>4.29</td>
</tr>
</tbody>
</table>

---

### Windload Charts

- **Trifab 400005**
  - $I_A = 1.882 \times 10^4$
  - $S_A = 0.941 \times 10^3$

- **Trifab 400110 ST EEL**
  - $I_A = 0.970 \times 10^4$
  - $S_A = 0.535 \times 10^3$
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.

© Kawneer Company, Inc., 2010
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.

© Kawneer Company, Inc., 2010
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.

© Kawneer Company, Inc., 2010

<table>
<thead>
<tr>
<th>Allowable Stress Design Load</th>
<th>LRFD Ultimate Design Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 15 PSF (720)</td>
<td>25 PSF (1200)</td>
</tr>
<tr>
<td>B = 20 PSF (960)</td>
<td>33 PSF (1580)</td>
</tr>
<tr>
<td>C = 25 PSF (1200)</td>
<td>42 PSF (2000)</td>
</tr>
<tr>
<td>D = 30 PSF (1440)</td>
<td>50 PSF (2400)</td>
</tr>
<tr>
<td>E = 40 PSF (1920)</td>
<td>67 PSF (3200)</td>
</tr>
</tbody>
</table>

WITH HORIZONTALS
WIDTH IN METERS

WITHOUT HORIZONTALS
WIDTH IN METERS

WINDLOAD CHARTS (Entrance Framing)
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.

<table>
<thead>
<tr>
<th>Allowable Stress Design Load</th>
<th>LRFD Ultimate Design Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 15 PSF (720)</td>
<td>25 PSF (1200)</td>
</tr>
<tr>
<td>B = 20 PSF (960)</td>
<td>33 PSF (1580)</td>
</tr>
<tr>
<td>C = 25 PSF (1200)</td>
<td>42 PSF (2000)</td>
</tr>
<tr>
<td>D = 30 PSF (1440)</td>
<td>50 PSF (2400)</td>
</tr>
<tr>
<td>E = 40 PSF (1920)</td>
<td>67 PSF (3200)</td>
</tr>
</tbody>
</table>

WINDLOAD CHARTS (Open Back Entrance)

**WITH HORIZONALS**

**WIDTH IN METERS**

<table>
<thead>
<tr>
<th>HEIGHT IN FEET</th>
<th>WIDTH IN FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>1.5</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>2.5</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>4.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>400110 STEEL</td>
<td>400599</td>
</tr>
<tr>
<td></td>
<td>450CG002</td>
</tr>
</tbody>
</table>

I = 2.105 (87.62 X 10^4)  
S = 1.043 (17.09 X 10^3)

**WITHOUT HORIZONALS**

**WIDTH IN METERS**

<table>
<thead>
<tr>
<th>HEIGHT IN FEET</th>
<th>WIDTH IN FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>1.5</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>2.5</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>4.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>400110 STEEL</td>
<td>400599</td>
</tr>
<tr>
<td></td>
<td>450CG002</td>
</tr>
</tbody>
</table>

I = 2.105 (87.62 X 10^4)  
S = 1.043 (17.09 X 10^3)

**WITH HORIZONALS**

**WIDTH IN METERS**

<table>
<thead>
<tr>
<th>HEIGHT IN FEET</th>
<th>WIDTH IN FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>1.5</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>2.5</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>4.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>400110 STEEL</td>
<td>400599</td>
</tr>
<tr>
<td></td>
<td>450CG002</td>
</tr>
</tbody>
</table>

I = 0.970 (40.37 X 10^4)  
S = 0.535 (8.77 X 10^3)

**WITHOUT HORIZONALS**

**WIDTH IN METERS**

<table>
<thead>
<tr>
<th>HEIGHT IN FEET</th>
<th>WIDTH IN FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>1.5</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>2.5</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>4.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>400110 STEEL</td>
<td>400599</td>
</tr>
<tr>
<td></td>
<td>450CG002</td>
</tr>
</tbody>
</table>

I = 0.970 (40.37 X 10^4)  
S = 0.535 (8.77 X 10^3)
Horizontal or deadload limitations are based upon 1/8" (3.2), maximum allowable deflection at the center of an intermediate horizontal member. The accompanying charts are calculated for 1/4" (6.35) thick glass supported on two setting blocks placed at the loading points shown.

**DEADLOADS ON ENTRANCE TRANSOM BARS**

Height limitations for transom glass over a doorway are based on a 1/16" (1.6) maximum allowable deflection at the center of a transom bar. The accompanying chart is calculated for 1/4" (6.4) thick glass supported on two setting blocks placed at the loading points shown.