**ARCHITECTURAL DETAILS**

**REVERVING DOORS**

**AutoFlow® Automatic Series 9331**
Type: 3-Wing with Segmented® Drum, Medium Stile

**INSTALLATION AND OPERATION**
- Door unit is surface mounted to finish floor (floor not to exceed 1/4" out of level). Unit is free-standing with no additional support required.
- Drum can be center connected to adjacent construction or throat connected (at entry vertical rails). Allow 1/4" shim space each side & at canopy. Adjacent construction not to bear down on revolving door.
- Motion sensor at each entry starts wing rotation on user approach at 3-5 RPM. Push plate mounted at door entry slows door to 1-3 RPM for slower traffic.
- Electrical: Provide 120 VAC, 15 amp service on a dedicated 20 amp circuit breaker routed to power operator mounted within the enclosure canopy.

**STANDARD PACKAGES**

<table>
<thead>
<tr>
<th>Nominal Inside Diameter</th>
<th>Outside Diameter</th>
<th>Entry</th>
<th>Rough Opening Width</th>
<th>Overall Unit Height</th>
<th>Rough Opening Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>10'-0&quot; (3048)</td>
<td>10'-3 1/2&quot;</td>
<td>4'-4 3/4&quot;</td>
<td>10'-4&quot; (3137)</td>
<td>8'-0&quot; (2438)</td>
<td>8'-0 1/4&quot; (2445)</td>
</tr>
</tbody>
</table>

**Ceiling Height:** 7'-0" (2134), **Canopy Height:** 12" (305)

**Glazing:** Standard unit prep'd for 1/4" (6) glass. Glass provided by others.

**ANODIZED FINISH:** Clear or Dark Bronze

**OPTIONS**
- Custom ceiling height up to 9'-0".
- Ceiling lights.
- Aluminum roof.
- Extended, cropped or round canopy.
- Prep up to 1" glazing in door wings & drum.
- Custom anodized or paint finish.

For more standards & options see Architectural Specs (p.F5.0) and Spec Details (p. F3.0).

**Horton Automatics reserves the right to alter its product and specifications without notice. Dimensions given in U.S. inches followed by millimeters in parenthesis.**
AutoFlow® Automatic Series 9330

Type: 3-Wing with Round Drum, Medium Stile

ARCHITECTURAL DETAILS

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**ARCHITECTURAL DETAILS**

**MiniGrand® Automatic Series 9331MG**

**Type: 3-Wing with Segmented® Drum**

<table>
<thead>
<tr>
<th>Standard Packages</th>
<th>Overall Unit Height</th>
<th>Rough Opening Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Outside Diameter</td>
<td>Inside Diameter</td>
<td>Entry</td>
</tr>
<tr>
<td>11'-0&quot; (3353)</td>
<td>10'-8 1/2&quot; (3264)</td>
<td>4'-9 3/4&quot; (1467)</td>
</tr>
<tr>
<td>12'-0&quot; (3658)</td>
<td>11'-8 1/2&quot; (3569)</td>
<td>5'-3 3/4&quot; (1619)</td>
</tr>
</tbody>
</table>

Ceiling Height: 7'-0" (2134). Canopy Height: 12" (305).

**Options**
- Extended, cropped or round canopy.
- Prep up to 1" glazing in door wings & drum.
- Custom anodized or paint finish.

For more standards & options see Architectural Specs (p.F6.0) and Spec Details (p. F3.0).

**Installation and Operation**
- Door unit is surface mounted to finish floor (floor not to exceed 1/4" out of level). Unit is free-standing with no additional support required.
- Drum can be center connected to adjacent construction or throat connected (at entry vertical rails). Allow 1/4" shim space each side & at canopy. Adjacent construction not to bear down on revolving door.

- Motion sensors at each entry starts wing rotation on user approach at 3-5 RPM. Push plates mounted at each side of entry slow door to 1-3 RPM for slower traffic.
- Electrical: Provide 120 VAC, 15 amp service on a dedicated 20 amp circuit breaker routed to power operator mounted within the enclosure door.

**Floor Plan and Exterior Elevation**

**Outside Diameter**

- 9" (229) Dia. Recessed Ceiling Lights
- Broken Out Position
- Slow Speed Switch
- Motion Sensor

**Inside Diameter**

- 6" (194) Max.
- 12" (305) Canopy Height

**Overall Unit Height**

- 3 3/4" (95)
- 3 3/4" (95)

**Drum Vertical Section**

- Offset Glass Stops: C2034 & C340
- Glass Stop: C337
- FootGuard™ Safety Switch
- 1 1/2" (38) Dia. Steel Center Shaft with 1/32" (1) Stainless Steel Sleeve
- Bottom Spider with Bearing
- Surface Mounted Bottom Bearing Post

**Door Wing and Drum - Horizontal Section**

- 3 3/16" (81)
- 1 1/2" (38) Dia. Steel Center Shaft with 1/32" (1) Stainless Steel Sleeve
- Bottom Spider with Bearing
- Surface Mounted Bottom Bearing Post

**Bottom Bearing**

- Safety Edge
- 3 1/8" (79) 1 3/4" (44)

**FootGuard™ Safety Switch**

- C2991
- 1 3/8" (35)

**Glass Stops**

- C2934 & C340

**Architectural Details**

- Horton Automatics reserves the right to alter its product and specifications without notice. Dimensions given in U.S. inches followed by millimeters in parenthesis.
**Standard Packages**

<table>
<thead>
<tr>
<th>Nominal Outside Diameter</th>
<th>Inside Diameter</th>
<th>Entry</th>
<th>Overall Unit Height</th>
<th>Rough Opening Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>11'-0&quot; (3353)</td>
<td>10'-8 1/2&quot; (3264)</td>
<td>4'-7 5/8&quot; (1413)</td>
<td>8'-0&quot; (2438)</td>
<td>11'-1&quot; (3378)</td>
<td>8'-0 1/4&quot;</td>
</tr>
<tr>
<td>12'-0&quot; (3658)</td>
<td>11'-8 1/2&quot; (3569)</td>
<td>5'-1 5/8&quot; (1565)</td>
<td>8'-0&quot; (2438)</td>
<td>12'-1&quot; (3683)</td>
<td>8'-0 1/4&quot;</td>
</tr>
</tbody>
</table>

Canopy Outside Diameter = Nominal O.D. + 1/2" (13).

Ceiling Height: 7'-0" (2134).

Glazing: Standard wing prep'd for 1/4" (6) glass. Glass provided by others. Standard drum provided with 7/16" clear laminated curved glass.

Anodized Finish: Clear or Dark Bronze

**Options**
- Extended or cropped canopy.
- Prep up to 1" glazing in wings & 9/16" in drum.
- Custom anodized or paint finish.

For more standards & options see Architectural Specs (p.F6.0) and Spec Details (p. F3.0).

**Installation and Operation**
- Door unit is surface mounted to finish floor (floor not to exceed 1/4" out of level). Unit is free-standing with no additional support required.
- Drum can be center connected to adjacent construction or throat connected (at entry vertical rails). Allow 1/4" shim space each side & at canopy. Adjacent construction not to bear down on revolving door.
- Motion sensors at each entry starts wing rotation on user approach at 3-5 RPM. Push plates mounted at each side of entry slow door to 1-3 RPM for slower traffic.
- Electrical: Provide 120 VAC, 15 amp service on a dedicated 20 amp circuit breaker mounted within the enclosure canopy.

Door wings can be collapsed for Emergency Egress after power is released from magnetic lock. Electromagnets hold wings in locked positions under normal conditions with 1000 lbs. min. force.

**Floor Plan and Exterior Elevation**

**Drum Vertical Section**

**Door Wing Vertical Section**

**Bottom Bearing**
ARCHITECTURAL DETAILS

REVOLVING DOORS

Grand® Automatic Series 9631
Type: 3-Wing with Segmented® Drum (page 1 of 3)

Floor Plan and Exterior Elevation

Standard Packages

<table>
<thead>
<tr>
<th>Nominal Outside Diameter</th>
<th>Inside Diameter</th>
<th>Entry</th>
<th>Clear Access at Door Wing</th>
<th>Overall Unit Height</th>
<th>Rough Opening Width</th>
<th>Rough Opening Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>12'-0&quot; (3658)</td>
<td>11'-8 1/2&quot; (3569)</td>
<td>5'-3 3/4&quot; (1619)</td>
<td>3'-0 1/4&quot; (921)</td>
<td>9'-0&quot; (2438)</td>
<td>12'-0 1/2&quot; (3670)</td>
<td>9'-0 1/4&quot; (2750)</td>
</tr>
<tr>
<td>14'-0&quot; (4267)</td>
<td>13'-8 1/2&quot; (4173)</td>
<td>6'-3 3/4&quot; (1924)</td>
<td>4'-0 1/4&quot; (1226)</td>
<td>9'-0&quot; (2438)</td>
<td>14'-0 1/2&quot; (4280)</td>
<td>9'-0 1/4&quot; (2750)</td>
</tr>
<tr>
<td>16'-0&quot; (4877)</td>
<td>15'-8 1/2&quot; (4788)</td>
<td>7'-3 3/4&quot; (2229)</td>
<td>5'-0 1/4&quot; (1530)</td>
<td>9'-0&quot; (2438)</td>
<td>16'-0 1/2&quot; (4890)</td>
<td>9'-0 1/4&quot; (2750)</td>
</tr>
</tbody>
</table>

Ceiling Height: 7'-0" (2134).
Canopy Height: 24" (610).
Glazing: Standard unit prep'd for 1/4" (6) glass. Glass provided by others.
Anodized Finish: Clear or Dark Bronze

Installation and Operation

- Door unit is surface mounted to finish floor (floor not to exceed 1/4" out of level). Unit is free-standing with no additional support required.
- Drum can be center connected to adjacent construction or throat connected (at entry vertical rails). Allow 1/4" shim space each side & at canopy. Adjacent construction not to bear down on revolving door.
- Motion sensors at each entry starts wing rotation on user approach at 3-5 RPM. Push plates mounted at each side of entry slow door to 1-3 RPM for slower traffic.
- Electrical: Provide 120 VAC, 15 amp service on a dedicated 20 amp circuit breaker routed to power operator mounted within the enclosure canopy.
- Options
  - Custom ceiling height up to 8'-0".
  - Extended, cropped or round canopy.
  - Aluminum roof.
  - Prep up to 1" glazing in door wings & drum.
  - Custom anodized or paint finish.

For more standards & options see Architectural Specs (p.F7.0) and Spec Details (p. F3.0).

For Horizontal Sections see F2.13 (page 2 of 3).
For Vertical Sections see F2.14 (page 3 of 3).

Horton Automatics reserves the right to alter its product and specifications without notice. Dimensions given in U.S. inches followed by millimeters in parenthesis.
For Elevation & Floor Plan see F2.12 (page 1 of 3).

For Vertical Sections see F2.14 (page 3 of 3).

Door wings can be collapsed for Emergency Egress after power is released from magnetic lock. Electromagnets hold wings in locked positions under normal conditions with 1000 lbs. min. force.

Bottom Spider Assembly connects to Hydraulic Closers Beyond.

Finish Floor

Bottom Bearing
Within Core

1/2" (13)

Corner Detail at Closer

Horton Automatics reserves the right to alter its product and specifications without notice. Dimensions given in U.S. inches followed by millimeters in parenthesis.
For Elevation & Floor Plan see F2.12 (page 1 of 3).

For Horizontal Sections see F2.13 (page 2 of 3).
## Standard Packages

<table>
<thead>
<tr>
<th>Nominal Outside Diameter</th>
<th>Inside Diameter</th>
<th>Entry</th>
<th>Clear Access at Door Wing</th>
<th>Overall Unit Height</th>
<th>Rough Opening Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>12'-0&quot; (3658)</td>
<td>11'-8 1/2&quot; (3569)</td>
<td>5'-1 5/8&quot; (1565)</td>
<td>3'-0 1/4&quot; (921)</td>
<td>9'-0&quot; (2438)</td>
<td>12'-0 1/2&quot; (3670)</td>
<td>9'-0 1/4&quot; (2750)</td>
</tr>
<tr>
<td>14'-0&quot; (4267)</td>
<td>13'-8 1/2&quot; (4173)</td>
<td>6'-1 5/8&quot; (1870)</td>
<td>4'-0 1/4&quot; (1226)</td>
<td>9'-0&quot; (2438)</td>
<td>14'-0 1/2&quot; (4280)</td>
<td>9'-0 1/4&quot; (2750)</td>
</tr>
<tr>
<td>16'-0&quot; (4877)</td>
<td>15'-8 1/2&quot; (4788)</td>
<td>7'-1 5/8&quot; (2174)</td>
<td>5'-0 1/4&quot; (1530)</td>
<td>9'-0&quot; (2438)</td>
<td>16'-0 1/2&quot; (4890)</td>
<td>9'-0 1/4&quot; (2750)</td>
</tr>
</tbody>
</table>

Canopy Outside Diameter = Nominal O.D. + 1/2" (13).

Canopy Height: 24" (610).

Glazing: Standard wing prep’d for 1/4" (6) glass. Glass provided by others. Standard drum provided with 7/16" clear laminated curved glass.

Anodized Finish: Clear or Dark Bronze

### Installation and Operation

- Door unit is surface mounted to finish floor (floor not to exceed 1/4" out of level). Unit is free-standing with no additional support required.
- Drum can be center connected to adjacent construction or throat connected (at entry vertical rails) (see p.F1.1). Allow 1/4" shim space each side & at canopy. Adjacent construction not to bear down on revolving door.
- Motion sensors at each entry start wing rotation on user approach at 3-5 RPM. Push plates mounted at each side of entry slow door to 1-3 RPM for slower traffic.
- Electrical: Provide 120 VAC, 15 amp service on a dedicated 20 amp circuit breaker routed to power operator mounted within the enclosure canopy.
- Custom ceiling height up to 8'-0".
- Extended or cropped canopy.
- Aluminum roof.
- Prep up to 1" glazing in door wings & 9/16" in drum.
- Custom anodized or paint finish.

For more standards & options see Architectural Specs (p.F7.0) and Spec Details (p. F3.0).

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**Floor Plan and Exterior Elevation**

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For Elevation & Floor Plan see F2.15 (page 1 of 3).

For Vertical Sections see F2.17 (page 3 of 3).

Door wings can be collapsed for Emergency Egress after power is released from magnetic lock. Electromagnets hold wings in locked positions under normal conditions with 1000 lbs. min. force.

Display Core, Door Wing and Drum - Horizontal Section
Grand® Automatic Series 9620
Type: 2-Wing with Round Drum

ARCHITECTURAL DETAILS

<table>
<thead>
<tr>
<th>Nominal Outside Diameter</th>
<th>Inside Diameter</th>
<th>Entry / Breakout Opening</th>
<th>Slide Door Opening</th>
<th>Rough Opening Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>12'-1 3/16” (3688)</td>
<td>11'-9 3/4” (3600)</td>
<td>5'-10 7/8” (1800)</td>
<td>3'-7 5/16” (1100)</td>
<td>12'-1 3/4” (3670)</td>
</tr>
<tr>
<td>14'-0 13/16” (4288)</td>
<td>13'-9 1/4” (4200)</td>
<td>6'-10 11/16” (2100)</td>
<td>4'-7 1/16” (1400)</td>
<td>14'-1 3/8” (4280)</td>
</tr>
<tr>
<td>16'-0 7/16” (4888)</td>
<td>15' - 9” (4800)</td>
<td>7'-10 1/2” (2400)</td>
<td>5'-6 15/16” (1700)</td>
<td>16'-1” (4890)</td>
</tr>
</tbody>
</table>

Ceiling Height: 7'-6 9/16” (2300)
Canopy Height: 1'-1 3/8” (340)
Overall Unit Height: 8'-7 15/16” (2640)

Glazing: Prep for 1/4” glazing in door wings & 5/16” in drum.
Finishes: Anodized or paint finish or stainless steel cladding

Installation and Operation

- Door unit is surface mounted to finish floor (floor not to exceed 1/4” out of level). Unit is free-standing with no additional support required.

- Drum can be center connected to adjacent construction. Allow 1/4” shim space each side & at canopy. Adjacent construction not to bear down on revolving door.

- Motion sensors at each entry start wing rotation on user approach at 3-5 RPM. Push plates mounted at each side of entry slow door to 1-3 RPM for slower traffic.

- Electrical: Provide 120 VAC, 15 amp service on a dedicated 20 amp circuit breaker routed to power operator mounted within the enclosure canopy.

Options
- Extended canopy.
- Aluminum roof.

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