Executive Screens - Technical Information

- Recessed Cavity Considerations
- Electrical Considerations
- Home Automation (HA) Systems

Drawings

- Executive Design Specifications - Manual System with Standard Side Track (V2A) (External Assembled View)
- Executive Design Specifications - System With Recessed Side Track (External Assembled View)
- Executive Design Specifications - System With Standard Side Track (External Assembled View)
DO NOT frame the cavity so that the U-channel is centered. The U-channel is mounted through its back wall with an appropriate fastener into the structure behind it.

The cavity walls must be parallel to each other. Again, no dimension can be made smaller than specified. It is recommended that additional space be provided to make installation easier if possible.

1. The cavity wall must be free from anything protruding through them i.e. nails, staples, etc.

2. The bottom panel or the front of the cavity must be removable, and the screen must always remain accessible. The actual size and position of the panel can be determined once the Executive Screen has been installed. The gap in the bottom panel, that allows the Executive slide bar and bottom seal access into the cavity, will be determined by the size of the bottom seal (1.75", 4", or 6"), in a non-compressed state. Phantom Screens Authorized Distributor ("installer") will provide the applicable dimensions if needed.

3. Phantom Screens installer will advise the contractor where the recessed mounting brackets are to be placed. These brackets must be attached through the cavity’s structural materials and into a structurally supported framing member. The two recessed mounting brackets support the entire weight of the Executive Motorized Screen.

4. The recessed mounting brackets must be installed perfectly level from left to right. This is a necessity for proper Executive roller installation and operation.

5. The recessed U-channel is normally installed during framing. Be sure that the U-channel is offset toward the back of the cavity. It should still be in line with the edge of the recessed mounting bracket. This will depend on which side of the cavity your mesh will be feeding out of. (See diagrams on page 2).

6. We recommend once the U-channel is installed that the finishing work (i.e. moldings, stucco, siding, etc.) do not protrude past the mouth of the U-channel. Consideration should be given to the ease of installing the roller after all of the finishing work has been completed. In the event that finishing work protruding past the mouth of the U-channel is unavoidable, the space that the U-channel is being recessed into must remain at minimum the same width as the U-channel, and have a smooth finish on the inside. The U-channel must remain clean and free of any debris. There should be a 1/8” gap between the U-channel and the wall on either side to account for flex during installation while snapping the recessed tracks into place.

7. Phantom Screens recommends using duct tape to cover the mouth of the opening of the U-channel until such time as construction and installation are complete.
Electrical Considerations

All electrical work being done must be in accordance with all Local and National Electrical Codes.

Power Isolation

When planning for an Executive motorized unit, keep in mind you must always be able to cut power to each unit independently. This applies not only for installation, but also in the event that the unit should ever need servicing, addition of a new remote, or in case of re-screening.

The simplest way to wire an Executive Screen is to attach the supplied plug to the end of the cable coming from the motor. The customer can then either plug the unit into a receptacle, or hire an electrician to hard wire the unit once the installation has been completed. Another way wiring can be set up during construction for isolation of each individual unit is to have the builder install a switch (standard light switch) in the ceiling or wall next to where the unit will be installed. From the switch, the electrician can run a pigtail wire (18” or 457 mm into the opening) to where the Executive will be installed. This can be an added cost, so it is important to budget for it accordingly. Be sure that you never make the motor wire or connections inaccessible, or bury them so that they are difficult to gain access to.

Motors

The Hertz motors run off of 120V AC/60Hz power with an Integrated Radio Receiver, and have the following characteristics:

- 6 ft. Motor Cable
- UL Recognized
- CSA Approved
- FCC Approved
- IP 44 Rated

Hertz motors are low amperage; therefore it would be acceptable to operate more than one Executive unit wired in series to a 15-amp circuit as long as it complies with electrical codes (see table below):

<table>
<thead>
<tr>
<th>Motor Model</th>
<th>Speed (RPM)</th>
<th>Power (Watts)</th>
<th>Current (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT50Altus (525)</td>
<td>18</td>
<td>180</td>
<td>1.6</td>
</tr>
<tr>
<td>LT50Altus (535)</td>
<td>18</td>
<td>250</td>
<td>2.1</td>
</tr>
</tbody>
</table>

The Hz motors however cannot be wired to a directional switch (rocker, maintained, momentary etc.), as they are not directional motors. Wiring an Hz motor to such a switch for control purposes will damage the motor and render it inoperable. A switch can only be wired to an Hz motor for the purpose of isolation of the power.
Wiring

Standard “house” wire (12/2 or 14/2 gauge cable; 14/2 and 12/2 stands for 14 or 12 gauge cable with 3 conductors) is acceptable for wiring Executive Screen units. Electrical code suggests that the electrician match the size of cable if possible to the existing house wiring. If you have only one power source for multiple units, the electrician can wire in parallel from one unit to the next providing that the rated capacity of the circuit is not exceeded. Use the space in the top back of the housing to hide the wire, but be sure the wire is attached firmly to the housing. After all the units have been set up, connect all of the wiring. It is recommended that all exposed wire be installed in conduit.

When a power source is located near the bottom of an Executive unit equipped with standard track, a simple technique to wiring the unit is to run the wire through the housing, behind the roller, and down inside of the sidetrack before the track covers are snapped into place.

When attaching the motor wire, make sure there is a drip loop in the wire if the unit is exposed to the elements. The purpose of a drip loop is to prevent any water from running down the cable and onto the head of the motor as it can cause irreparable damage. Instead, the moisture will drip off the lowest point of the loop.

Alternative Power

Phantom Screens can supply alternative motors to the customer if there is a requirement for DC power or if there is a need for voltage that differs from what we currently offer.
Home Automation (HA) Systems

If you are working on “smart homes” with a centralized computer or home automation system it is important to note that each brand of HA systems have different specifications for connecting to an Executive Screens unit. Phantom Screens offers a RTS single channel dry contact transmitters, which can wire directly into most home automation systems and transmit a signal to the screens to lower and retract automatically once programmed. There is also a second option of a multi channel RTS transmitter with RS232 and IR outputs. Phantom Screens can make available the wiring diagrams for a wide variety of home automation systems. Please contact Phantom Screens Technical Support and one of our Representatives will be happy to supply you with the information you require.
EXECUTIVE DESIGN SPECIFICATIONS - MANUAL SYSTEM WITH STANDARD SIDE TRACK (V2A) (External Assembled View)

FOR ILLUSTRATION PURPOSES - NOT DRAWN TO SCALE

Parts Spec

A Housing Assembly:
   ( 5-1/2"W x 5-1/2"H )
B #8 x 1" Corrosion Resistant Fastener (Color Matched)
   3 Fasteners per End Cap
C PVC Coated Fiberglass Mesh
   or other - see Mesh Specifications
D Standard Side Track (V2A) c/w Cover (1-3/4" W x 1-17/32" D)
E #8 or #10 Corrosion Resistant Fastener
   Type and length of screws may vary depending on type of mounting surface
F Slide Bar c/w Probe Assembly
G Bottom Seal - 4" Shown (Other Options Available)

CROSS SECTIONAL VIEW OF THE STANDARD SIDE TRACK (V2A)

CROSS SECTIONAL VIEW OF THE SLIDE BAR AND 4" BOTTOM SEAL

All components are color matched except Mesh, Bottom Seal, and Manual Hand Crank.
Executive Design Specifications-System With Recessed Side Track
(External Assembled View)

FOR ILLUSTRATION PURPOSES ONLY - ONLY CROSS SECTIONS DRAWN TO SCALE

CROSS SECTIONAL VIEW
OF THE FULLY ASSEMBLED
RECESSED SIDE TRACK (V3)

2 x 5 x 1 1/4"
ROLLER MOUNTING ANGLE
FOR 4" ROLLER
(Not Drawn To Scale)

CROSS SECTIONAL VIEW
OF THE SLIDE BAR
AND 4" BOTTOM SEAL

All components are color matched except Mesh, Rivets, and Bottom Seal.

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Mar 21/06 (By N.D.R.)
Executive Design Specifications - System With Standard Side Track
(External Assembled View)

For illustration purposes - only cross sections drawn to scale

Parts Spec
A Housing Assembly: (5-1/2"W x 5-1/2"H or 7-1/8"W x 7-1/8"H)
B #8 x 1" Corrosion Resistant Fastener (Color Matched) 3 Fasteners per End Cap
C PVC Coated Fiberglass Mesh or other - see Mesh Specifications
D Standard Side Track (V2A) c/w Cover (1-3/4" W x 1-17/32" D)
E #8 or #10 Corrosion Resistant Fastener Type and length of screws may vary depending on type of mounting surface
F Slide Bar c/w Probe Assembly
G Bottom Seal - 4" Shown (Other Options Available)
H Mounting Surface

All components are color matched except Mesh and Bottom Seal.