

Phantom Screens

Planning Considerations for Motorized Retractable Screens



True to you. Pure Phantom

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Overview

Retractable Screen Solutions for Oversized Openings

Phantom Screens was founded in 1992 on the principle that a better alternative existed to conventional door and window screens. Since then, we have rapidly grown to become North America's leading provider of retractable screen solutions: insect, solar and privacy screens that remain hidden and out of the way until required.

We have designed this document to introduce to you the main benefits of Motorized Executive Screens by Phantom®, plus provide information you will need when incorporating these screen solutions into your construction projects.

Phantom's motorized retractable screens are designed for integration into large applications for retrofit or new construction projects, and can be mounted on both the interior and exterior of buildings. Executive Screens provide the ideal screen solution for oversized openings including: covered patios, telescoping walls, lift & slide doors, large picture windows, and Roman archways. With more than 30 mesh types, Executive Screens offer insect protection, solar shading and enhanced privacy, all at the touch of a button. Programmable control options allow the oversized screens to be fully automated throughout the building, providing solar protection specifically when required.

Executive Screens offer a solution to a myriad of issues in designing buildings with reduced carbon footprints and a greater connection with nature: they form part of a building's daylighting strategy, lower energy costs and increase occupant comfort. Because of their functionality in all these areas, Phantom's motorized retractable screens are applicable to buildings that incorporate the principles of sustainability and human health and well being.

Phantom Screens offers complete support to builders and architects including technical specifications and CAD drawings. Phantom's dedicated full-time professionals are happy to assist designers and builders integrate our retractable screen solutions into your design / build projects.

Benefits of Phantom Retractable Screens

- Provide the functionality of conventional screens, but disappear when not needed
- Increase access to natural ventilation and daylight
- Decrease heat and glare from direct sunlight and solar reflective structures
- Reduce energy usage
- Extend the life of interior furnishings by reducing UV related fading
- Offer numerous finish options, including custom color matching
- Allow for complete building integration with components that can be recessed into columns and ceiling cavities
- Include motorized controls that are compatible with home automation systems
- Offer a range of mesh choices for insect control, solar shading and privacy.



"My clients expect these types of options in their custom homes."

Phil Kean, Phil Kean Designs, Orlando, FL

Making Outdoor Living a Reality



One of the strongest growing trends in residential design is “bringing the outside in.” As sizes of homes and properties level off, there has been a considerable rise in the development of outdoor living spaces. No longer a feature just in the sunshine states, outdoor retreats appeal to homeowners in every climate.

One of the key elements in addressing this trend has been to convert a patio or porch into a multi-purpose room that can be used throughout the year instead of just during summer. Many consumers are making significant investments to create outdoor “rooms” with kitchens complete with large, permanently-installed grills; refrigerators and work areas; luxurious fireplaces; and beautiful lighting options that are specially made to be weather-proof. However, they are being kept from using these spaces as often as they wish by nuisances such as insects, the hot afternoon sun, or a chilly day.

Phantom Screens provides retractable screen solutions that enable people to create comfortable outdoor living areas, while maintaining the integrity and esthetics of the design of the building. Perfect for all large openings, Phantom’s motorized retractable screens pull into place when needed, and retract out of sight when not in use. Additionally, Phantom’s sun and wind sensors are often used to lower or retract the screens when the heat of the sun and/or strength of wind gusts exceed or fall below a predetermined set of thresholds.

Homeowners can choose among many mesh options depending on their location, climate, and screening needs. Several of Phantom’s solar mesh options can significantly reduce the exposure to UV rays and block air from entering or exiting the screened space, thereby helping to control the temperature in the areas where the screens are used. This allows people to enjoy their outdoor spaces year-round without sacrificing their views to the outside.



Case Study: The InSync Home

| | |
|---------------------|---|
| BUILDER: | Goehring & Morgan Construction |
| DESIGN TEAM: | Morales-Keesee Designs Associates |
| CONCERNS: | Solar Heat Gain & Pest Control |
| SOLUTION: | 3 Retractable Motorized Executive Screens with: <ul style="list-style-type: none">• 18/14 Charcoal Insect Mesh,• 40% sun & UV blockage,58% openness |

Overview: The InSync Home, produced by Builder and HOME magazines and built in Baldwin Park, Florida, is a 6,500-square-foot house inspired by the vision and feedback of American homeowners and consumers.

Need: One of the main emphasis of InSync Home was to blend indoor and outdoor living. A key area of the home that brings this together is the lanai that opens to the inner courtyard and pool. It was necessary to find a way to merge the two spaces in order to allow the family to enjoy the outdoors without having to suffer from heat or insects.

Solution: Phantom's retractable screen solutions provided the best of both worlds. Depending on the clients' need, the motorized Executive Screens open the spaces up or enclose the lanai to provide shade, added ventilation, privacy, and protection from insects.

The Executive Screens are integrated into the design of the lanai, retracting into the arches when not in use. The Phantom Screens installation team worked closely with the client to ensure that the screens would blend seamlessly with the overall décor of the home. The InSync Design Team selected 18/14 Insect Mesh in charcoal with a sun control factor of 40% and openness of 58%. By recessing the screen components, the three units remain completely out of sight when not needed, uniting the indoor and outdoor spaces in a unique and creative way.



Custom Fit to Meet Your Clients' Needs

Executive Screens can be integrated into every type of architectural style including wood, brick, stucco, natural stone, and concrete.



Stucco
Column



Decorative
Column



Stone-faced
Column



Wood-clad
Column



Recessed
Cavity



Surface
Mount

Executive Screens fit single openings as large as 25 feet wide and 16 feet tall; the ideal screen solution for both commercial and residential renovation and construction projects.

| Style | Width | Height |
|----------------|--------------|----------|
| 4" Housing | 45" to 120"* | Max 96" |
| 5 1/2" Housing | 46" to 240"* | Max 132" |
| 7 1/8" Housing | 46" to 300"* | Max 192" |

Note: Restrictions may affect Size and Mesh Type offered.

*Smaller widths are available on Special Order.

Screening and Shading Options

Executive Screens have a variety of screening and shading options to enhance the unique features of any building:

Insect: Ideal where insects are a problem, this mesh type reduces up to 55% of UV rays.

Solar: Mesh types within this line block heat and glare by up to 75% and seal insects out.

Premium Solar: Available in multiple colors, this solar category provides significant shading by blocking up to 90% of UV rays.

Privacy: Available in multiple colors, this mesh type blocks up to 100% of UV rays.

Color Options

Phantom's screens come in a variety of standard powder-coated colors to match your finishes, each of which meet AAMA (American Architectural Manufacturers Association) 2603 standards. We can also create custom coatings, including wood grains.

All of Phantom's color programs provide a high-grade quality finish designed to resist scratching, chipping, cracking, and fading from UV rays.

Due to color variances, we provide aluminum samples that more accurately depict actual color choices. To view color samples or to order a color brochure, please contact your Phantom Screens Authorized Distributor at 1-888-PHANTOM (742-6866).

Mounting Options



Standard mount Executive Screens with housings and standard tracks. Inside above header mount.



Standard mount Executive Screens with housings and standard tracks. Under header mount.



Standard mount Executive Screens with housings and standard tracks. Outside above header mount.

Phantom's Executive Screens can be either surface-mounted (with housing and cover) or recessed into an opening (without housing and cover). Standard units are normally retrofitted onto the existing structure, and the housing unit will therefore be visible. Recessed units are usually installed during the construction process and are placed inside of a cavity that is built by the contractor.

Phantom Screens also provides two types of tracks: standard and recessed tracks. In most cases, standard units use standard tracks, and recessed units use recessed tracks. However, it is possible to interchange these two types of tracks with either of the two installation types mentioned above to accommodate various installation requirements and/or to meet customers' needs.

Standard Mount

Standard mount is by far the easiest application to integrate Phantom's Executive Screens into any structure, and is typically one of the last components to be added. The tracks and housing units of surface mounted Executive Screens can be color matched to the rest of the building.

The unit(s) are either surface mounted on a face surface above the opening on the inside of the surround, inside of the frame under the header, or on the outside of the structure above the opening.

Phantom Screens offers three different sizes of housings depending upon the width and height of the opening: 4", 5 1/2", and 7 1/8". Your local Phantom Screens Authorized Distributor will help you specify the correct housing size for your project.

If you have multiple units, you may want to keep all housing units the same size. This will help you achieve a more uniform appearance and consistent roll-up / roll-down speeds.

Recessed Mount

Recessed units are most commonly installed during a new construction project or a major remodel. The main appeal of recessing motorized screens is to hide the mechanisms and side tracks without affecting the architectural aesthetics of the building. In most custom homes it is the preferred installation choice of both the client and architect.



Recessed mount Executive Screens built into cavities with recessed u-channel in decorative columns.



Recessed mount Executive Screens showing screen exit opening and recessed u-channel built into fiberglass Roman columns.



Customized for your home, Phantom's screens are integrated for long term use and easy maintenance.



Arched openings with 80% sun block to control UV rays and temperature create a more livable outdoor space.



Recessed mount with detail of contents of cavity.

Planning Considerations



Cavity framed in top of opening with bottom access, u-channel mounted on column before finish is applied.



Unfinished cavity and column showing mounting brackets, electrical connections, and u-channel placement.



Duplex electrical outlet installed inside the cavity outside the working area of the screens roller, mesh and motor.

As in any typical construction project, the integration of motorized screens involves the builder or the builder's superintendant, Phantom's Authorized Distributor responsible for the territory where the project is to be completed, and subcontractor tradesmen (electricians, framers, and finish carpenters).

A proposal containing the costs associated with Phantom's products, installation, project management services, site inspection visits, and training will be provided by Phantom's local distributor upon request. However, you need to be aware of other expenses that will be incurred by other trade suppliers during the preparation phase. These added costs will be outlined below and should be referenced and addressed during the submittal of the builder's proposal to his client for motorized screens.

If you choose to opt for a recessed installation, you need to also review other services required to complete the installation of the retractable Executive Screens. We recommend you review Phantom's Planning Considerations & Project Management Overview document that outlines the additional services & fees. Your local Authorized Phantom Screens Distributor can provide you the noted overview document upon request.

Framing

In the case of a recessed installation, framing costs will be incurred to design and build a cavity for housing the roller, motor, and screen mesh. For arched openings, additional framing costs will be incurred beyond that of a square opening. Some framing will also be required to embed the u-channel into the column design. Phantom Screens recommends you review the framing requirements listed in our Planning Considerations & Project Management Overview document with your framing contractor.



Cavity framed in top of header opening with front access. U-channel mounted in columns surrounded by framing before stucco finish is applied.



U-channel installed within a mixed column of wood and stone.



Removable front access panels finished to complement wooden tongue and groove ceiling.

Electrical

Recessed or Standard mount screen installations will incur electrical costs in addition to that of the standard wiring of the structure. The outlets needed for retractable screens have to supply 110v to power the motor, requiring about 1.6 amps per unit. Required power outlets must be installed in or near the roller where the motor is located. A review of the motor control options and home automation interface is also advisable.

Finishing

If a recessed installation is required, finishing costs will be incurred to design and build removable covers for the cavities built earlier during the framing stage. The covers must be designed to allow Phantom Screens Authorized Distributor easy access for any maintenance of the motor and/or mesh. These covers are typically built by the builders' finishing carpenters out of material used to finish the interior ceiling of the room where the screens are installed. Finished hardwood or plywood can also be adorned with matching trim to close the cavity containing the screens.

Phantom Screens recommends that professionals review the columns finish details to determine any additional costs that may occur. Additional time may be required for applying the lathing and column prep for the selected finish.

Architectural & Builder Services



Recessed Executive Screens mounted within multiple arched openings, with removable front access panels.



Recessed Executive Screens integrated in pre-cast and stone columns.



Recessed Executive Screens using 90% sun block material to reduce UV rays and interior heat gain.

The Phantom Screens Architectural and Builder Services program provides building and design professionals with resources on product specifications and the integration of Phantom retractable screen solutions into residential and commercial building projects.

Architects and builders can therefore easily specify Phantom's retractable screens during the planning and drafting stages of the project.

The Architectural and Builder Services program consists of the following:

- Access to online resources such as drafting and project planning tools (product specification details, CAD drawings, product installation services, etc.)
- A library of Phantom project case studies
- Educational seminars
- Marketing and sales materials that can be used independently or integrated with customer presentations.

Our experts work closely with architect and contractor communities to ensure integration of Phantom Screens solutions to the design of buildings.

Please contact Phantom Architectural and Builder Services by calling 1-888-444-4142, or visit our website at www.phantomscreens.com to access our technical drawings and specifications.

FOR MORE INFORMATION:

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