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*Planning Considerations*  
FOR MOTORIZED  
RETRACTABLE SCREENS



# Overview

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## *Retractable Screens 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 screens: insect, solar and privacy screens that remain hidden and out of the way until required.

This document outlines the main benefits of Executive motorized retractable screens and provides information to help you incorporate these screens into your construction projects.

Executive 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. They are perfect 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 screens to be fully automated throughout a 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. Thanks to their functionality in all these areas, Executive motorized retractable screens are ideal for 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 screens into your design / build projects.

## **BENEFITS OF EXECUTIVE MOTORIZED RETRACTABLE SCREENS**

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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 structure

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

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One of the strongest growing trends in residential design is “bringing the outside in” and consequently 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 trends which is becoming popular is 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 along with refrigerators and work areas, luxurious fireplaces; and beautiful lighting options all of which 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 or the hot afternoon sun.



Phantom Screens provides retractable screens that enable people to create comfortable outdoor living areas, while maintaining the integrity and esthetics of the building. Perfect for all large openings, motorized retractable screens come into place when needed, and retract out of sight when not in use. Additionally, 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 threshold.



Homeowners can choose from many mesh options whatever their location, climate or screening needs. Several of Phantom’s solar mesh options can significantly reduce the exposure to UV rays, 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 Executive Motorized Retractable Screens with:

- 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:** 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:** Executive motorized retractable screens provided the best of both worlds. Depending on the clients' need, the screens open the spaces up or enclose the lanai to provide shade, added ventilation, privacy and protection from insects.

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 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 making them ideal for both commercial and residential renovation and construction projects.

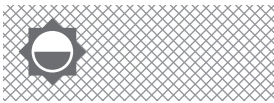
STYLE	WIDTH	HEIGHT
4" housing	45" to 120"*	Max 96"
5-1/2" housing	46" to 240"*	Max 132"
7-1/8" housing	46" to 300"*	Max 192"

NOTE: Restrictions may affect size and mesh type offered.

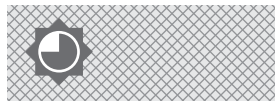
\*Smaller widths are available on special order.

## SCREENING AND SHADING OPTIONS

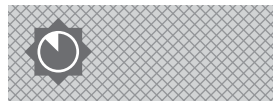
Executive screens have a variety of screening and shading options to enhance the unique features of any building:



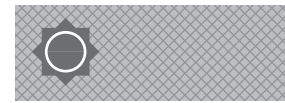
**STANDARD**  
Reduces up to 55% of UV rays



**SOLAR**  
Blocks up to 75% of UV rays



**PREMIUM SOLAR**  
Blocks up to 80% of UV rays, provides significant shade and is available in multiple colors



**PRIVACY**  
Blocks up to 100% of UV rays, available in multiple colors

## COLOR OPTIONS

Executive 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

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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.

Executive retractable screens can be either surface-mounted (with housing and cover) or recessed into an opening (all components hidden from view). Standard units are normally retrofitted onto an existing structure and the housing unit will therefore be visible. To blend the units seamlessly into your design, Phantom Screens provides a full color matching service including wood grain finishes. Recessed units are usually installed during the construction process and are placed inside of a cavity that is built by the contractor.

There are two types of tracks available: standard and recessed. In most cases, standard units use standard tracks and recessed units use recessed tracks. However, it is possible to use either type of track with either type of installation to enable various installation options.

## COLOR OPTIONS

Standard mount is by far the easiest application to integrate Executive screens into any structure. It 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) can be surface mounted 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.

There are three different sizes of housings for Executive screens depending upon the width and height of the opening: 4", 5 1/2", and 7 1/8". Your local Phantom Screens Authorized Representative 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 Executive screens built into cavities with recessed U-channel in decorative columns.

## 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 mechanics 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 showing screen opening and recessed U-channel built into fiberglass Roman columns.



Customized for your home, Executive 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

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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 screen roller, mesh and motor.

As in any typical construction project, the integration of Executive motorized screens not only involves the builder or the builder's superintendent, but also the subcontractor tradesmen (electricians, framers and finish carpenters) and Phantom's Authorized Representative responsible for the territory where the project is to be completed.

The Phantom Representative will provide a proposal which will include the costs associated with Phantom's products, installation, project management services, site inspection visits and training. However, you should be aware of other expenses that will be incurred by other trade suppliers during the preparation phase. These added costs are outlined in the following sections and should be referenced and addressed during the submittal of the proposal to the client.

If you choose to opt for a recessed installation, you need to also review other services required to complete the installation of the Executive screens. We recommend you review Phantom's Planning Considerations & Project Management Overview document that outlines the additional services and fees; this is available from your local Authorized Phantom Screens Representative.

## 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.

## 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 need 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 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 finish details of every column to determine any additional costs that may occur. Additional time may be required for applying the lathing and column prep for the selected finish.



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



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

# Architectural & Builder Services

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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 screens 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/specifications](http://www.phantomscreens.com/specifications)** to access our technical drawings and specifications.

## FOR MORE INFORMATION:

Please contact your local Phantom Screens Authorized Distributor at

**1-888-PHANTOM (1-888-742-6866)**

**[www.phantomscreens.com](http://www.phantomscreens.com)**