CONCEALED BLINDS

An introduction to concealing blinds in windows, gables and skylights.

INTRODUCTION TO CONCEALED BLINDS

"A room is not a room without natural light." is a famous quote by Louis Kahn. Natural light is something Architects and Designers know well and they design buildings with this in mind.

Innovations in architectural glazing have led to increasing glazing areas with Architects pushing the boundaries in terms of shape, size and performance. Home owners are also installing sliding or bi-folding doors, floor to ceiling windows, glass boxes, and skylights, all to increase the natural light in their homes.

All together this creates beautiful exteriors and interiors, but it also creates a need to control the daylight and exposure of a room to the outside.

Shading products such as blinds are increasingly motorised leading to the need to provide power to every window.

If the architect or designer are not proactive, the end result can be that shading solutions are considered by the property owner once construction is complete. This leads to surface-mounted solutions, often with visible cables, guide tracks and wires.

By being proactive, Architects and Designers can anticipate the need of their clients and achieve perfect integration.

Continue to read to get concreate information on how blinds can be concealed in windows, gables and skylights.

REASONS TO USE BLINDS

To provide **decoration** and **control the natural light** at throughout the day.

To provide **privacy** to bedrooms, bathrooms, and rooms exposed to people outside.

To **manage glare** or provide **full blackout** in bedrooms and any room with a screen.

To **Block UV rays** from tinting furniture, fabric and art during daytime.

To **save energy**, **reducing solar heat gain** in the summer and **providing insulation** in the winter.

Roller blinds installed in skylight and doors.

BACKGROUND TO

BLIND CONCEALMENT

Over the last decade, there has been an increase in recessed installations of spotlights, speakers and now increasingly also of blinds.

Trends for contemporary and minimalist interiors have led Architects and Designers to look at solutions to integrate and hide devices wherever possible.

Bespoke blind companies have made custom installations and also provided blind cassettes matching the colour of the ceiling or window frame.

For skylights, blinds and side channels have been hidden in recessed pockets or above surface-mounted shelves.

In commercial buildings, blinds and cassettes have been mounted flush with the inner ceiling.

WHAT IS A

CONCEALED BLIND?

When blinds are fully concealed they can be seen from below showing only the underside of the bottom bar when the blind is not in use.

To fully conceal blinds, builders and bespoke blind companies have until now built-in blinds behind fixed plasterboard or similar material. The panel is painted to match the surroundings and leaving a slot for the blinds to come through.

Even though this creates a beautiful end-result it has some limits, It requires early planning and selection of fabric, blind installation during construction, it causes damage to the blind and prevents its access for maintenance afterwards.

There is now the option to use Blindspace to fully conceal blinds in any window, gable and skylight. The solution allows access to the blinds after installation.

Roller blinds in long Blindspace® box

Skylight roller blinds, honeycomb blind on left side and roller blind on right side.

COMMON TYPES OF

BLINDS TO CONCEAL

The most common type of blind to have concealed is the roller blind, followed by the honeycomb/pleated blind.

Both types are supplied in numerous fabrics with different properties relating to light/transparency, energy, acoustics, and aesthetics.

Both types can be electrically set up as a stand-alone installation or part of a home automation system. They also can be used in windows, gables and skylights.

Any type of blinds can be concealed with careful planning as long as the structural spaces around the glass are large enough.

CONCEALED

ROLLER BLINDS

A roller blind mainly consists of two brackets, a roller, a fabric and a bottom bar. For electric roller blinds, the motor sits inside the roller. The design is minimalist yet elegant and can be very quiet.

The space needed to conceal roller blinds depends on the width and height of the glazing area. The size of the roller varies, with bigger roller tube and rolled-up fabric as the area to cover gets larger. The size of the bottom bar is another factor to consider.

For vertical roller blinds, small bottom bars can be selected. However, for skylight roller blinds and tensioned roller blinds, larger hem bars are needed to keep the fabric straight.

Skylight and blackout roller blinds often have side channels, that also need to be concealed.

Roller blinds in skylight and sliding doors.

Honeycomb Duette® blinds in shaped corner window.

CONCEALED

HONEYCOMB BLINDS

Honeycomb blinds mainly consists of a fixing bar that is fixed to the ceiling, the stacked fabric and a bottom bar.

For electric honeycomb blinds, the motor usually sits inside the fixing bar with wires hidden through the honeycomb cells.

The space needed to conceal honeycomb blinds depends on the width and height of the glazing area and the fabric chosen. As the blind is stacked, the space needs to be deeper than for roller blinds for the same window type. However, the width of the space does not have to be increased with increased window sizes (in comparison to roller blinds).

For skylight or bottom-up blinds, wires are needed to pull the blind. For smaller glazing areas, these wires can be concealed within the sides of the window.

WHEN DESIGNING FOR CONCEALED BLINDS

1. **The more space allowed** and the more robust pocket surrounding the space, **the more options** for different types of blinds and installations.

2. **Larger glazing areas require more space for blinds**.
    1. **Roller blinds** – average size window needs **100mm X 80mm**
    2. **Blackout roller blind** – need a minimum of **100mm X 130mm**
    3. **Honeycomb blind** –need a minimum of **100mm X 200mm**

3. **Power and network cables** for different electrical blinds and controls should be brought to the space to be hidden too.

Roller blinds in window and bi-folding doors.

CONCEALED BLINDS FOR WINDOWS AND DOORS

When designing for concealed blinds for windows, floor to ceiling glazing, bi-folding doors and sliding doors, there are two main options:

- To provide space to conceal at the top only - still having gaps between the walls and the fabric on the sides.
- To have top space and space at the sides to eliminate gaps and enable full black out or the use of insect screens.

Bespoke blind companies are also designing bottom-up blinds that appear from below using concealed guide tracks or wires at the sides of the glazing area.

For larger areas, multiple blinds can be installed to allow more flexibility in shaping the light, providing various options to open and close the blinds.

A recent trend consists in having dual blinds in the same window, such as a semi-transparent privacy blind and a blackout blind. This solution requires more space.

By providing a top space 100mm wide and 130mm deep, and side frames 100mm wide and 40mm deep, a number of different installations are possible: single roller blind, dual roller blinds, or a tensioned blind with side channels.

Honeycomb Duette® blinds in shaped windows.

CONCEALED BLINDS IN GABLES AND SHAPED WINDOWS

Bespoke blind specialists can conceal blinds in almost any shape or form as long as there is space provided.

While normal roller blinds need to be installed levelled, tensioned roller blinds with side channels have more flexibility.

The honeycomb blind can be installed in any angle as long as there can be thin guide wires supporting the blind.

The most common way to conceal triangular blinds in gables is to provide a space along the sloping sides for a honeycomb blind to be concealed.

In some cases, due to the way the gable is designed it can work better to conceal the blind at the bottom of the window, to be pulled-up. However this option will have permanent guide wires across the glazing.

With shaped windows, it is recommended to consult with a blind specialist at the earliest planning stages of the project.


Concealed motorised skylight blind 5000mm X 6000mm

CONCEALED BLINDS IN SKYLIGHTS

When designing for concealed blinds in skylights and roof lanterns, there are some different options available:

- With or without side tracks,
- With or without visible wires,
- With or without a space to conceal the hem bar, to only show the fabric when the blind is completely out.

For best results, it is recommended to provide a space for concealed blinds on all 4 sides of a skylight.

For skylights up to 4m x 2m, the minimum space to allow for Zip roller blinds is 100mm wide and 130mm deep on both ends and 100mm X 40mm on both sides.

There are many parameters affecting skylight blinds and solutions vary where there are glass fins or box structures.

Dual Insect screen/Blind or Screen/Blackout skylight solutions are also available but require extra space.

It is recommended to consult with a blind specialist from the earliest planning stage of the project.

Concealed boxes with closed covers plastered in for future potential installation of blinds

FUTURE-PROOF WITH HIDDEN BOX FOR POTENTIAL INSTALLATION

When designing or installing a large glazing area such as glass boxes, floor to ceiling windows, sliding or bi-folding doors, this is often done to get more natural light into a room.

Shadings and blinds are often forgotten and overlooked during the planning and design brief of a project.

Blind companies are then contacted at late stage to install shading solutions. This results in visible blinds, surface mounted, and for skylights visible guide tracks or wires.

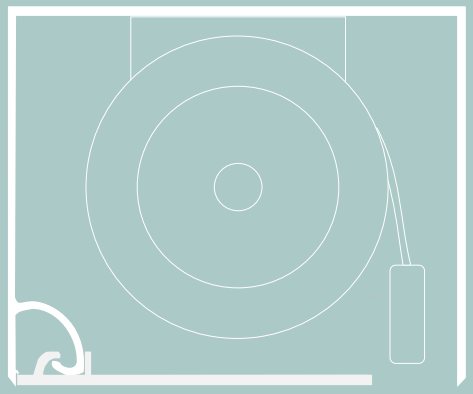
Architects and Designers can anticipate future need and include the option for later installation of concealed blinds.

A space for blinds can be prepared with electrical wires fully concealed behind a closed cover.

The hidden space gives the option to the home owner to decide later to use it and install blinds. The closed cover will have to be replaced by an open one to allow the concealed blind to appear through.

BLINDSPACE®

A PATENTED SOLUTION USING BOXES WITH COVERS TO CONCEAL BLINDS, WIRING AND SIDE CHANNELS.



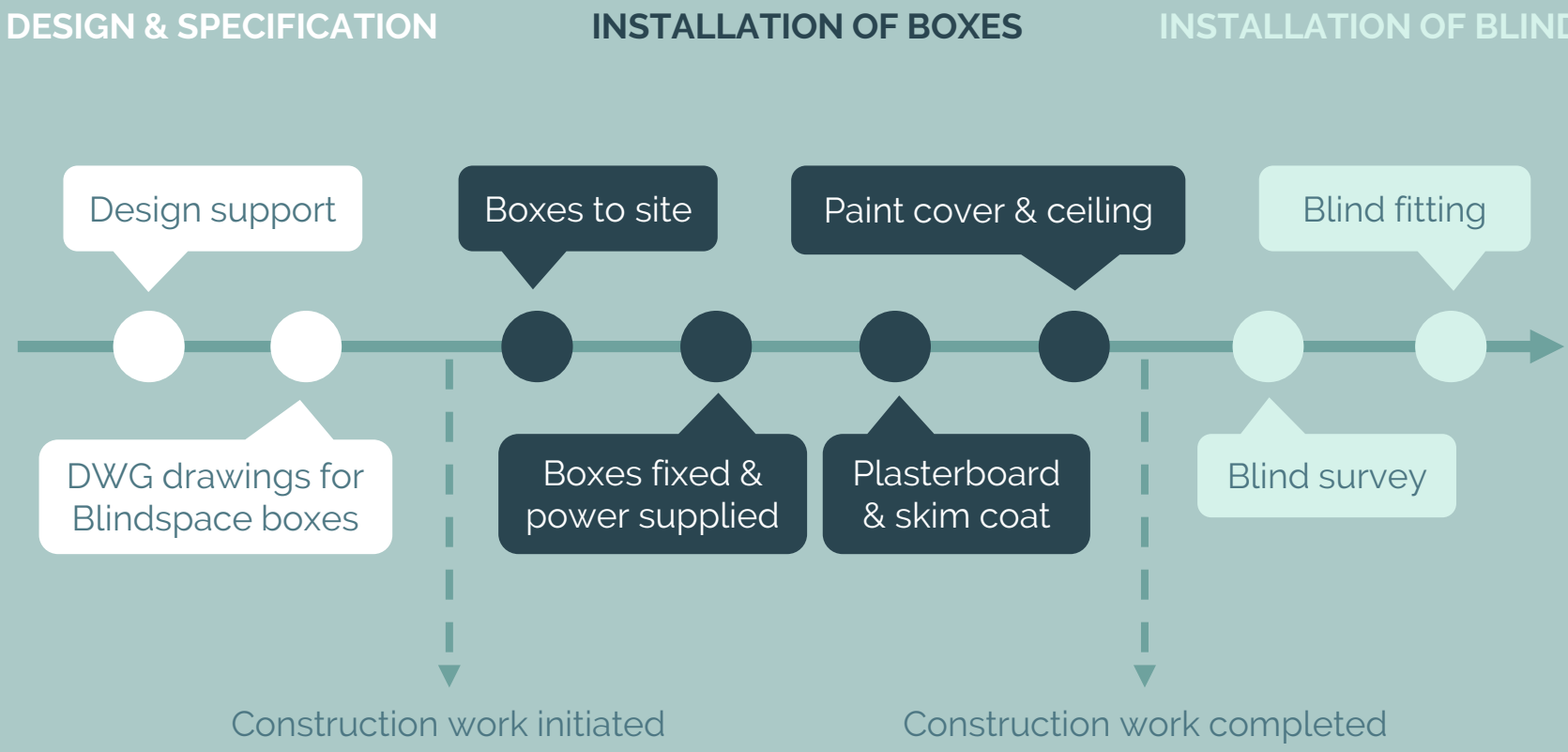
Detachable cover for later installation of blinds and access for maintenance.

Minimal visual impact with plastered edges leaving only hair lines between the cover and the ceiling.

Cover to be painted with emulsion paint to match the surrounding.

Closed cover – an option for future installation.

INCLUSION OF BLINDSPACE® BOXES



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CONCEALING BLINDS THROUGH INNOVATION

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