SMART PRIVACY GLASS
The Future of Glazing Solutions...

TECHNICAL GUIDE

SWITCHABLE GLASS

VISUAL PRIVACY **REMOTE CONTROL** **PROJECTION SCREEN** **BRITISH MANUFACTURER**

Overview

Toughened glass coated with our optical switchable smart film layer

Switchable Glass switches from frosted to clear at the flick of a switch. This means that the Switchable coating can be simply applied to any type or thickness of glass, creating a solution with optimum clarity and performance. Another major factor is its comparatively low manufacturing lead-time, making it the ideal choice for all time critical projects.

A simple ON-OFF mode switches the glass from being frosted to clear. In its frosted state, the film acts as an electronic blind, providing privacy and security for any glass, window or partition.

This unique glass technology can also be used as a high definition rear projection screen to display corporate presentations, TV images and videos. A truly innovative product making switchable smart glass technology accessible to everyone, while giving your home or business that added 'WOW factor'.

Features

- Standard glass thicknesses from 6mm to 15mm
- Maximum single panel size 1.5 x 3.0 metres
- Multiple panels can be joined to create glass walls & partitions
- Operating power 110VAC, frequency 50/60Hz
- Power used 7 watts & current 0.1 amperes per m^2

Benefits

- Switches from frosted to clear
- Cost effective
- Panel size up to 3 metres (118")
- Easy maintenance and cleaning
- Low energy consumption
- Custom panel sizes made to order
- Multifunctional

Applications

- Privacy / security glass
- Glass walls / partitions
- Vision panels / doors
- TV / video screen
- Presentation display
- Furniture / displays
- Manufacturing sealed units
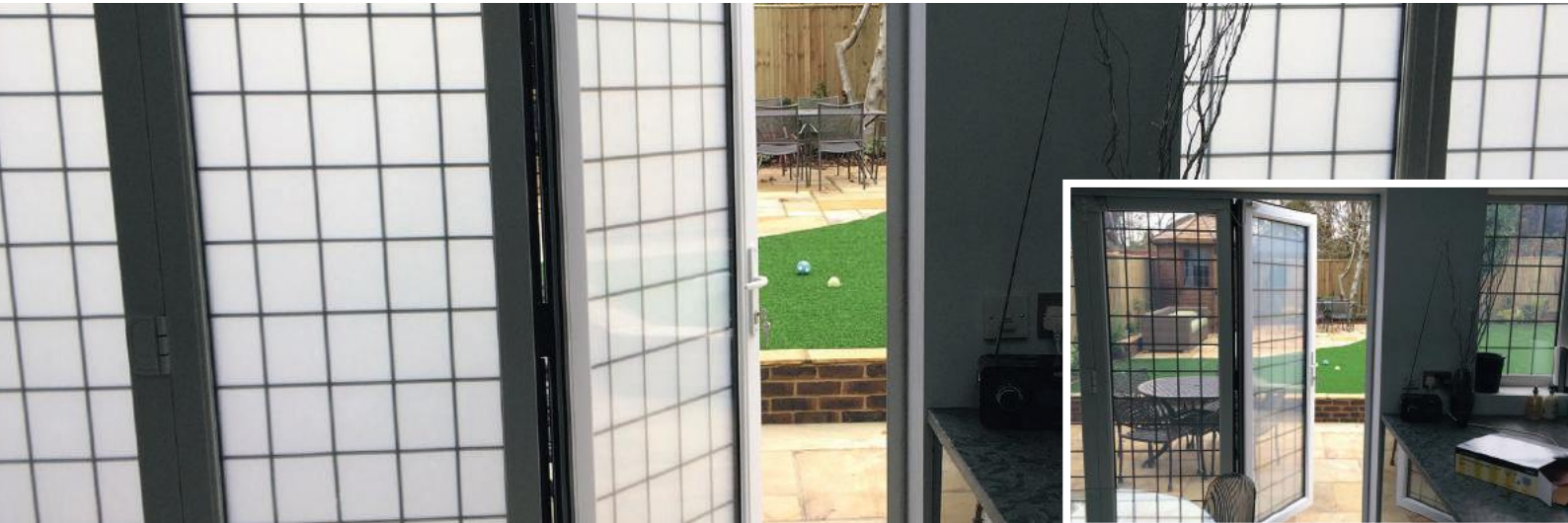
VISUAL PRIVACY	REMOTE CONTROL	THERMAL INSULATION	BRITISH MANUFACTURER

Overview
Insulating glazing incorporating switchable smart glass technology

This durable solid state technology replaces the need for old fashioned blinds or curtains offering greater control and comfort within any room. The (PDLC) switchable layer is coated down on the inner surface of one panel of glass, then this is combined with a second panel of glass to form a sealed unit. Our switchable double glazed windows utilise a warm edge spacer bar with an argon filled air gap in between to offer greater insulation and performance. Depending upon the customer requirements we offer a variety of glass options e.g. low iron, low E coatings to provide the most efficient smart glass windows on the market today.

A simple ON - OFF mode switches the glass from being clear to frosted. This product is simple to install just like any standard double glazed sealed unit. Enjoy the benefits of insulated glass making your room warmer in the winter and cooler in the summer. You can even treat this technology like normal glass windows, since it requires no maintenance or special cleaning requirements.

Features

- Standard thickness of sealed units 18mm, 24mm and 28mm
- Maximum single unit size 1.5 x 3.0 metres
- Energy efficient sealed units (Argon filled)
- Operating power 110VAC, frequency 50/60Hz
- Power used 7 watts & current 0.1 amperes per m^2
- Custom panel sizes made to order

Benefits

- Switches from clear to frosted
- No external wires
- Panel size up to 3 metres (118")
- Easy maintenance and cleaning
- Low energy consumption
- Custom panel sizes made to order

Applications

- Privacy / security glass
- Vision panels / doors
- Conservatories / sun rooms
- Sky lights / glass roofs
- Bathrooms / kitchens
- External glazing / windows
- Replace blinds / curtains

VISUAL PRIVACY

REMOTE CONTROL

DURABLE TECHNOLOGY

IDEAL FOR WET ROOMS

Overview
Laminated glass incorporating our switchable smart glass technology

The seamless nature of laminate glass means that panels can be positioned side by side (glass to glass) without the need for any vertical frames. This makes switchable laminate glass the ideal choice for glass walls and partitions, creating a very minimal and contemporary look.

A simple ON - OFF mode switches the glass from being clear to frosted and replaces the need for old fashioned blinds or curtains, offering greater control and comfort within any room.

The switchable film is protected, being bonded between two sheets of glass, which makes laminate glass a safer product and more durable in applications such as high traffic areas, bathrooms, hospitals or clean rooms. Our unique manufacturing process means that our laminated smart glass panels provide superior performance and clarity, compared to other switchable glass products in the market.

Other options include low iron glass, toughened glass, bullet resistant glass and light weight scratch resistant polycarbonate panels.

Features

- Standard glass thicknesses 12mm and 14mm
- Maximum single panel size 1.5 x 3.0 metres
- Multiple panels can be joined to create glass walls & partitions
- Operating power 110VAC, frequency 50/60Hz
- Power used 7 watts & current 0.1 amperes per m^2
- Custom panel sizes made to order

Benefits

- Switches from clear to frosted
- Toughened / security glass
- Panel size up to 3 metres (118")
- Easy maintenance and cleaning
- Low energy consumption
- Frameless glazing offering acoustic properties

Applications

- Privacy / security glass
- Vision panels / doors
- Glass walls / dividers
- Office partitions / meeting rooms
- Bathrooms / changing rooms
- High traffic areas / clean-rooms
- Information windows / counters
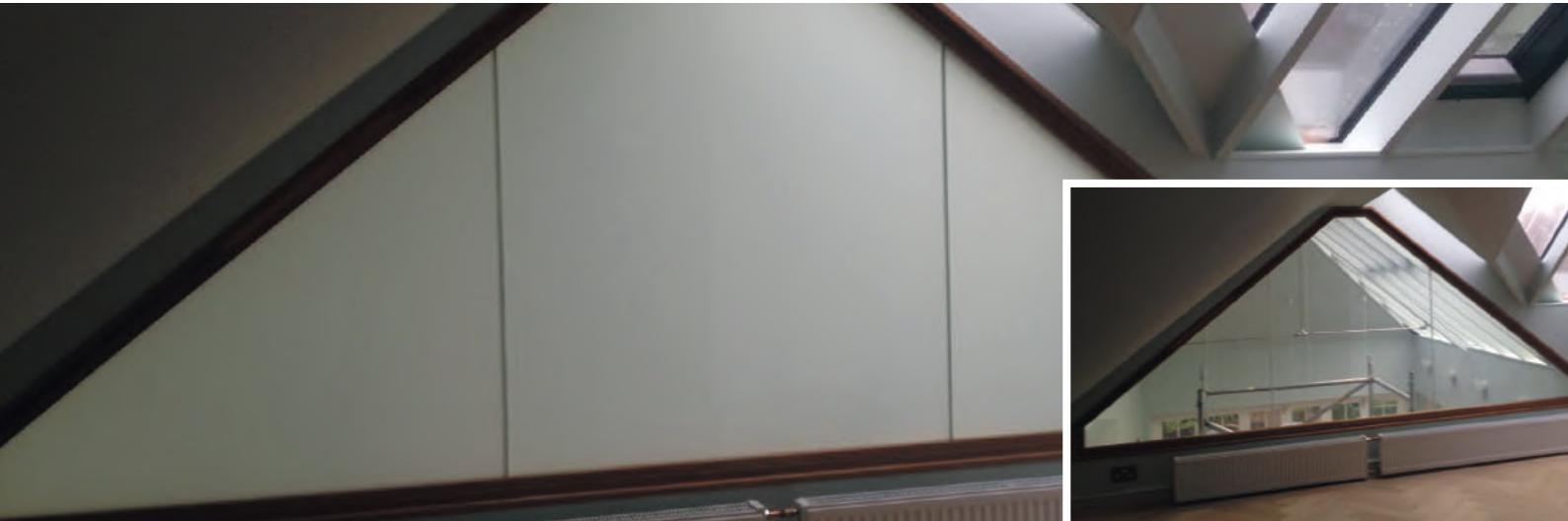
VISUAL PRIVACY	REMOTE CONTROL	FIRE RESISTANT	BRITISH MANUFACTURER

Overview
Switchable technology fused with Pyroguard Fire Safety Glass

Bringing all the benefits of our standard switchable technology, privacy or projection is still only a press of a button away, making it a comprehensive solution for commercial and residential applications.

Used in the correct way in commercial applications, fire safety switchable glass can help to safeguard valuable office equipment or even furniture, minimising damage and helping to contain any fire that may break out.

Considering that one of the primary functions of switchable glass is to provide privacy, fire resistant switchable glass is perfectly placed for enclosing somewhere like a server room- providing privacy to hide your valuable IT systems as well as containing any fire which may break out, an important feature for an area with such a high risk of fire.

Fire resistant switchable glass will help you meet fire safety regulations whilst maintaining the stylish and modern environment you are looking to achieve.

A perfect alternative for standard steel or wooden fire doors, fire safety switchable glass may even be a safer option, allowing for the potential of greater visibility in the unfortunate event that the unthinkable does happen.

Features

- Full range of Pyroguard fire rated options
- Multiple panels can be joined to create glass walls & partitions
- Operating power 110VAC, frequency 50/60Hz
- Power used 7 watts & current 0.1 amperes per m^2

Benefits

- Fire safety compliant
- Custom panel sizes made to order
- Easy maintenance / cleaning
- Low power / running costs
- Frameless glazing

Applications

- Privacy / security glass
- Vision panels / doors
- Glass walls / dividers
- Office partitions / meeting rooms
- High traffic areas / clean-rooms
- Server rooms

VISUAL
PRIVACY

REMOTE
CONTROL

SOUND
INSULATING

BRITISH
MANUFACTURER

Overview

Sound Insulating Acoustic Switchable smart glass for audio privacy applications

There is no better way to compliment visual privacy than by using glass with sound insulating properties. In environments which necessitate audio privacy, this technology provides you with the ability to provide sound insulation without having to compromise on style or effect.

Used in warehouses or a factory, this technology can help to reduce the sound emitted from heavy machinery, as well as the loud noises often experienced in warehouse environments. This is ideal for corporate applications that require a separation between an office and factory environment, keeping those loud noises out of the office space. Sound insulating Switchable Glass is also perfectly placed in a standard office environment, creating total privacy both visually and audibly, making it suited to meeting rooms, conference rooms and boardrooms - environments where you wish to keep sound in. Commercial applications sees this special glass work well in the service sector, such as opticians, car showrooms or even spas / salons. The perfect way to protect your customer's privacy, this solution helps you avoid distractions and disturbance. On the residential front, sound insulating Switchable Glass provides a fantastic way to create an environment of isolation, the ultimate shut off from the outside world, ideal for homes near busy roads or loud environments.

Features

- Sound Insulating
- Maximum single panel size 1.5 x 3.0 metres
- Multiple panels can be joined to create glass walls & partitions
- Operating power 110VAC, frequency 50/60Hz
- Power used 7 watts & current 0.1 amperes per m^2
- Standard glass thicknesses 10.8mm and 12.8mm

Benefits

- Switches from clear to frosted
- Toughened / security glass
- Panel size up to 3 metres (118")
- Easy maintenance and cleaning
- Low energy consumption
- Custom panel sizes made to order

Applications

- Privacy / security
- Vision panels / doors
- Glass walls / dividers
- Office partitions / meeting rooms
- Factory environments
- Privacy pods/ Study rooms

VISUAL PRIVACY

REMOTE CONTROL

PROJECTION SCREEN

BRITISH MANUFACTURER

Overview

Switchable smart glass walls for video projection applications

A simple ON - OFF mode switches the film from being clear to frosted and in its frosted state the film becomes a high definition rear projection screen.

The screen is available in standard sizes ranging from 30" to 92" diagonal or it can be custom cut to fit any glass size; multiple pieces of film can be joined to create HD large format projection displays.

These screens offer a very minimal look which blends easily into any architectural or contemporary interior, making it the ideal screen choice for both historical buildings (churches, museums, theatres and concert halls) and modern hi-tech environments (hotels, offices, stadiums, shopping malls).

Features

- Ultra clear switchable glass wall (110VAC)
- Maximum glass panel size: 1500 x 3000mm
- Multiple panels are positioned side by side to create a HD video projection wall
- HD projection when frosted & holo effect when clear
- Installation kits, transformers and RF remote control

Benefits

- Switches from frosted to clear
- Cost effective
- Panel size up to 3 metres (118")
- Easy maintenance and cleaning
- Low energy consumption
- Custom panel sizes made to order
- Multifunctional

Applications

- Video / advertising screen
- Exhibition / product launch
- POP / POS displays
- Store windows / retail displays
- Boardrooms / office partitions
- Museums / visitor attractions
- Conservatories / sun rooms

Thank you for Switching On

For over 13 years, Clear2Frost has been developing its own range of patented switchable smart glass technology.

A British manufacturer dedicated to quality and reliablity, the products manufactured by Clear2Frost are designed to offer instant and controllable privacy at the press of a button.

We are pleased you have chosen Clear2Fost for your project, the best choice for quality and reliable switchable smart glass solutions. We are dedicated to providing our customers with not only the very best PDLC products on the market, but also the very best expert support and after-care advice, enabling you to easily maintain your investment, keeping it in great condition for longer.

This document will assist you with installation steps, best practises for care as well as the technical apsects involved in the maintenance of your product.

We hope you enjoy your product and we look forward to working with you again.

Technical Guide- Switchable Glass

1. Shipping

A full crating and shipping service is available for UK and worldwide export.

Where required, shipping crates are individually made for each customer order. These crates are robust and designed to provide protection of glass, film and accessories in transit. A small box will be supplied externally to the crate containing electrical accessories purchased as part of the order.

It is the responsibility of the recipient to offload deliveries, unless otherwise agreed prior to dispatch. Correct handling methods should be observed when offloading. It is the customer's responsibility to notify Clear 2 Frost if access to the delivery address site is restricted.

If no preferred carrier is stated for shipping within the UK, consignments will be shipped through ground carriers and overseas customers' consignments can be shipped via air, sea or road depending on location, cost and timescale required.

Overseas customers are responsible for customs and clearance at the destination country.

All consignments are insured to the full value of the goods. A quotation for crating, shipping and insurance will be provided prior to dispatch.

2. Receiving

Before signing for and accepting the shipment from the carrier, the crates should be inspected for shortages or damage. If shortages or damage is found, the shipping documentation should so be noted and the driver's signature obtained as a witness.

CLEAR 2 FROST should be notified of any short deliveries and/or damage to goods immediately or in any event within 24 hours of delivery in order to pursue a claim with the carrier.

The Carrier or Clear 2Frost are not responsible for shortages or damage if the party taking delivery of the goods fails to inspect the consignment at the time of delivery.

3. Un-Crating

Switchable Glass panels are heavy and the crate should be placed on a level, even surface prior to commencing un-crating.

Warning: Glass panels are positioned vertically in crates, precautions should be taken to prevent panels tipping forward prior to removal of the front panel.

4. Storage

Glass often sustains edge damage between manufacturing and installation; therefore care should be taken when the product is being handled , in line with local recommended guidelines for the handling of glass panels . If the C2F Switchable Glass is not being installed immediately after un-crating, care must be taken to protect the panels and store them in conditions where the relative humidity is less than 80% and a near constant temperature between -20 and +50 ° C in order to prevent the formation of condensation on the glass.

5. Installation

The customer or installer should thoroughly inspect each piece of C2F Switchable Glass prior to installation.

Never attempt to install products which you consider to be incorrectly sized, damaged, scratched, abraded or deficient in any other way, in the first instance contact Clear2Frost for an initial assessment.

Any attempt to install a deficient product will signify acceptance of its suitability and as such cannot not be replaced.

Adhere to all C2F Switchable Glass installation guides. Never install C2F Switchable Glass in pressure glazing systems that do not have a positive stop.

C2F Switchable Glass should never be installed in situations where it may be subjected to loading or pressure or mechanical stress, for example installation into misaligned, damaged or warped framework or concentrated mechanical loads or actions.

We do not recommend the use of laminated switchable glass in frameless glass door applications. Where laminated switchable glass is required for a door application a framing system which supports the glass on 4 sides should be utilised.

Glazing to exterior and wet interior applications must be wet sealed in a suitable frame and impervious to moisture, with provision for the weeping of condensation that may form in the glazing system.

Electrical connections must be positioned and exit at the top of any installation in wet environment applications and must be completely sealed so as to be impervious to moisture ingress.

We only recommend the use of Dow Corning AS7096N, as a sealant, this can be supplied by Clear2Frost.

Ensure all glazing gasket joints are cut and sealed in accordance with the relevant manufacturer's instructions to provide a watertight seal wherever joints are made.

All glass pieces must be supported by two setting blocks. The blocks should have a Shore A Durometer hardness of 85 +/- 5 and be silicone compatible. The preferred location for setting blocks is at quarter points. The electrical connections should not be used to support the glass.

Great care should be taken when installing fixings and fittings to the glass, metal parts should never have direct contact with the surface of the glass or the film and fittings attached by threaded fixings should be tightened to a maximum torque of 1Nm. (To avoid the risk of mechanical threaded fixing becoming loose over time the use of a high quality thread adhesive in line with the manufacturer's instructions should be considered)

Technical Guide- Switchable Glass

Unexplained Breakages can occur even after all precautions for glass handling, storage and protection has been observed, this is beyond the control of the manufacturer and as such is not warrantable. Breakages of this nature can include but is not limited to:

- Thermal Stress
- Glazing System Pressures
- Accidental Damage during Installation
- Excessive Wind loading

5. Glazing

Prior to commencing installation, examine all and make good any unsatisfactory conditions relating to the glazing system, stops, gaskets, channels, rebates which may impair the successful and safe installation of C2F Switchable Glass.

Internal Applications

Dry Glazing: this is the recommended interior glazing method.

Butt Joint Glazing: can be used in internal applications we recommend the use of Dow Corning AS7096N for "seamless glazing" effects, alternatively the use of clear dry plastic jointing trims may be placed between abutted glass panels. (The use of polished edge glass is recommended)

Wet Glazing: If a sealant is required use only Dow Corning AS7096N, which can be supplied upon request.

External Applications

Wet Glazing: Pre-shimmed Glazing tapes and Dow Corning AS7096N are required to create a seal impervious to moisture, with provision for the weeping of condensation that may form in the glazing system.

Framing Systems and Design

C2F Switchable Glass is suitable for glazing to a wide range of steel, timber, aluminium and UPVC systems.

Frame edge clearance and face clearances may be used although a minimum bite edge of 10mm for C2F Switchable Single Glazing and Laminate Glazing and 16mm for Independent Glazed Units (IGUs)

Inadequate clearance for the edges can cause damage due to glass-to-frame contact, a minimum edge clearance of 3mm is recommended to reduce this possibility.

Glass larger than 0.6m2 should be placed on four Shore A Durometer hardness of 85 +/- 5 and be silicone compatible. The preferred location for setting blocks is at quarter points.

The blocks should be 1.5mm narrower than the channel width. Lock Strip Gasket Systems can also require setting blocks, refer to manufacturer for recommendations.

Customer specified holes and cut outs produced during the manufacturing process may cause the edge of the switchable film to discolour slightly and as such will require 4-6mm coverage by a trim, escutcheon or bezel.

Glass Protection

Clear2Frost cannot be held liable for damage caused by other parties. Once the glass has been installed it is the responsibility of the installer, main contractor or building owner to provide protection and cleaning.

6. Electrical Installation

C2F Switchable Glass is an electrical component and should be provided for in the electrical layout including the provision of fused spurs, switches, cable management and electrical connection boxes. All installations must meet the requirements of local regulations and guidelines and be carried out by a qualified electrician.

Any metal framework close to or adjoining the wiring of the panel should be earthed.

C2F Switchable Film or glass must NEVER be installed in direct contact with a metal frame

If in doubt consult a qualified electrician prior to commencing any installation work.

Before installation commences bus bars, connection leads and cables should be inspected to ensure the integrity of insulation.

Where ever possible it is recommended that the operation of C2F Switchable Film or Glass is tested prior to commencement of installation.

Great care should be taken to ensure that exposed bus bars, leads or cables do not come into contact with framework and any metal frames must be earthed and are totally sealed to prevent the ingress of moisture or water.

C2F Switchable Glass / acrylic operates at 110VAC, if the local mains voltage is higher than 110VAC a step down transformer is required. Clear2Frost manufacture and supply a range of thermally protected isolating transformers.

Failure to use Clear2Frost Transformers may result in irreparable damage to the C2F Switchable Glass / acrylic or Film. (Datasheets can be supplied upon request). This is not covered by the warranty, detailed on page 15.

Multiple C2F Switchable Glass panels can be connected in parallel to a single transformer up to the maximum M2 rating of each transformer:

50VA – 2 M²

200VA – 10M²

500VA – 25M²

An RCD with an MCB, or an RCBO should be used along with a fused spur at the connection point for C2F Switchable Glass to provide local isolation.

Selecting the right one should be done in accordance with BS 7671:Requirements for Electrical Installations and will ensure that the device will not give unwanted tripping due to high inrush currents generated by the transformer(s).

Technical Guide- Switchable Glass

It is imperative that the manual switch or remote control is wired into the circuit on the mains voltage side of the transformer; failure to observe this requirement may lead to irreparable damage of the C2F Switchable Glass panels.

Before turning on the power to a new installation the electrician must test the resistance reading between the frame and the bus bar feed cables to ensure that the reading resistance is infinite. If this is not the case the short circuit should be found and insulated accordingly.

7. Cleaning & Aftercare

Once the glass is installed, the glazing contractor should make provisions to ensure that glass surfaces are protected from possible damage caused by the construction practices of other trades.

Special care must be taken during the initial cleaning, cleaning during the construction period, or when film surfaces are severely soiled, in order to prevent marking or damage caused by abrasive contaminants.

In the event that the film surfaces become heavily contaminated with abrasive particles the surface of the film should initially be blown with a low pressure compressed air or electrical blower to remove as much of the contaminant as possible.

Any remaining surface contamination should be removed by gently flicking the surface of the film with a soft bristled cleaning/dusting brush.

CAUTION MUST BE TAKEN TO ENSURE THAT ANY REMAINING ABRASIVE MATERIALS DO NOT BECOME TRAPPED AND DRAGGED ACROSS THE FILM SURFACE AND THE BRUSH; OTHERWISE THE SURFACES MAY BE SCRATCHED.

ALL SWITCHABLE GLASS AND FILM PRODUCTS MUST BE CLEANED WITH SOFT IPA WIPES ONLY WHICH CAN BE PURCHASED FROM INTELLIGENT GLASS / CLEAR2FROST.

Exposed C2F Switchable Film surfaces (C2F Standard Switchable Glass or C2F Switchable Film for Retrofit) should be cleaned initially with either a low pressure compressed air or electrical blower to remove any abrasive contaminants.

PLEASE NOTE THAT THE PLASTIC SURFACE OF THE FILM CAN BE MARKED OR SCRATCHED IF THE CARE AND CLEANING INSTRUCTIONS ARE NOT FOLLOWED.

NEVER ATTEMPT TO CLEAN C2F SWITCHABLE GLASS OR SWITCHABLE FILM WITH A WET CLOTH AND BUCKET OR OTHER WINDOW CLEANING TECHNIQUE WHICH DRENCHES THE SURFACE OF THE GLASS OR FILM. THIS WILL CAUSE IRREPARABLE DAMAGE TO THE PRODUCT AND WILL INVALIDATE THE WARRANTY

To ensure many years of problem free operation we recommend that C2F Switchable Glass receives regular resting hours of 8 hours at a time.

ANNUAL CHECKS: We recommend that the client should check that all wiring is in good condition, framing materials are free of any damage and that the transformer and switch are in good visible order. The areas adjoining the Switchable Glass including walls, ceilings and floors should be checked for structural integrity, excess humidity and temperature. Should any of these items appear unusual the client should immediately notify the original supplier / installer / contractor or Clear2Frost.

8. Transformer Data Sheets

6VA Isolating Transformer

Electrical:-

Input: 230v ~ AV 50/60Hz. Full Load Current 0.045A

Output: 110v ~ AC at 0.054A

Max Power rating: 6VA

Off Load Voltage: 138v

Thermal Protection Self: Resettable thermal fuse 120 ° C

Manufactured and tested in accordance with the relevant sections of EN61558

Connections:-

Input: Black 0.75mm 2 Core Cable 0.9mts Long

Output: White 0.75mm 2 Core Cable 0.9mts Long

Construction:-

Moulded Plastice Box with 2 mounting Feet

Fully Encapsulated

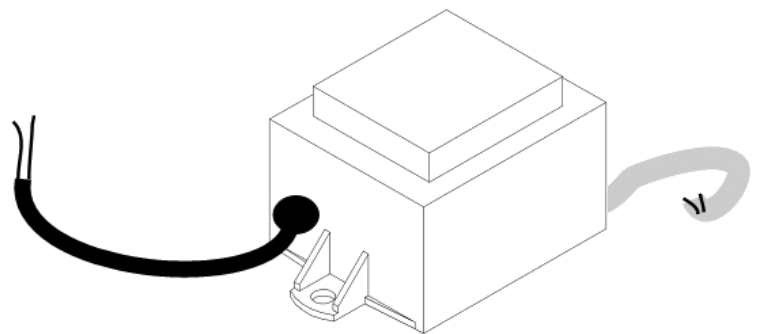Input / Output at opposite ends

Dimensions:-

Width: 45.3mm

Length: 54.3mm

Length Including Fixing feet: 74mm

Height: 43.1mm

Fixing Centres: 65mm Hole Size 4.2mm Dia

50VA Isolating Transformer

Electrical:-

Input: 230V ~ AC 50/60Hz. Full Load Current 0.3A

Output: 110v ~ AC at 0.45A

Max Power rating: 50VA

Off Load Voltage: 120.8v

Thermal Proection: Self-Resettable thermal fuse 120 ° C

Manufactured and tested in accordance with the relevant sections of EN61558

Connections:-

Input: Black 0.75mm 2 Core Cable 0.9mts Long

Output: White 0.75 2 Core Cable 0.9mts Long

Constructions:-

Black Moulded Plastic Box with 4 mounting Feet

Fully Encapsulated

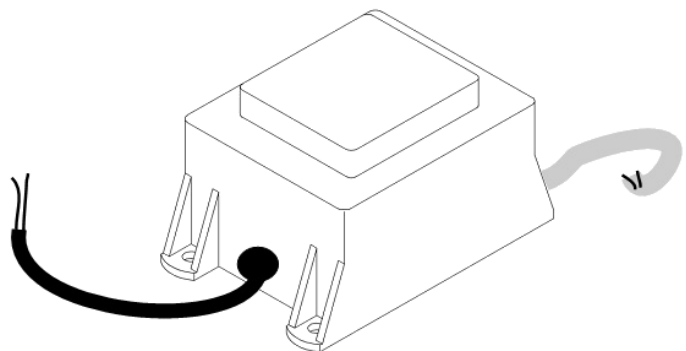Input / Output at opposite Ends

Dimensions:-

Width: 69mm

Length: 82mm

Length Including Fixing Feet: 99.6mm

Height: 68mm

Fixing Centres: 90mm

200VA Isolating Transformer

Electrical:-

Input: 230v ~ AC 50/60Hz. Full Load Current 1.08A

Output: 110v ~ AC at 1.8A

Max Power rating: 200VA

Regulation: 7%

Thermal Protection: Self-Resettable thermal fuse 120 ° C

Manufactured and tested in accordance with the relevant sections of EN61558

Connections:-

Input: Terminal Block

Output: Terminal Block

Construction:-

Black Moulded Plastic Box with 4 mounting Feet
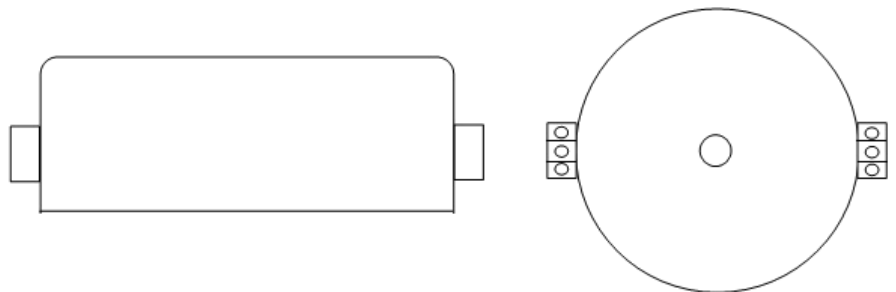
Fully Encapsulated

Input / Output at opposite Ends

Dimensions:-

Diameter: 125mm

Height: 66mm

Mounting Hole Size: 6.1mm Dia

500VA Isolating Transformer

Electrical:-

Input: 230v ~ AC 50/60Hz. Full Load Current 2.5A

Output: 110v ~ AC at 4.5A

Max Power rating: 500VA

Regulation: 5%

Thermal Protection: Self-Resettable thermal fuse 120° C

Manufactured and tested in accordance with the relevant sections of EN61558

Connections:-

Input: Black 0.75mm 2 Core Cable 0.9mts Long

Output: White 0.75mm 2 Core Cable 0.9mts Long

Construction:-

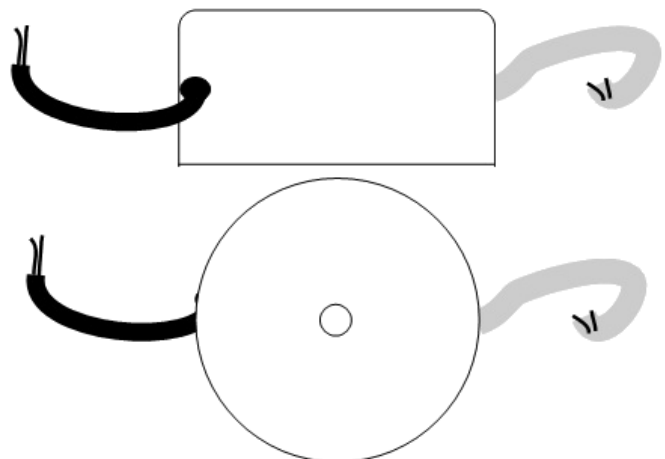Black Moulded Plastic Box with 4 mounting Feet

Fully Encapsulated

Input / Output at opposite Ends

Dimensions:-

Diameter: 152mm

Height: 83mm

Mounting Hole Size: 8.2mm Dia

9. PDLC Data Sheet

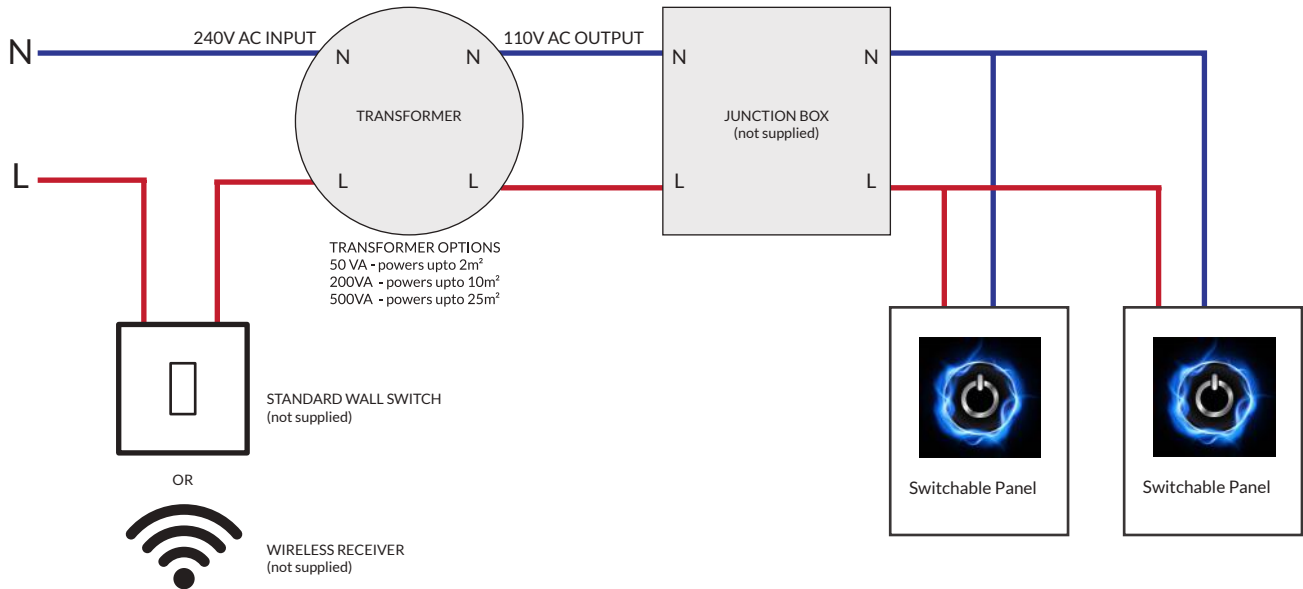| ITEM	MEASURING ARTICLE		TEST CONDITION	UNIT	VALUE
THICKNESS	FILM THICKNESS		MICROMETRE	mm	STANDARD FILM 0.5mm +/- 10%
					STANDARD FILM 0.7mm +/- 10%
OPTICAL CHARACTER	ON	TRANSMITTANCE	SPECTRO PHOTOMETER		78
		HAZE			5
	OFF	THICKNESS			7
		HAZE			78
UV FILTER	SELF-ADHESIVE FILM		WITHIN 1 YEAR		99%
DIMENSIONAL STABILITY	HEAT SHRINKAGE	MD	100 ℃ X 30min	%	0.5
		TD			0.5

Technical Specifications

ITO film – 350 microns

LC polymer coating – 100 microns

Protective coatings – 75 microns

Self-adhesive layer – 45 microns

Power – 110v

Frequency – 50-60 Hz

Electrical current – 0.1 amperes per square metre

Power consumption – 12 watts per square metre

Switching – less than 1 second

Operation mode – On (transparent) / Off (opaque)

Light transmittance – On (75%) / Off (67%)

Test Procedures

Tested over 3 million switches

High temperature – >70 ° C (14 days)

High temperature / humidity – >50 ° C / 95% RH (14 days)

Cold temperature – minus 20 ° C (14 days)

10. Wiring Diagrams

C2F Switchable Glass & Film Standard / Wireless Wiring Diagram

240V AC INPUT

110V AC OUTPUT

N

L

TRANSFORMER

N   N

L   L

JUNCTION BOX
(not supplied)

N   N

L   L

TRANSFORMER OPTIONS
50 VA **-** powers upto 2m²
200VA **-** powers upto 10m²
500VA **-** powers upto 25m²

STANDARD WALL SWITCH
(not supplied)

OR

WIRELESS RECEIVER
(not supplied)

Switchable Panel

Switchable Panel

10. Wiring Diagram (Receiver)

1.

2.

3.

4.

5.