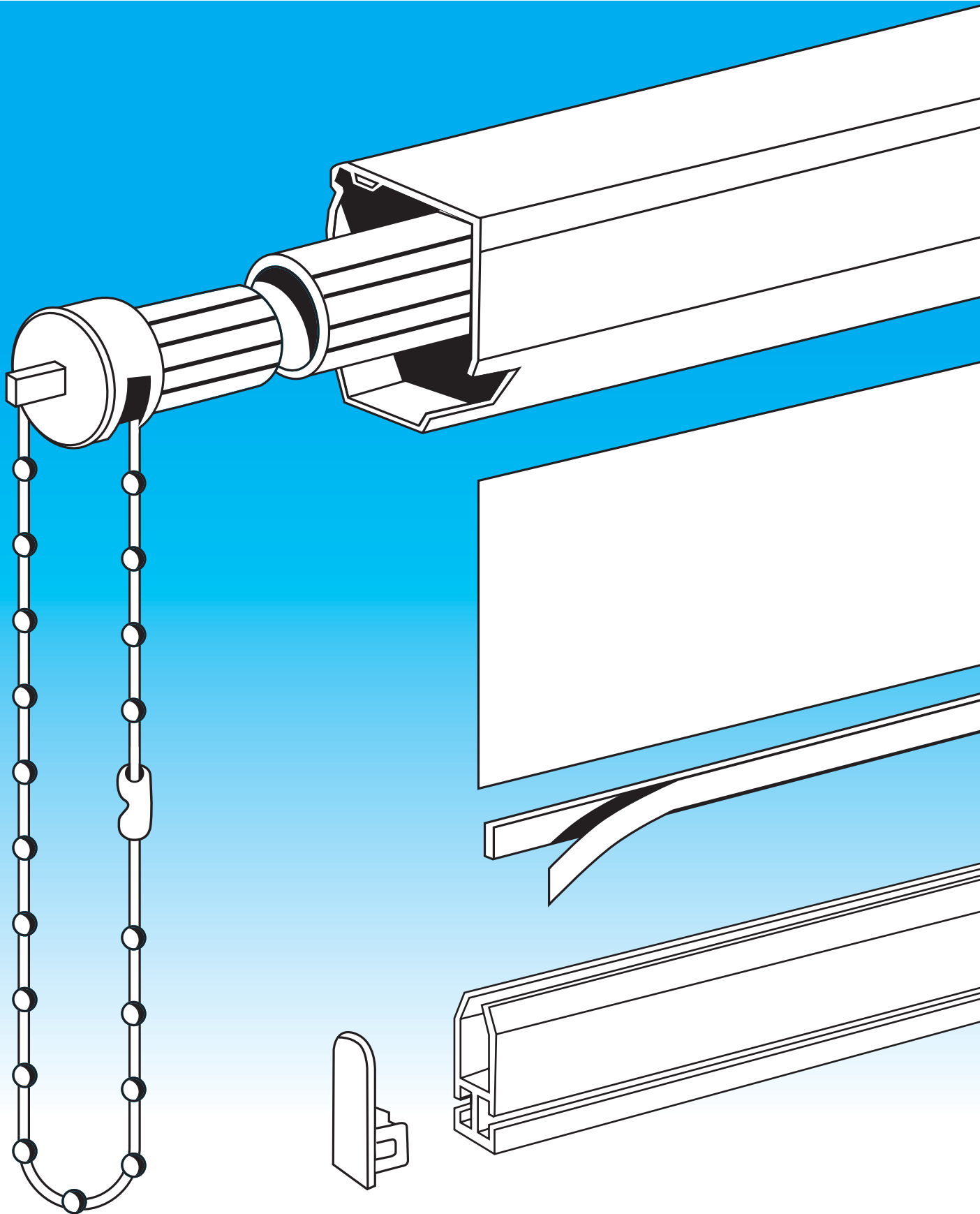
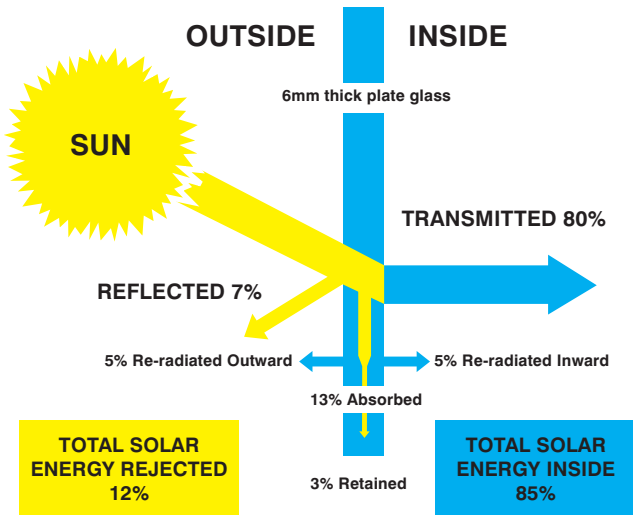




product technical information



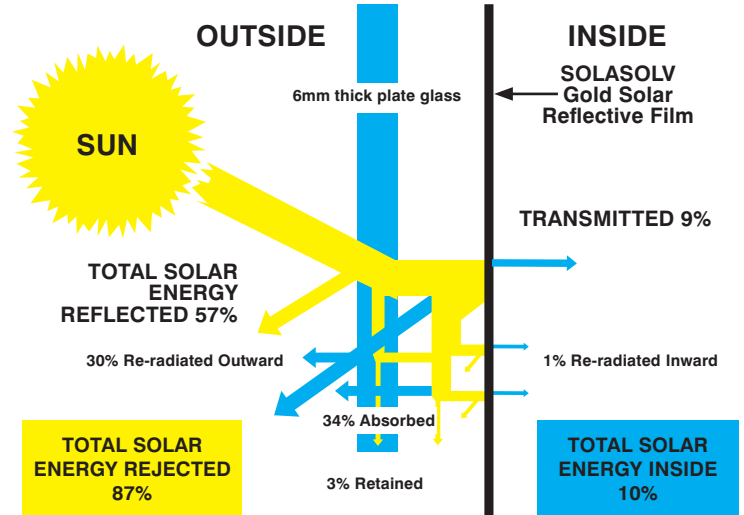
PRINCIPLE ON WHICH SOLASOLV® FILM WORKS



INSTALLATION WITHOUT SOLASOLV® FILM PROTECTION

Diagram 1 shows how an enclosed area is heated by the short wave energy from the sun passing through glass windows. This short wave energy is absorbed by the room surfaces and is re-radiated from them as long wave radiation, generating heat in the process.

Because plain glass does not allow this long wave radiation to pass back through it to the atmosphere, the heat is trapped within the enclosed area.



INSTALLATION WITH GOLD SOLASOLV® FILM PROTECTION

Diagram 2 shows how the rejection of solar energy takes place with very little conversion to heat. The transmitted energy is only converted to heat when it strikes an absorbing surface.

The absorbed heat which is contained in the glass, surroundings and polymer is partly re-radiated to the outside air and partly re-radiated into the inside atmosphere.

The dyed layers of polyester film which go to make up the finished film type, control the amount of visible light which the film transmits. This feature produces the 'Anti-Glare' effectiveness of the films and the colour shading observed when looking through them.

MADE WITH SOLASOLV® TECHNOLOGY

SPECIFICATIONS FOR SOLASOLV® ROLLER SCREEN FILMS

COLOUR	SOLAR REFLECTIVE			
	GOLD	SILVER	GREY	BRONZE
% Glare Reduction (Anti Glare Effect)	93	92	91	84
% Total Solar Energy Rejected (Cooling Effect)	87	77	65	67
% Ultra Violet Light Rejected	99	97	98	98
% Total Solar Transmission	9	7	23	27
% Total Solar Reflection	57	63	19	19
% Total Solar Absorption	34	27	58	54
% Visible Light Transmission	7	7	8	15
Shading Coefficient	0.2	0.19	0.45	0.48

The shading coefficient and % total solar energy rejected of shade products will vary depending on physical conditions existing at the fitted location. Laboratory conditions for the above tests were for a free hanging system with solar film 15mm from 6mm thick glass.

POLYESTER used in shade films is a biaxially oriented polyethylene terephthalate film.

Heat set during processing, it has a melting point of approx. 260°C (500°F) and does not shrink at temperatures below 150°C.

DEFINITIONS FOR SOLAR ENGINEERING PARAMETERS

Total Solar Transmission - the amount of all the sun's energy that goes directly through a glazing system.

Total Solar Reflection - the amount of all the sun's energy that is directly reflected by a glazing system.

Total Solar Absorption - the amount of all the sun's energy that is immediately absorbed by a glazing system.

Total Solar Energy Rejected (COOLING EFFECT) - the amount of all the sun's energy that is rejected by a glazing system.

Visible Light Transmission - the amount of the visible light that goes directly through a glazing system.

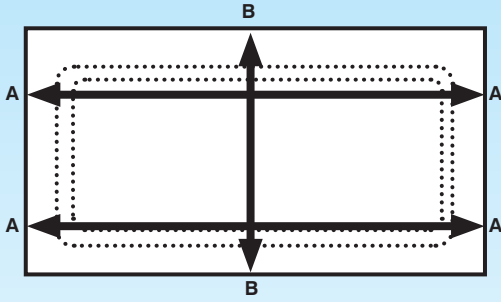
Ultraviolet Light Rejected - the amount of all the ultraviolet light that is absorbed by a glazing system.

Glare Reduction (ANTI GLARE EFFECT) - the percent reduction in visible light.

Shading Coefficient - a measure of the amount of sun's energy that is allowed through a glazing system. The lower it is, the less total energy goes through and the better the shading.

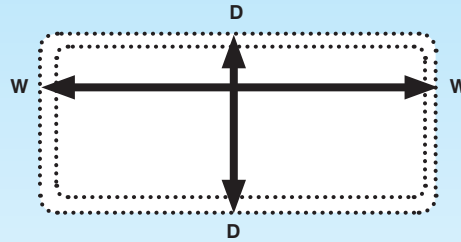
MEASURING INSTRUCTIONS

ALWAYS USE A METAL MEASURING TAPE. ALL BLINDS/SCREENS ARE MADE ACCORDING TO THE INFORMATION AND MEASUREMENTS SUPPLIED. THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR INCORRECT INFORMATION GIVEN BY A CUSTOMER.



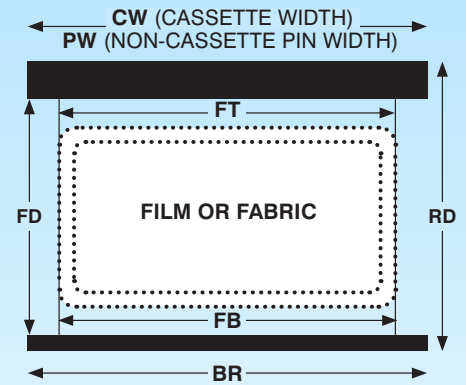
INSIDE RECESS

Carefully measure **width 'A'** at two points to identify the recess and window shape e.g. Square / Rectangular or Tapered. Use the smallest size for 'A' and deduct 6mm. Give this as a **WIDTH** dimension. This is also known as the **CW = CASSETTE WIDTH** on the SOLASAFE screen or **PW = PIN WIDTH** on the SOLAROLA screen. Carefully measure the size for 'B' as the **DROP** dimension. This is also known as the **RD = REQUIRED DROP**.



OUTSIDE RECESS

Decide where the blind/screen is to be installed and carefully measure **width 'W'** and **drop 'D'**. Give the dimension 'W' as **CW = CASSETTE WIDTH** or **PW = PIN WIDTH** and the dimension 'D' as the **DROP 'RD' = REQUIRED DROP**.

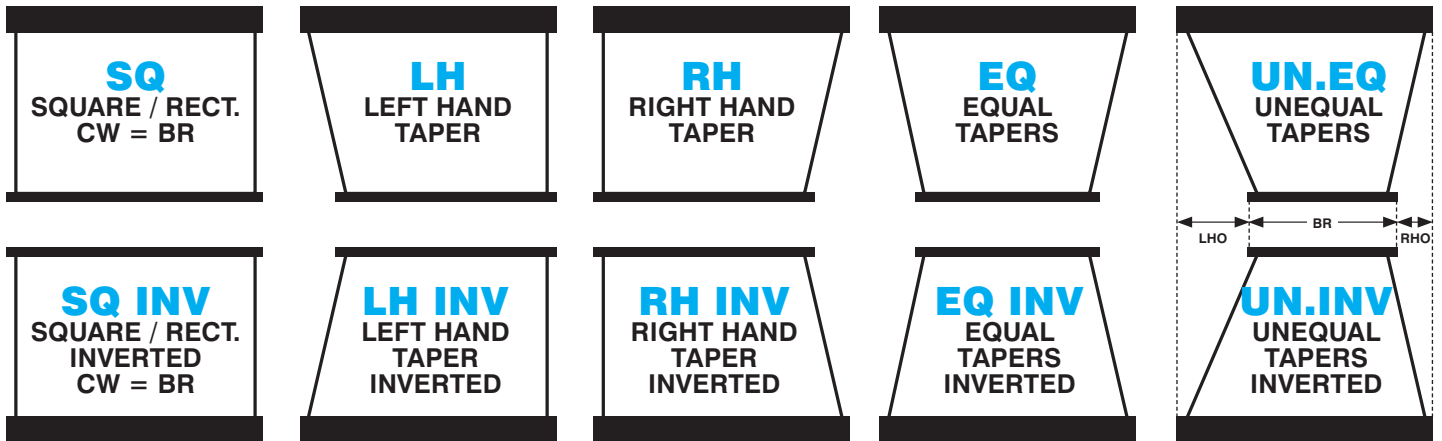


- FT = Film / Fabric Top Width**
(CW or PW less 38mm)
- FB = Film/Fabric Bottom Width**
(BR less 38mm)
- FD = Film/Fabric Drop**
- BR = Bottom Rail Width**
- RD = Required Drop**

Please note that the **CASSETTE WIDTH (CW)** or **PIN WIDTH (PW)** is always **38mm wider** (19mm each side) than the **FILM / FABRIC WIDTH (FW)** to allow the material to roll up and down without catching on the cassette or roll tube.

ROLLER BLIND / SCREEN - SHAPES AVAILABLE

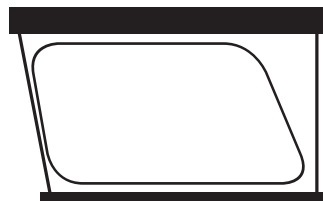
IMPORTANT NOTE - For unequal tapered screens, either the left hand offset (lho) or the right hand offset (rho) as well as the bottom rail width BR must be supplied.



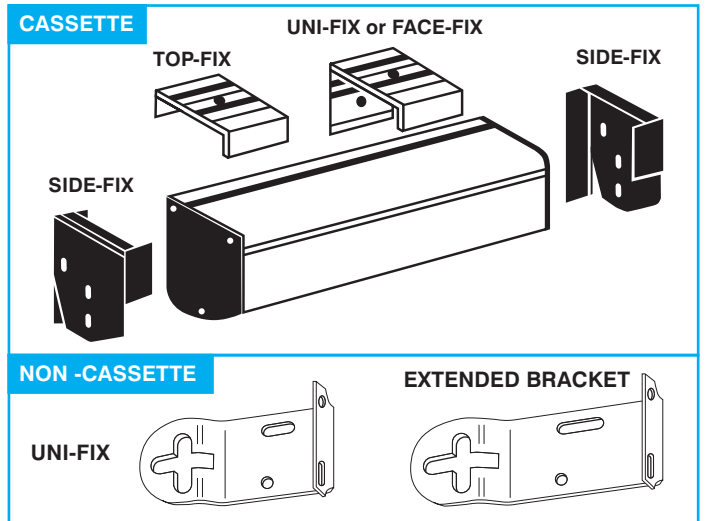
TRAPEZIUM / RHOMBOID / PARALLELOGRAM SHAPED WINDOWS



Where space at the top of the window is limited, an area of glass **A** would not be covered by the film / fabric.



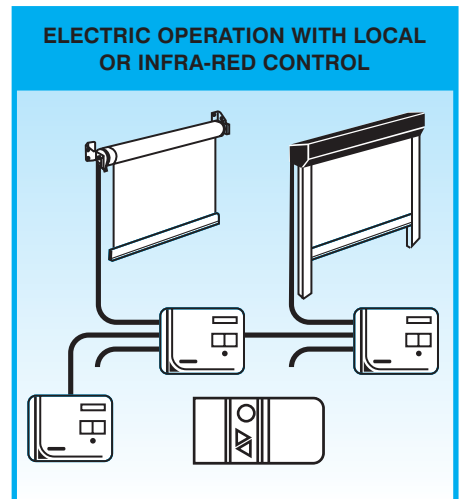
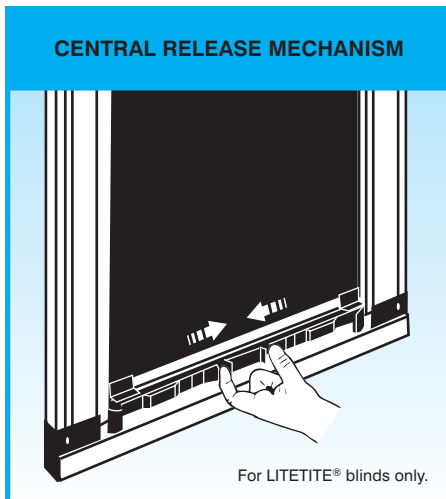
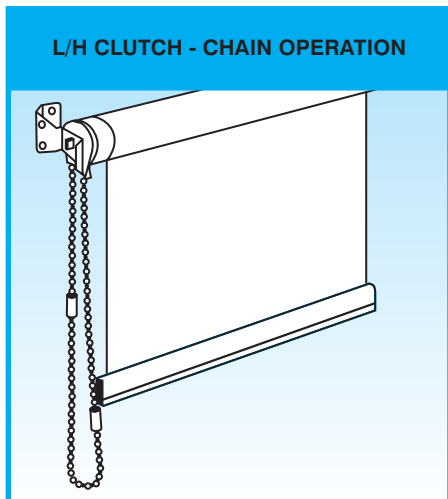
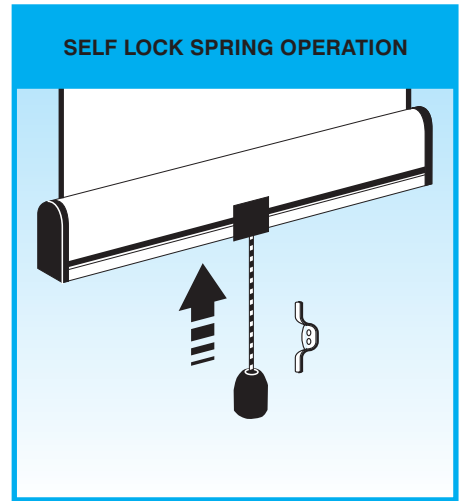
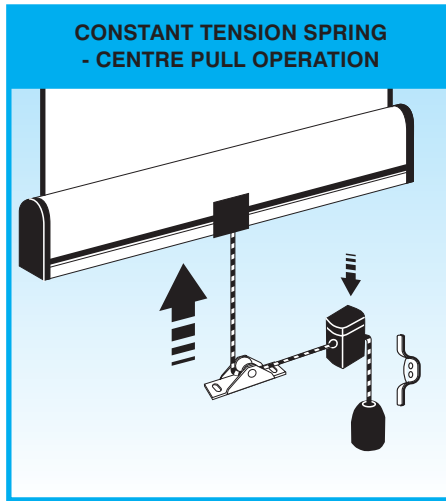
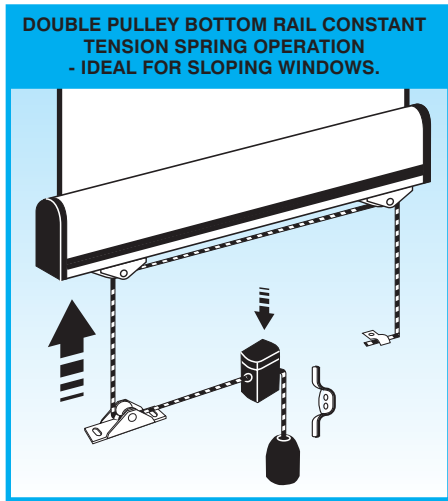
Where space at the top allows the roller / cassette to be extended then the extra width of film / fabric allows all of the glass to be covered.



OPERATING SYSTEMS

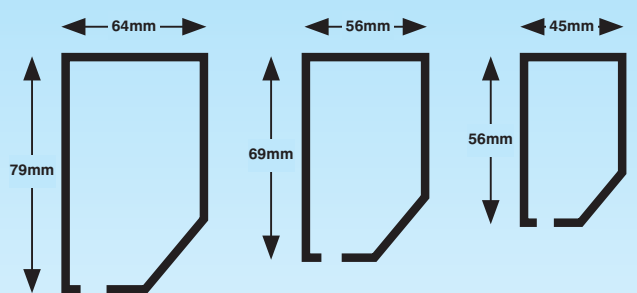
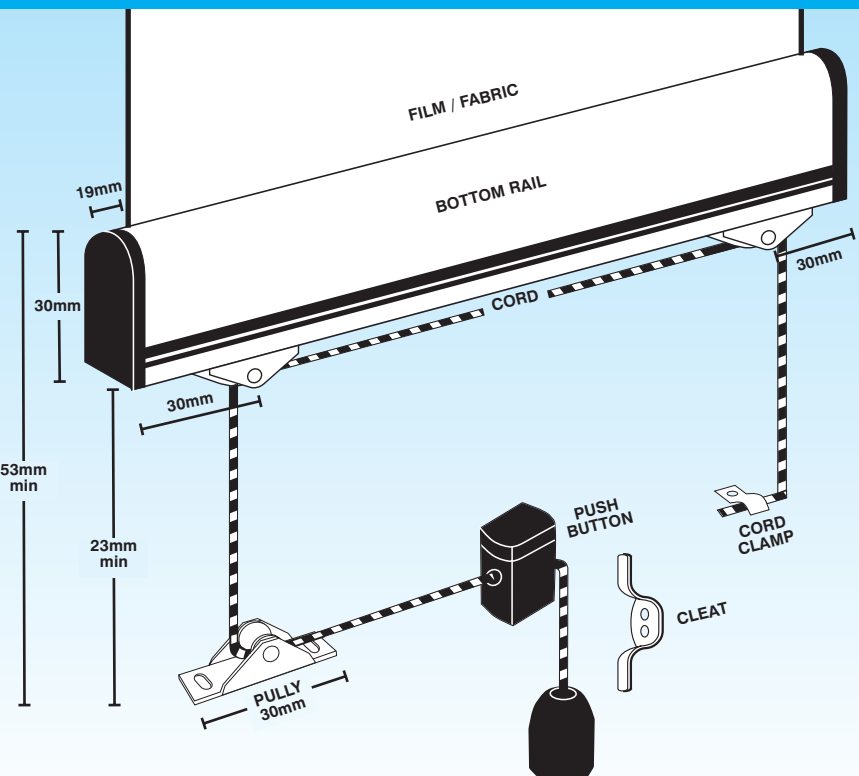
ROLLER OPERATING MECHANISMS:

S/L SPRING: Self Lock Spring **C/T SPRING:** Constant Tension Spring - Centre Pull **D/P SPRING:** Constant Tension Spring - Double Pulley Bottom Rail
L/H CLUTCH: Left Hand Chain Operated Clutch **R/H CLUTCH:** Right Hand Chain Operated Clutch **ELECTRIC:** Mains Power or Low Voltage Motors



We suggest Uni-Fix brackets for inverted screen installations.

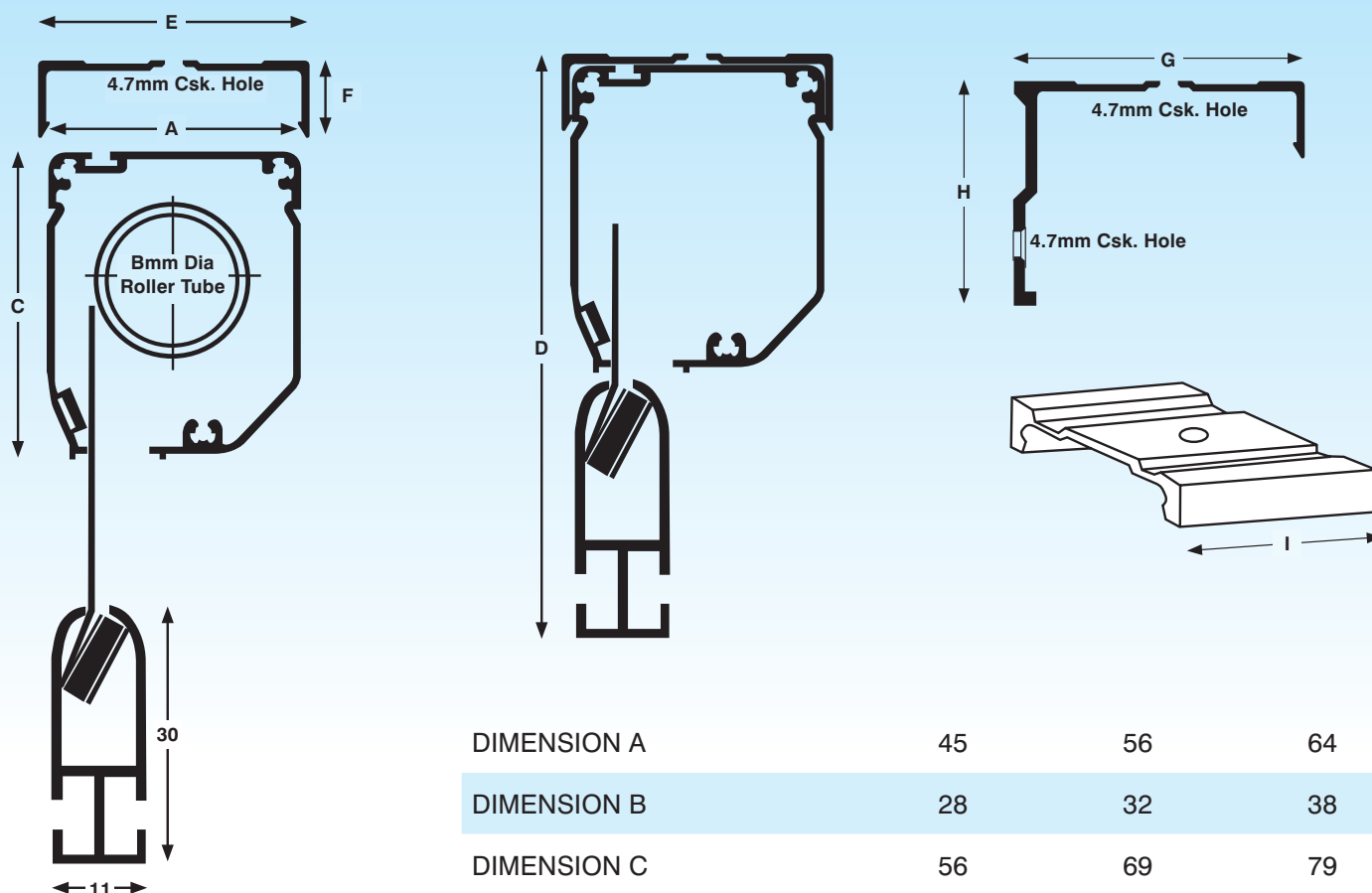
DOUBLE PULLEY BOTTOM RAIL OPERATING SYSTEM



SOLASOLV		
FILM COLOURS AVAILABLE		
Name	INside	OUTside
GOLD	Grey	Gold
SILVER	Grey	Silver
GREY	Grey	Grey
BRONZE	Bronze	Bronze

ALUMINIUM PROFILE DATA

All dimensions are in mm.



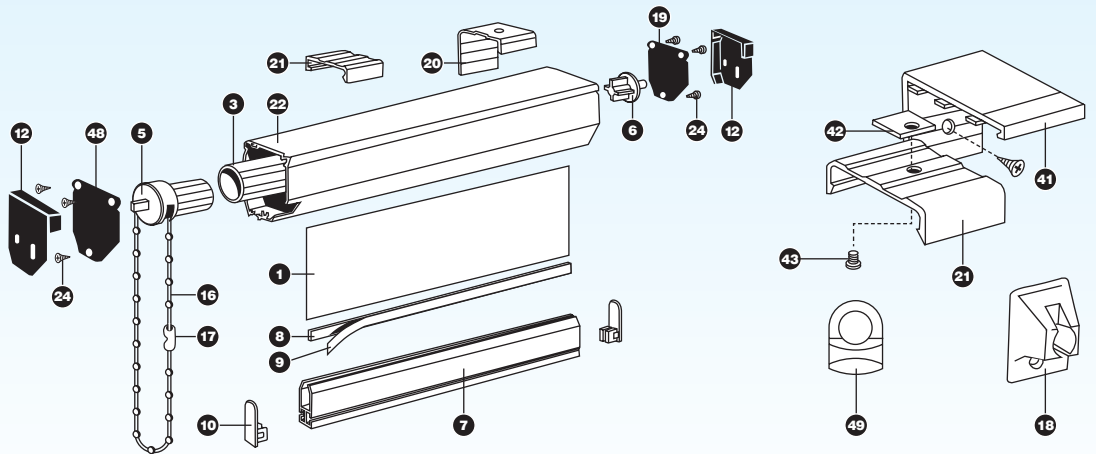
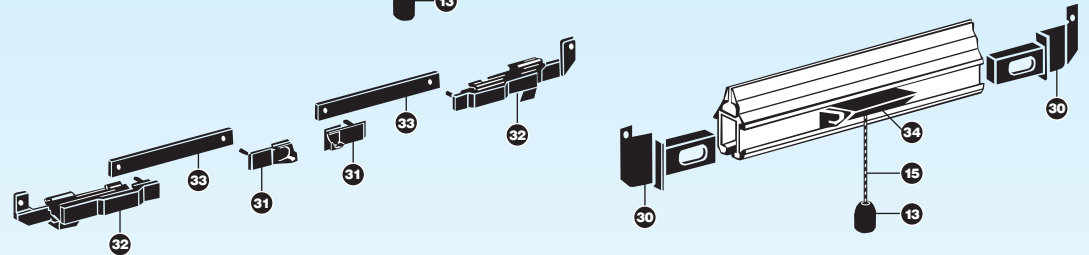
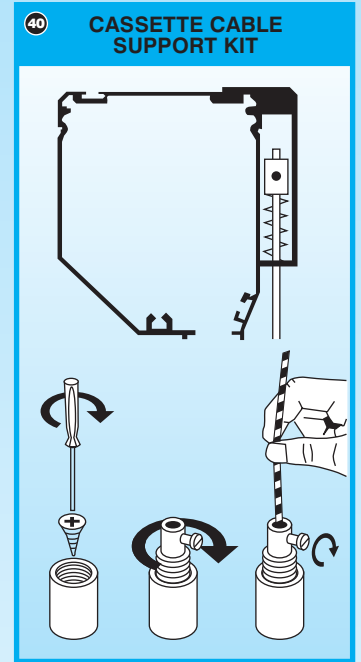
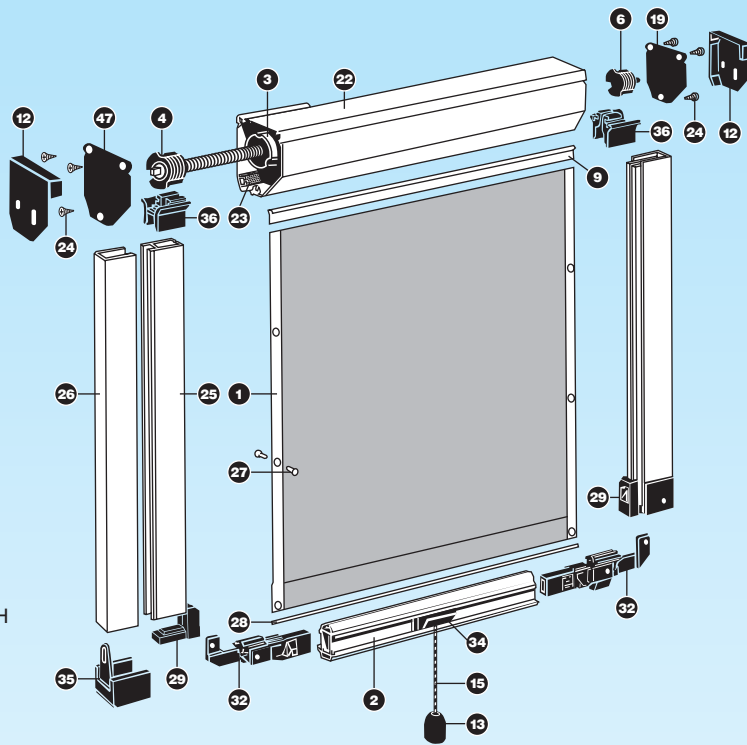
The information in the table shown opposite refers to the cassette systems and associated aluminium profiles used in the manufacture of SOLASOLV® cassette mounted sunscreens and roller blinds.

The aluminium profiles can be powder coated to most RAL standards. More than 400 colours are available in a choice of gloss, matt and satin finishes. Further details are available on request.

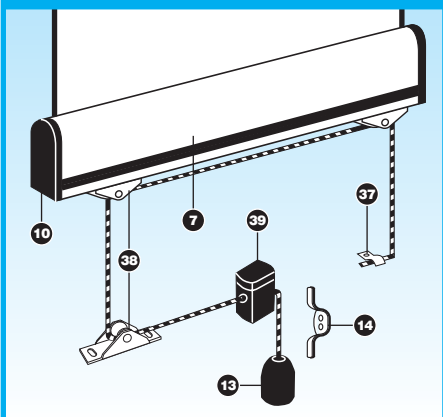
DIMENSION A	45	56	64
DIMENSION B	28	32	38
DIMENSION C	56	69	79
DIMENSION D	90	103	113
DIMENSION E	48	59	67
DIMENSION F	17	17	21
DIMENSION G	52	63	70
DIMENSION H	40	45	80
DIMENSION I	40	40	60
Spring Operation MIN width	425	385	530
Spring Operation MAX width	2,000	2,800	3,500
Clutch Operation MIN width	330	330	330
Clutch Operation MAX width	2,000	2,800	3,500
Low Volt Elec.Op. MIN width	500	N/A	N/A
Low Volt Elec.Op. MAX width	2,000	N/A	N/A
Low Volt Elec.Op. Dim B	28	N/A	N/A
230 Volt Elec.Op. MIN width	N/A	550	550
230 Volt Elec.Op. MAX width	N/A	2,800	3,000
230 Volt Elec.Op. Dim B	N/A	40	40
MINIMUM DROP	250	250	250
MAXIMUM DROP	2,000	2,250	3,000

SPARE PARTS LIST FOR CASSETTE ROLLER SCREENS/BLINDS

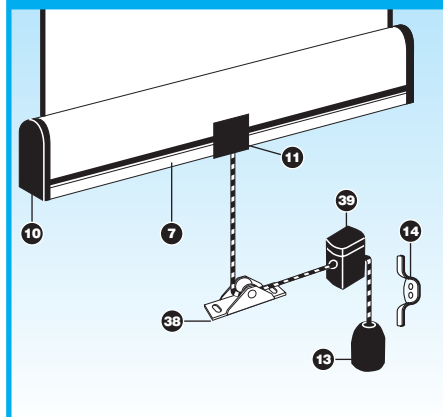
- 1 Film / Fabric
- 2 Blackout Bottom Rail
- 3 Roll Tube
- 4 Spring Mechanism
- 5 Side Chain Clutch Mech.
- 6 Roll Tube End Pin
- 7 Bottom Rail
- 8 Aluminium Retaining Strip
- 9 DS Adhesive Tape
- 10 Bottom Rail End Cap
- 11 Pull Cord Holder
- 12 Side-Fix Bracket
- 13 Acorn
- 14 Stainless Steel Cleat
- 15 Pull Cord
- 16 Operating Bead Chain
- 17 Chain Connector
- 18 Chain Holder
- 19 Cassette Pin End Plate RH/LH
- 20 Uni-Fix Brackets
- 21 Top-Fix Brackets
- 22 Cassette
- 23 Brush Strip
- 24 End Plate Screws short/long
- 25 Inner Side Channel
- 26 Outer Side Channel
- 27 Rivet for LITETITE B.O fabric
- 28 PVC Retaining Rod
- 29 Bottom Block
- 30 BOBR Slide
- 31 Bottom Slide Unlock Tabs
- 32 Bottom Slide with Latch
- 33 Connection Strip
- 34 Bottom Rail Handle
- 35 Bottom Moulding
- 36 Curtain Feed
- 37 Stainless Steel Cord Clamp
- 38 Stainless Steel Guide Pulley
- 39 Auto Cordlock Pushbutton
- 40 Cassette Cable Support Kit
- 41 Uni-Fix Adaptor Bracket
- 42 Adaptor Clamp
- 43 Adaptor Bolt
- 47 Spring End Plate
- 48 Clutch End Plate
- 49 Cable Guide



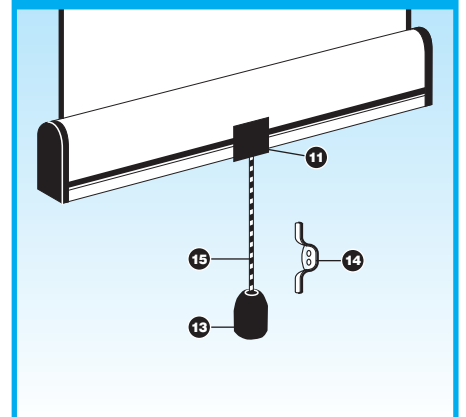
DOUBLE PULLEY BOTTOM RAIL CONSTANT TENSION SPRING OPERATION - IDEAL FOR SLOPING WINDOWS.



CONSTANT TENSION SPRING - CENTRE PULL OPERATION

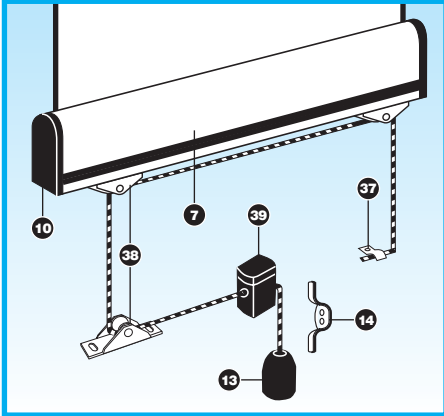


SELF LOCK SPRING OPERATION

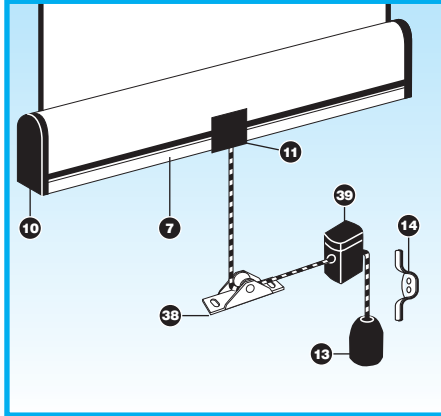


SPARE PARTS LIST FOR NON CASSETTE ROLLER SCREENS/BLINDS

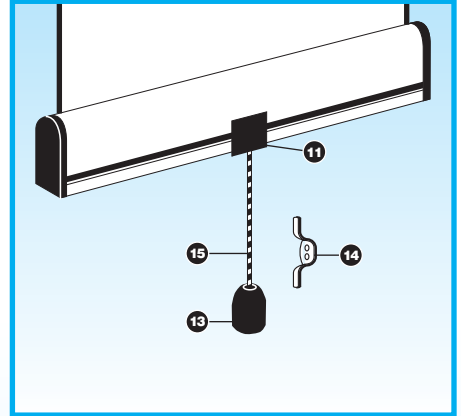
DOUBLE PULLEY BOTTOM RAIL CONSTANT TENSION SPRING OPERATION - IDEAL FOR SLOPING WINDOWS.



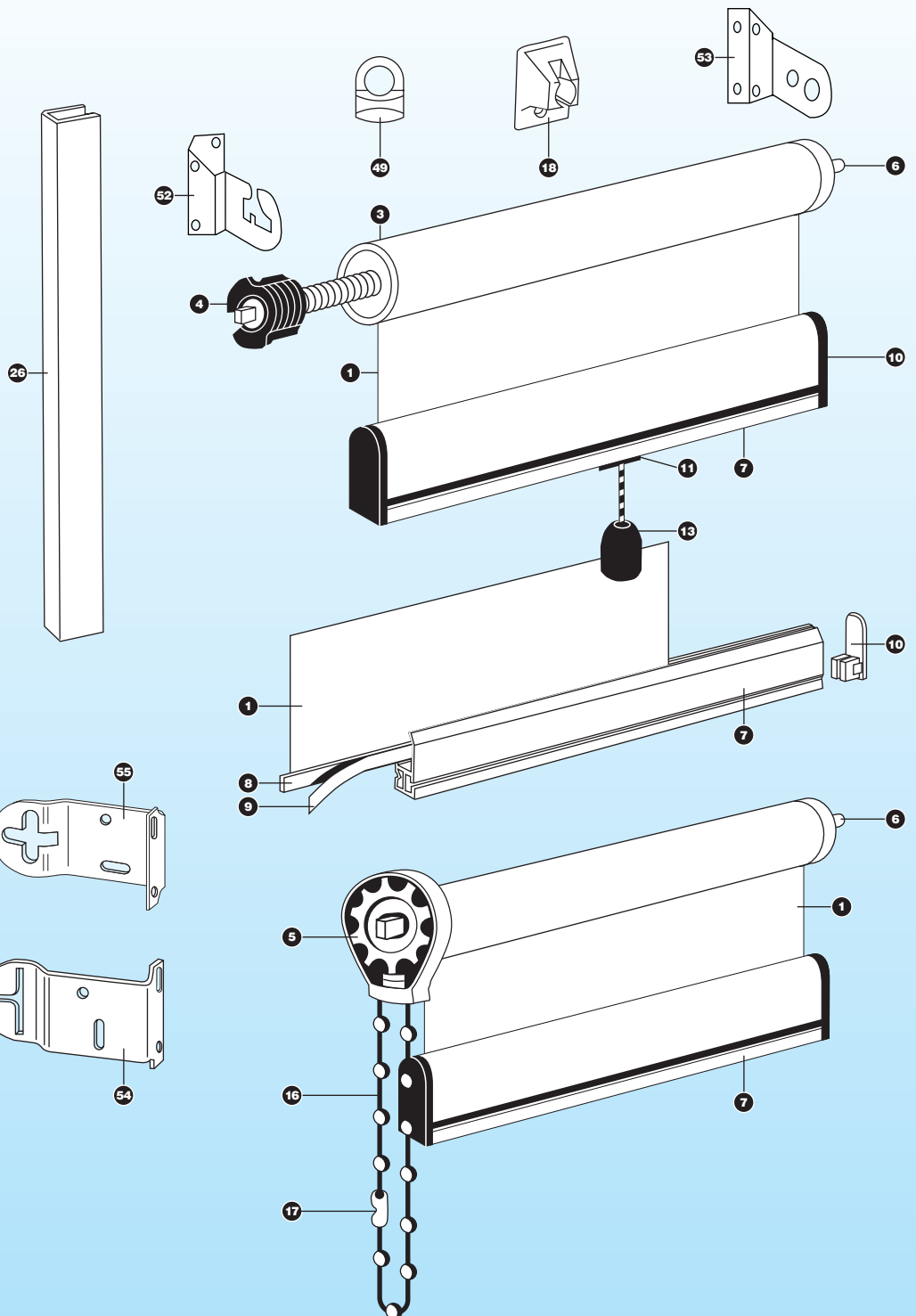
CONSTANT TENSION SPRING - CENTRE PULL OPERATION



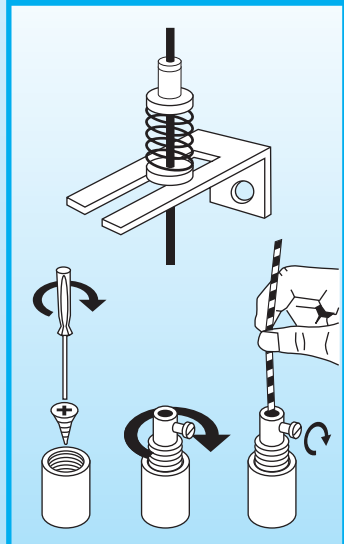
SELF LOCK SPRING OPERATION



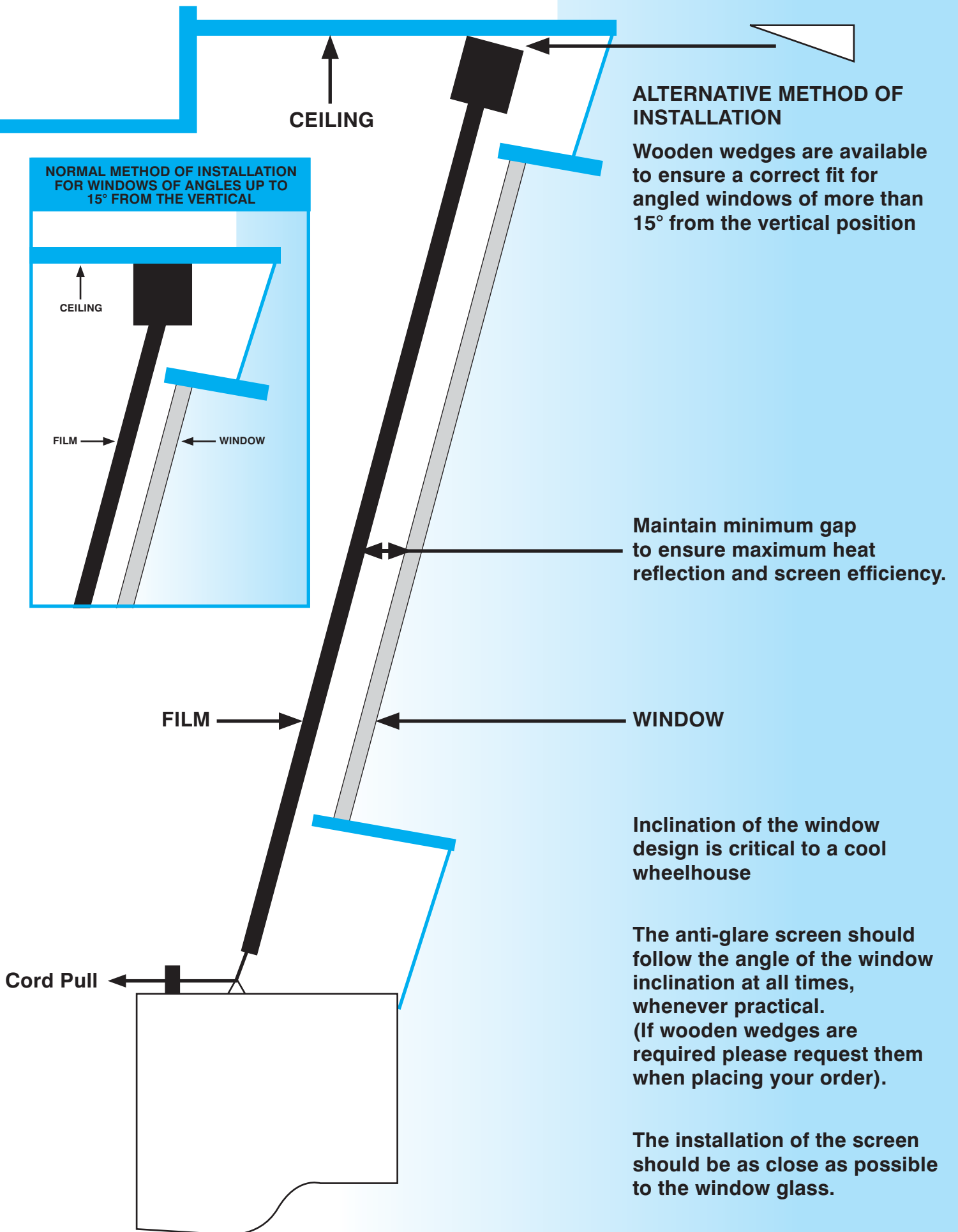
- 1 Film / Fabric
- 3 Roll Tube - 28 / 32 / 38
- 4 Spring Mechanism - 28 / 32 / 38
- 5 Side Chain Clutch Mech. - 32 / 38 / 45
- 6 Roll Tube End Pin - 28 / 32 / 38
- 7 Bottom Rail
- 8 Aluminium Retaining Strip
- 9 DS Adhesive Tape
- 10 Bottom Rail End Cap
- 11 Pull Cord Holder
- 13 Acorn
- 14 Stainless Steel Cleat
- 15 Pull Cord
- 16 Bead Operating Chain
- 17 Chain Connector
- 18 Chain Holder
- 26 Outer Side Guide Channel
- 37 Stainless Steel Cord Clamp
- 38 Stainless Steel Guide Pulley
- 39 Auto Cordlock Pushbutton
- 46 Non-Cassette Cable Support Kit
- 49 Cable Guide
- 52 Spring Uni-fix Bracket 28 / 32 / 38
- 53 Pin End Uni-fix Bracket 28 / 32 / 38
- 54 Clutch Pin End Uni-fix Bracket 28 / 32 / 38
- 55 Pin End Uni-fix Bracket 28 / 32 / 38



46 NON-CASSETTE CABLE SUPPORT KIT



SOLASOLV® ANTI-GLARE ROLLER SCREEN INSTALLATION

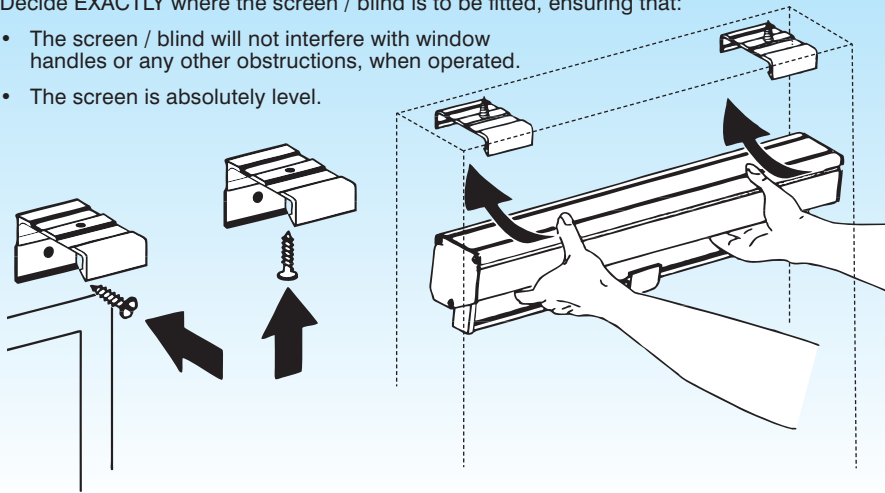


FITTING INSTRUCTIONS FOR INSTALLING ALL TYPES OF CASSETTE MOUNTED BLINDS AND SCREENS

CASSETTE INSTALLATION

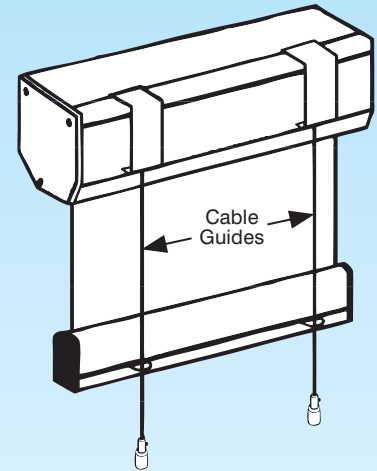
Decide EXACTLY where the screen / blind is to be fitted, ensuring that:

- The screen / blind will not interfere with window handles or any other obstructions, when operated.
- The screen is absolutely level.

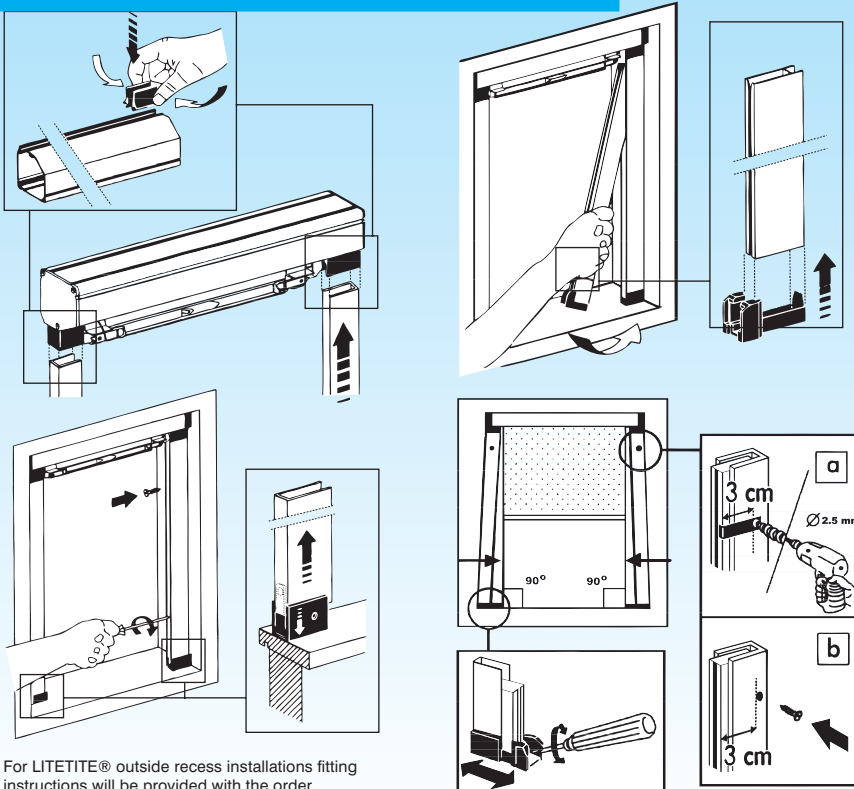


CABLE SUPPORT SYSTEM

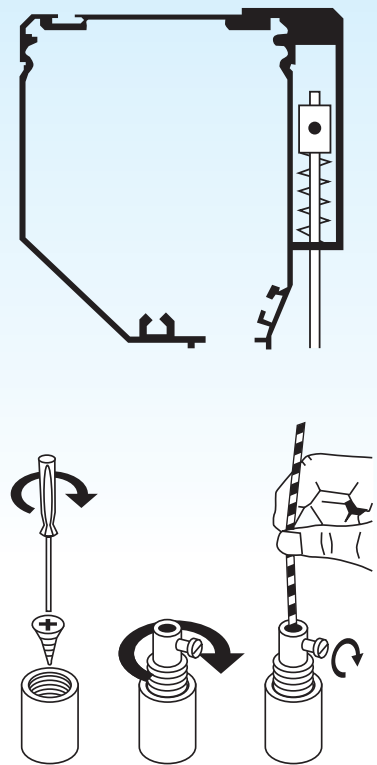
Completed cable system as seen from behind screen



LITETITE BLACKOUT BLIND INSTALLATION (INSIDE RECESS)



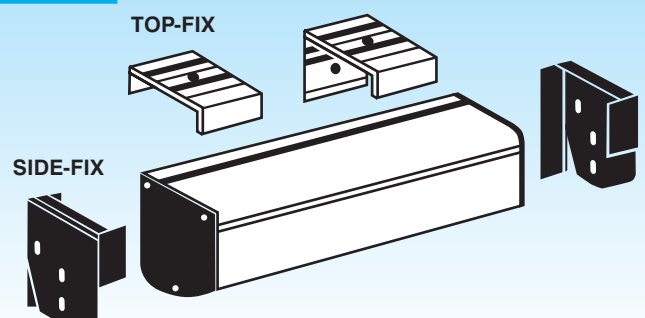
For LITETITE® outside recess installations fitting instructions will be provided with the order.



CASSETTE MOUNTED ELECTRICALLY MOTORISED ROLLER BLINDS / SCREENS

1. Decide EXACTLY where the screen / blind is to be fitted, ensuring that:
 - The screen / blind will not interfere with window handles or any other obstructions, when operated.
 - The screen is absolutely level.
2. Mark off the position of the fixing holes and drill pilot hole.
3. Secure the brackets with the 3/4 x No.8 self tapping screws provided.
4. Push-fit the cassette securely into the brackets.
5. If the screen is to be fitted with a Cable Guide system, refer to the cassette mounted fitting instructions.

UNI-FIX or FACE-FIX



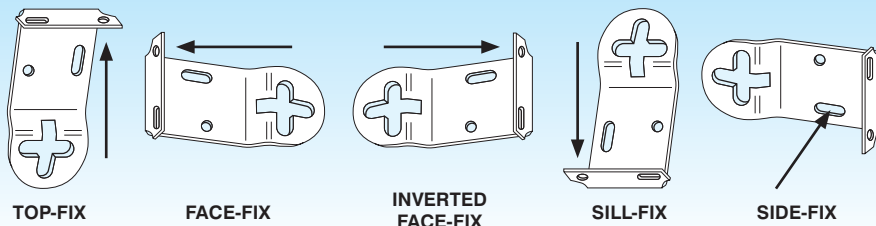
FITTING INSTRUCTIONS FOR INSTALLING ALL TYPES OF NON-CASSETTE MOUNTED BLINDS AND SCREENS

Decide EXACTLY where the screen / blind is to be fitted, ensuring that:

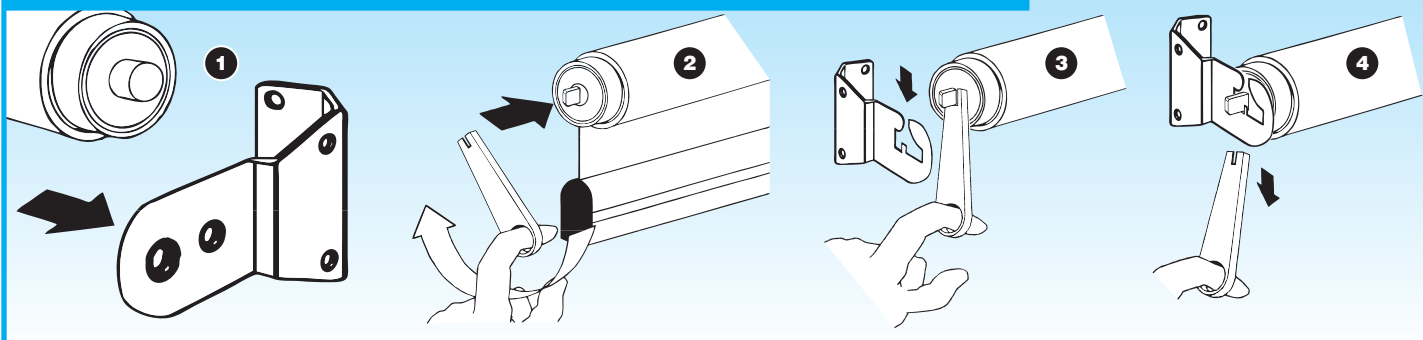
- The screen / blind will not interfere with window handles or any other obstructions, when operated.
- The screen is absolutely level.
- The brackets are fixed securely (the distance between the brackets will vary depending on the size of the screen).

PLEASE NOTE: ALWAYS USE THE GLOVES PROVIDED WHEN HANDLING FILM

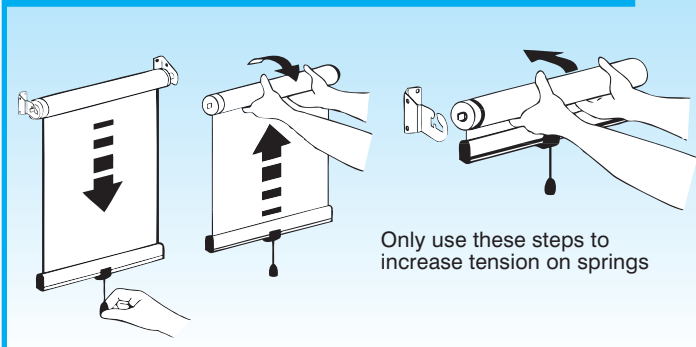
BRACKET POSITIONS



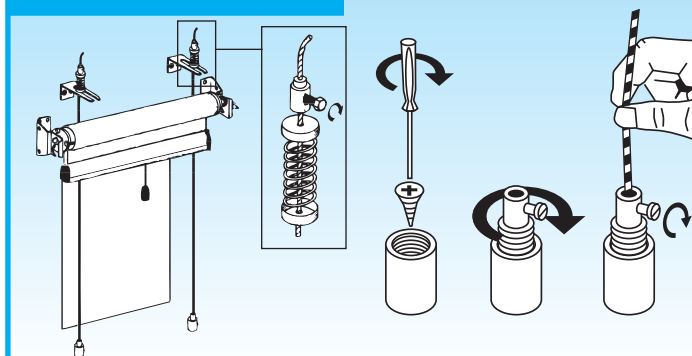
INSTALLATION INSTRUCTIONS FOR SCREENS / BLINDS WITH CONSTANT TENSION SPRINGS



INSTALLATION INSTRUCTIONS FOR SCREENS / BLINDS WITH SELF LOCK SPRINGS



CABLE SUPPORT SYSTEM



NON-CASSETTE SPRING TENSIONING GUIDE

28MM ROLL TUBE		UP TO 1000	1200	1400	1600	1800	2000
WIDTH							
NO OF TURNS		10	12	14	16	18	20
32MM ROLL TUBE							
WIDTH		2100	2200	2400	2500	2600	2700
NO OF TURNS		27	27	27	27	27	27
38MM ROLL TUBE							
WIDTH		2800	2900	3000	3100	3300	3500
NO OF TURNS		24	26	29	31	31	31

PLEASE NOTE: The above chart is only a guide and additional turns may need to be applied if the screen or blind does not retract correctly (especially in the case of DIMMLITE fabric blinds). If the screen or blind retracts too quickly then fewer turns may be needed than shown above.

JOIN

The film and fabric we use in the manufacture of our screens/blinds are supplied in standard roll widths (Maximum Film Width 1,829mm and Maximum Fabric Width 1,524mm). If a screen or blind is ordered with a width and drop greater than the maximum roll width then a horizontal join will be required in the film/fabric.

MAXIMUM CASSETTE SIZE

The maximum cassette width we recommend is 3,500mm. The reason for this is that the roll tube over this distance has a tendency to bend in the middle due to the weight of the film/fabric. This bend causes the roll tube to rotate in an elliptical manner, which in turn causes the film to hit the back of the cassette. Each time the film touches the back of the cassette it scratches and over a period of time the scratches become so bad that it becomes difficult to see clearly through the film.

NON-CASSETTE ELECTRICALLY MOTORISED SUN BLINDS / SCREENS

The brackets supplied are UNI-FIX and are suited to all methods of fitting. TOP, FACE, SIDE.

Decide exactly where the screen is to be fitted ensuring that:

- the screen will not interfere with window handles or other obstructions when the screen is operated.
- the screen is absolutely level.

Mark off the fixing holes and fit the brackets using the 3/4 x No.6 self tap screws provided.

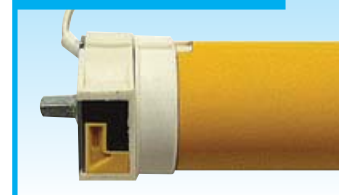
Complete the installation by wiring up to the switch and then the power supply by referring to the wiring diagram supplied.

For mains motors, adjust the 'STOP' positions using the Allen Key provided. For low voltage motors, use a terminal screwdriver to set the 'STOP'. It does not matter which side the motor is fitted to as the same adjusters set the same 'STOP' positions.

MAINS MOTOR



LOW VOLTAGE MOTOR



ELECTRICAL OPERATION

ELECTRICAL OPERATION

All roller screens and blinds can be electrically operated either individually or in groups and from a position nearby or remotely at some distance from the installations. Electrical operation is particularly suitable where local access is difficult.

LOW VOLTAGE (12V or 24V DC)

Is available for screens from 500 mm to 2000 mm wide

MAINS VOLTAGE (230V 50Hz or 60Hz)

Is available for screens from 550mm to 3000 mm wide

The simplest and cheapest method of control is via a locally situated 3-position rocker switch to control each screen individually. Alternatively the rocker switches could be located on a console enabling remote individual control.

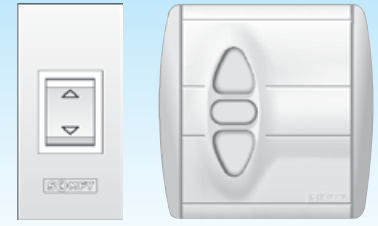
Where screens are required to be operated in groups, they can be operated from one central work station or they can have remote group AND local individual operation. They can also be operated by hand held infra-red remote controller. (See diagram opposite.)

Further technical information regarding electrically operated installations as well as wiring design service is available from Solar Solve Marine.

ELECTRICAL SCREENS DISCLAIMER

Due to the size of the motors used in the manufacture of our screens it may mean that the usual gap of 19mm (between the overall cassette width and film width), on each side of the screen, may have to be increased slightly to prevent damage to the film. However, we will endeavour to keep the gap as small as possible.

SWITCHES

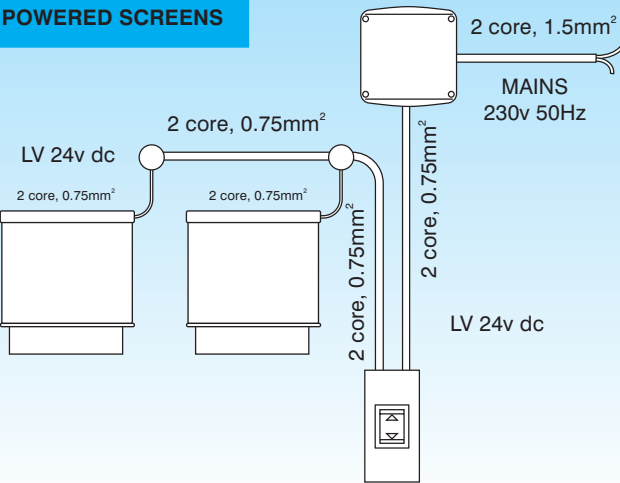


REMOTE CONTROL HANDSETS SINGLE AND GROUP CONTROL

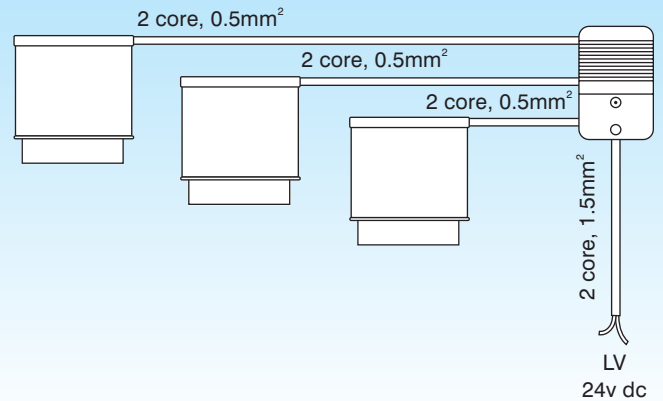


EXAMPLES OF VARIOUS METHODS OF ELECTRICAL INSTALLATION

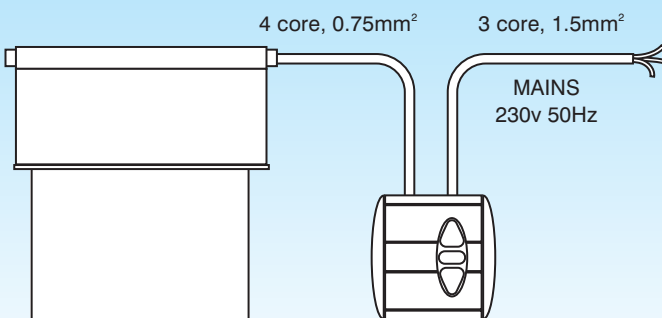
DC POWERED SCREENS



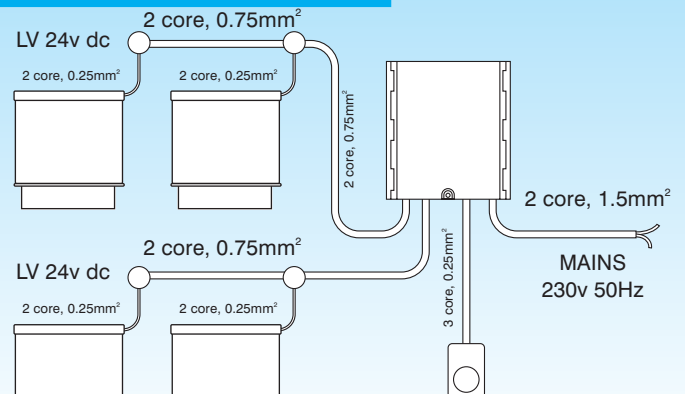
DC INFRA-RED REMOTE CONTROL



AC POWERED SCREENS



AC INFRA-RED REMOTE CONTROL



CUSTOMER NAME	
CUSTOMER REF	
PROJECT	
DATE	QUOTE <input type="checkbox"/> ORDER <input type="checkbox"/>

SOLASAFE (SS)
Film sunscreen inside an aluminium cassette

SOLAROLA (SR)
Film sunscreen without an aluminium cassette

CASSLITE (CL)
Fabric Roller Blind inside an aluminium cassette

DIMMLITE (DL)
Fabric Roller Blind without an aluminium cassette

LITETITE (LT)
Blackout fabric roller blind inside an aluminium cassette with inner and outer side guide channels

VARYSTOP (VS)
Fabric roller blind inside an aluminium cassette with side guide channels. It will stop in any position.

ITEM REF						
SCREEN / BLIND TYPE e.g. SS or SR						
SHAPE						
FIXING BRACKET TYPE						
ROLLER OPERATING MECHANISM <small>Shortened codes are used here. See top of page 4.</small>						
WIDTH 'CW' OR 'PW'						
BOTTOM RAIL WIDTH 'BR'						
DROP 'RD'						
INSIDE / OUTSIDE RECESS						
FILM OR FABRIC COLOUR						
CABLE SUPPORT						
SIDE GUIDE CHANNELS						
REMARKS OR REFERENCE						
QTY						

