



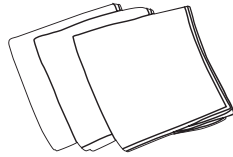
# INSTALLATION INSTRUCTIONS

## TOOLS REQUIRED

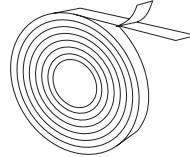
### 2023



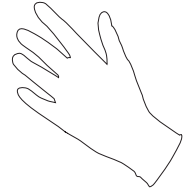
Diluted alcohol



Absorbent Cloth &  
Lint-free Cloth



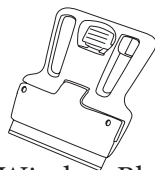
3M Tape



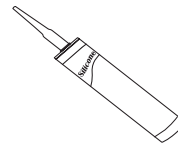
Nitrile protective gloves  
(non-powdered)



Decorative Strip



Window Blade



Non-acid based silicone



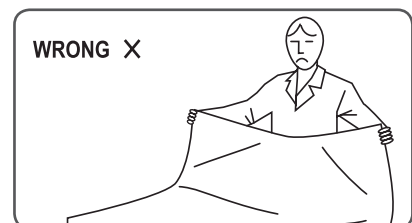
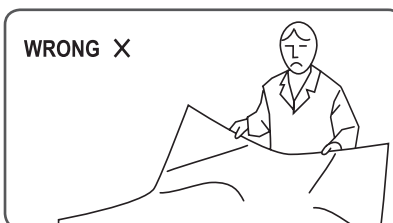
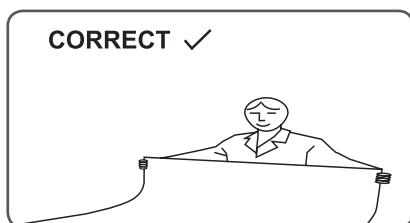
Soft edge squeegee

Soldering Iron & Solder

Lint RShrink Tubing Roll & L-shaped cable channels (to hide wires)

**IMPORTANT INFORMATION - CLEAN GLASS IS EXTREMELY IMPORTANT! ANY DIRT, DUST WILL CREATE BUBBLES DURING INSTALLATION! SMART FILM IS A DRY INSTALLION ONLY. DO NOT USE WATER UNDER ANY CIRCUMSTANCES.**

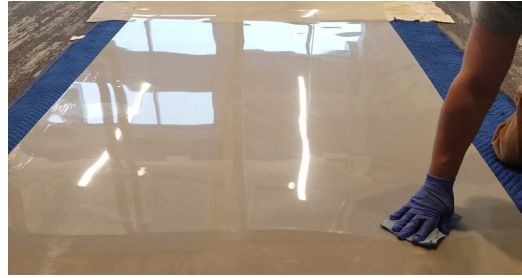
1. Please ensure the working environment is as clean and dust free as possible. We recommend installing the Smart Film in a very well-lit environment.
2. Do not remove the protective liner (Cling Side) until you are ready to install Smart Film. The Protective liner (Non-Cling Side) should remain attached until installation is completed.
3. When handling Smart Film always be careful with the edges to avoid delamination.
4. Never fold, bend or curve Smart film. Always keep it flat and straight as shown below. Please be careful around busbar/electrode areas.



# BEFORE INSTALLATION

## STEP 1

Remove the film from the package and place it with the self-adhesive (cling) side of Smart Film facing up. Make sure you **do not bend** the film to avoid creating creases.



## STEP 2

**Connect the film to a power supply to ensure that the film is working** and switching from clear to frosted. If the film is not working contact us for trouble shooting or a replacement covered under warranty. Please note that the film uses alternating current and there are **+ or - wires**. Please ensure that the wires are correctly hooked up to the correct + and - before powering it on to avoid damage.



## STEP 3

**Apply smart film to the installation area to make sure it will fit to the glass area.** If the edges of the window/door frame are not square, you can use scissors **to trim the film to fit**. We recommend that you use a pair of tailors scissors for the best results possible.

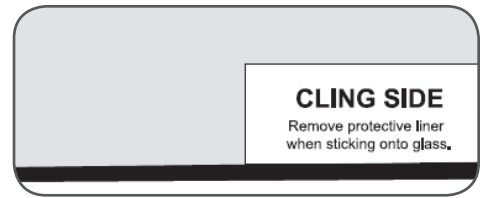


**SMART FILM IS A DRY INSTALLION ONLY.  
DO NOT USE WATER UNDER ANY CIRCUMSTANCES.**

# INSTALLATION INSTRUCTIONS

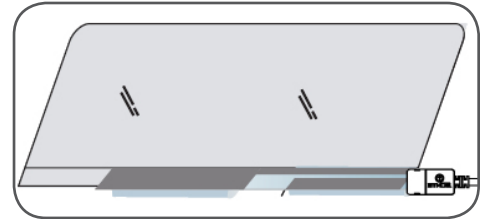
## STEP 1

Make sure the self-adhesive (cling) side of Smart Film is **facing up**.



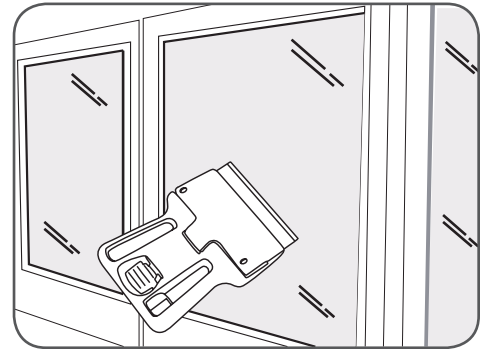
## STEP 2

Place Smart Film on a dust free and flat surface. **Wipe the cling side with alcohol** to remove any dust. Keep the busbars secure.



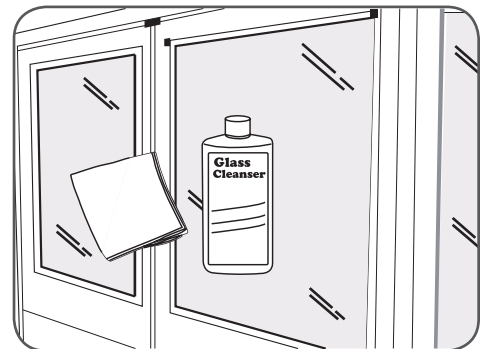
## STEP 3

**Use a window scraper or blade to remove any dirt / blemishes from the glass surface.** Repeat this procedure until the surface and edges of the glass are free from glue residue, smooth with no dirt or dirty spots which will affect the installation of Smart Film. **CLEAN GLASS IS EXTREMELY IMPORTANT. ANY DIRT, DUST WILL CREATE BUBBLES DURING INSTALLATION.**



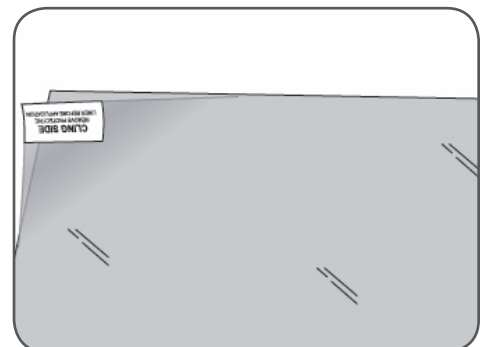
## STEP 4

**Spray the glass with glass with alcohol and clean with an absorbent cloth.** Repeat this process until the surface is **completely clean and dry.** Look at the glass from different angles to make sure it completely clean.



## STEP 5

Put on clean **nitrile gloves** and **peel off 3 inches** of the protective liner covering the self-adhesive side.



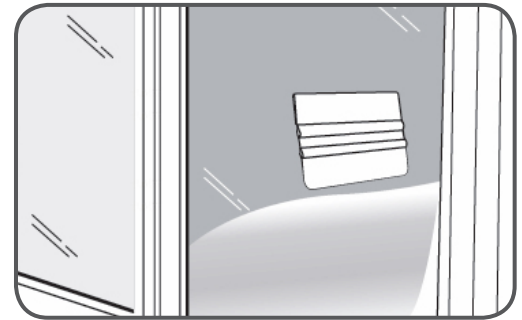
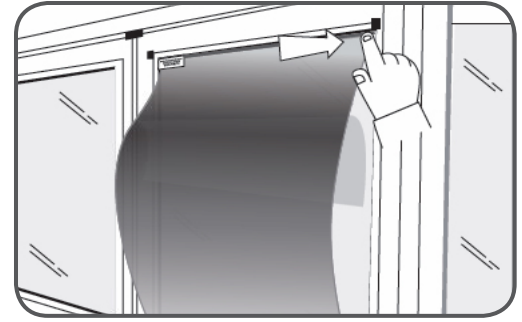
## STEP 6

**Align the edges** of the Smart Film on all edges of the glass and run your finger to press down along the top edge (the adhesive strip will hold the film in the place).

## STEP 7

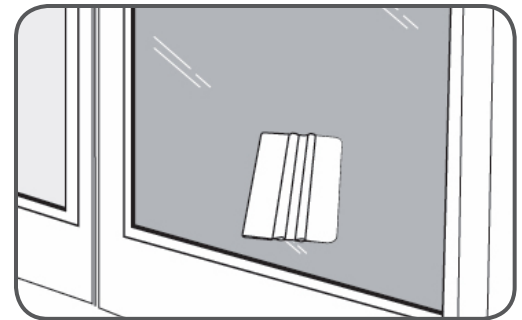
Gradually pull away the protective liner **no more than 5 inches at a time**. Using the soft edge squeegee move downwards on Smart Film **working in horizontal lines left to right to disperse any air bubbles**. Do so slowly, inch by inch to avoid any bubbles. If any small bubbles are still visible, carefully lift the film and reapply.

If any **bubbles** are visible, mark the spot with an erasable marker, lift the film and carefully check for any dust particles. If dust has gotten stuck to the film use an adhesive tape or lint roller to carefully remove the dust particles. Reapply Smart Film using the squeegee.



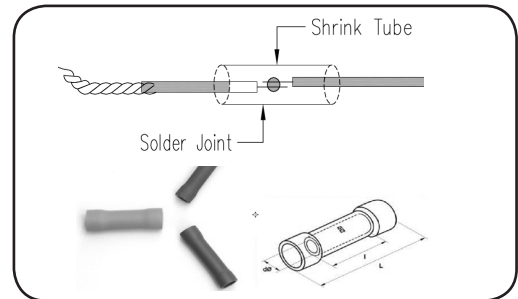
## STEP 8

Repeat the above process until you have a bubble free installation. Use soft edge squeegee to squeeze out any small bubbles along the edges of the film



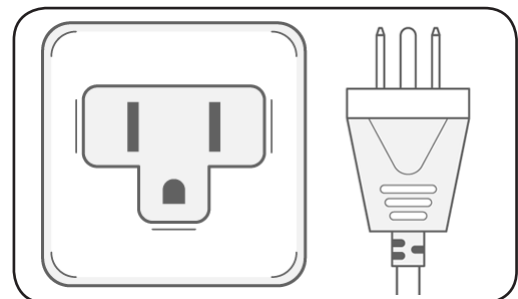
## STEP 9

Once the smart film is installed, **connect the busbar wires to the transformer soldering and shrink tubing or by using splice insulated butt connector**. For best results, use **cable guides or channel cable along the edge of the window**.



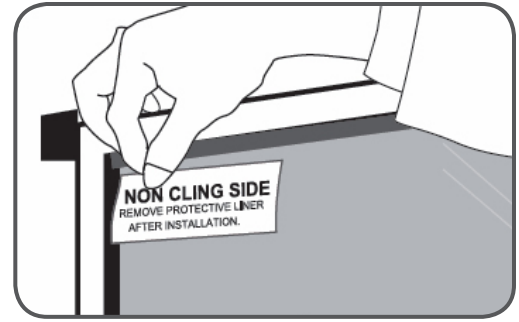
## STEP 10

**Connect the transformer to the power source** and power on the film (switching from opaque to clear).



### STEP 11

Lift the tag and carefully remove the protective liner (non-cling side)



### STEP 12

For additional security or when using the Smart Film in a high moisture environment use non-acid based silicone along the edges of the film.



### ***YOUR INSTALLATION IS COMPLETE***

Now you can clean the Smart Film using isopropyl alcohol cleaner and a soft lint-free cloth. You can repeat this for general cleaning.

### **YOU MAY ALSO NEED**

Lint Roller - 3M Scotch Brite

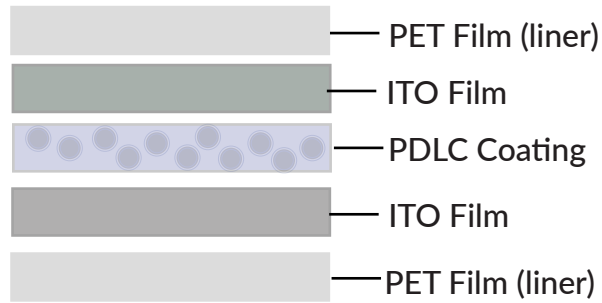
To remove any dust or restore self adhesiveness of the cling side use lint roller. Remove the film from the glass and roll the lint roller to remove any dust or to restore adhesive layer of the film.

### **CLEANING**

Please clean Smart FILM with spray alcohol or a wet dust-free paper/high-quality towel, then clean and wipe glass.

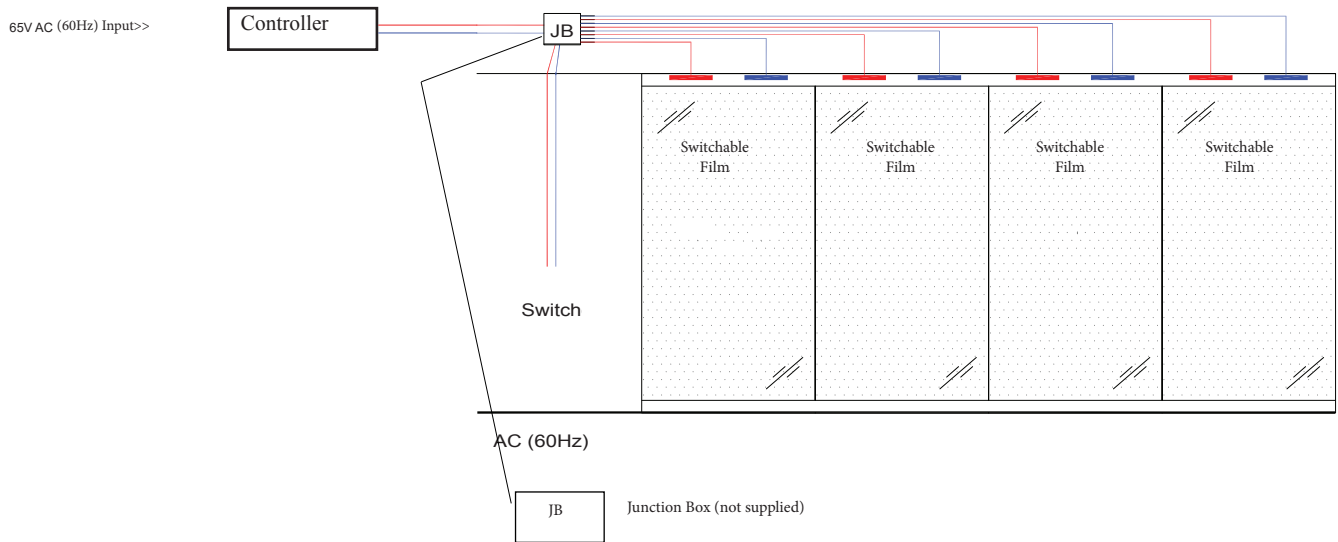


## Smart Film Structure



## Smart Film Control Options

All Panels Controlled With One Switch



Each Panel Controlled Independently

