

Technical Bulletin

Installation guidelines for 3M™Thinsulate Climate Control, 3M™Safety and Security Window Films and 3M™ Solar control Films

1: Ensure the correct installation tools are clean and ready for use. It is recommended to use a squeegee with the rubber no wider than 15 cm for Thinsulate and Safety & Security films. Wider squeegees can be used for Solar Control films.



2: Clean the window and surrounding frame thoroughly. Spray window generously with a water and soap solution (Johnson's Baby Shampoo).

3: Clean the entire window using a scraper with a stainless steel blade.



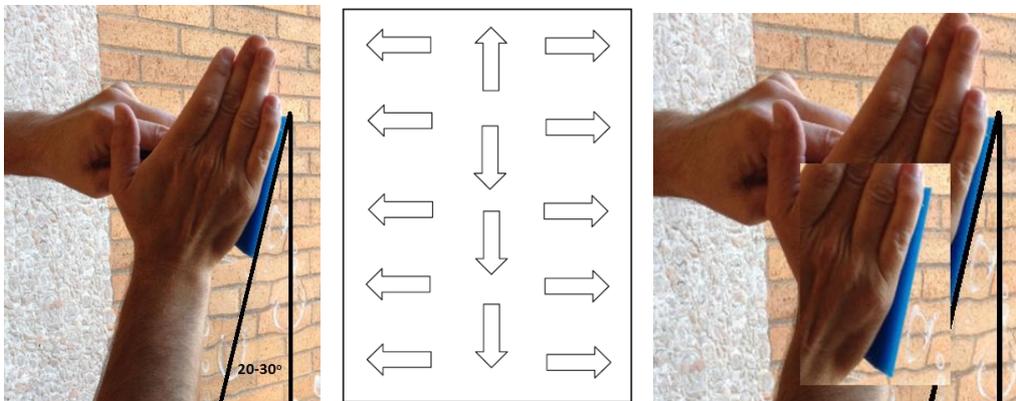
4: Use the reverse roll technique to position the film on the window.

5: Use a window cleaner squeegee, to squeegee out most of the water.



6: Spray the film surface with the water and soap solution. Use the recommended squeegee, and push it across the film using both hands at a 20-30° downward angle, to remove any remaining water under the film.

Squeegee once only according to the pattern in the diagram below and with an overlap of 50%. Never squeegee the entire window more than once!!



7: Use a hard squeegee (3M PA-1) and a paper towel (3M 34569) covering the leading edge, to squeegee the last 5 cm at the edges. The paper should be rotated occasionally to ensure that all residual water is absorbed and the edges are completely dry.

Squeegeeing the edges without paper will push any remaining water under the gasket, which will then flow back by capillary action, potentially bringing dirt particles with it.



8: Spray the entire window with the application water and soap solution.

9: Remove all surface water with a window cleaning squeegee

Cleaning recommendations for 3M™ Thinsulate CC75 and all other 3M™ Window Film

1: Use a DRY Microfiber cloth to clean 3M™ Thinsulate CC75 – never wet!



2: Use water with neutral soaps (Johnson’s Baby Shampoo or Ammonia) with the following window cleaning squeegees:



3: Use Cotton Wipes with (Johnson’s Baby Shampoo or Ammonia) water. Never use dry cotton wipes to clean CC 75



4: Use Paper Wipes with (Johnson’s Baby Shampoo or Ammonia) water. Never use dry paper wipes to clean CC 75



Installation preparing 3M™ Window Film

Tool and Equipment Inspection

Inspect Before Leaving For Application Site

1. Film Dispenser
 - a. New sharp blades Stainless Steel
2. Plastic Pressure Spray Tank
 - a. Flush out before filling
 - b. **Use only purified water**
(In some areas it has very hard water with very much lime, we recommend to use distilled water or use a filter, and if you are not sure what kind of water is present at the application site.



- c. Use Johnson's Baby Shampoo for slip solution.
3. Squeegees
 - a. Clean, Straight, Flat and Sharp
 - b. **Never use damaged squeegees**



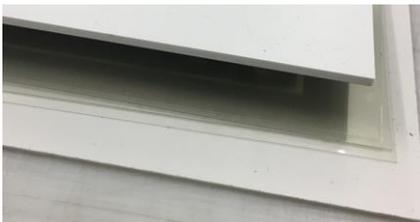
4. Knives
 - a. Use only stainless steel blades
 - b. Use new blade after 3-5 cuts
5. During the application, always keep the Scraper, squeegees and the window cleaner squeegee in a clean bucket when not in use. Never leave these tools on the floor or on the window sill because they will pick up dirt and contaminate the installation.



Storage of pre-cut films 3M™ Window Film

If film is pre-cut 1 -2 days before applying, 3M recommend the following storage conditions:

1. When Safety & Security & Thinsulate films have been pre-cut, they must be stored and transported flat in order to prevent tunneling.
 - a. Flat, between example two Forex® plates, with a weight on top.



1. Up to 20 pre-cut pieces of thinner films (Solar control) can be stored and transported on the original core.
 - a. On a core vertically.



- b. On an core in a box on the supports



2. **Never store and transport pre-cut film without a core in a box. The bottom edge will be damaged during transportation.**
 - a. Small rolled of pre-cut film without core vertically in a box.



- b. Small roll-ups of pre-cut film without core horizontally in a box.



3. 3M Window films should not be stored overnight in vehicles ready for the next day's installation if temperatures are expected to drop below zero at night.

Storage of full or part rolls of 3M™ Window Films

3M recommend the following storage conditions:

Material should be stored in its original packaging, laying in a horizontal orientation, away from direct sunlight. Heavy objects should not be placed on top of it to avoid damaging the product. Recommended storage conditions are 21°C and 40 – 60% relative humidity. Avoid extreme temperature ranges during storage.

- a. Maximum 60% humidity.
- b. Temperatures 18 °C +/- 8 °C.
- c. Keep Dry
- d. Store in the Box with the poly bag
- e. Always store rolls horizontally.



Never store 3M Window Films in the box without the protective poly bag.





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