

## APPLYING AND REMOVING

### Protection film

# BUILDING FILMS

#### MATERIAL REQUIRED

- ✓ PULVITRE (1 l - litre vaporiser)
- ✓ MALPACK carrycase with:
  - POIGNVITRE with a LAMEVITRE, or rubber blade squeegee
  - GRATVITRE (scraper for windows)
  - MPFSEC aluminium squeegee
  - 5 m measuring tape
  - CUTVITRE Olfa snap off blade knife
- ✓ MARNOIR medium squeegee for finishings
- ✓ CUTLAME replacement blades
- ✓ Ruler
- ✓ Detergent (washing-up liquid)
- ✓ Roll of absorbent paper
- ✓ Masking tape
- ✓ Silicone seal joint (outside windows)
- ✓ AMVERRE glass and air space laser gauge

#### STORING YOUR FILMS UNDER GOOD CONDITIONS

Keep films away from all sources of high temperatures (radiators, direct sunlight,...). The ideal storage temperature is between 15 and 25°C (59-77°F) with 50% relative humidity.

Store films in a dry place and in their original packaging – the rolls are packaged in waterproof polyethylene bags and held in place in their cardboard boxes by means of square plastic end pieces to prevent the wound turns from being crushed by the weight.

- A roll that is stored correctly can be kept for 1 year.
- NEVER STORE THE ROLLES UPRIGHT.



#### CHARACTERISTICS

HEXIS has an extensive range of building protection films. Their wide-ranging characteristics make it possible to render your windows more resistant and more aesthetically pleasing, as well as considerably improving day-to-day living in your buildings and offices.

#### PREPARING THE TARGET SURFACE

BATIMENT HEXIS film can only be applied to the windows on buildings (see recommendations in Chapter 1), on the condition that the windows in question have a clean, smooth, non porous surface with no traces of oil, grease, wax, silicone or other polluting agents. To avoid any nasty surprises, work on the principle that all substrates are polluted and must be cleaned.

Do not forget to first do a test on a small surface to make sure that the substrate will not be damaged.

> Do not hesitate to consult the technical data sheets for the films used on our internet site, [www.hexisgroup.com](http://www.hexisgroup.com)

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These application methods are based on HEXIS' experience and are not restrictive. For easier application of HEXIS films, please respect these recommendations. HEXIS also proposes training courses, which are necessary for optimal application of our products.

## I. RECOMMENDATIONS

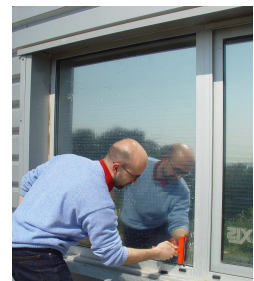
- ✓ Do not use the standard wetting and cleaning agents used for cleaning windows.
- ✓ A silicon seal joint is recommended on outdoor films only.
- ✓ Identify the type of window using the AMVERRE gauge to prevent any risk of thermal shock.  
[AMVERRE](#): laser gauge indicating the thickness and nature of glass, and the thickness of the air or gas between the plates of glass.
  - If any doubt remains, in all cases apply the film to the outside or contact your HEXIS representative.
- ✓ When applying the film outside, make sure that it is not windy and that the outside temperature is not lower than 15°C.

## 2. CLEANING THE SUBSTRATE

- 1) Prepare the 1 l-litre vaporiser with around 20 capfuls of detergent and water.
- 2) Carefully clean the window. Vaporise the soapy liquid all over the window as well as into the seal joints. (FIG01)
- 3) Use the GRATVITRE scraper over the entire surface (FIG02), changing blades often.
- 4) Spray the entire glass surface once again and use a window squeegee, finishing the edges with absorbant paper.



(FIG 01)



(FIG 02)

## 3. APPLYING THE FILM

The films for buildings proposed by HEXIS can be applied either inside or outside the building (see Technical data sheets and recommendations).

1. Cut the film to a size slightly larger than that of the window (1.5cm more on each of the 4 sides), being careful not to wrinkle the film whilst handling it.
2. Vaporise the surface of the window to be treated using the sprayer.
3. Remove the liner protecting the adhesive surface (FIG03) whilst wetting it abundantly.

*Be careful of the direction in which the wind is blowing!*

Warning: please handle the film with care.

Advise: get help from another person whenever possible.

4. Put the film into position immediately, with the adhesive side in contact with the window (wet side).



(FIG 03)

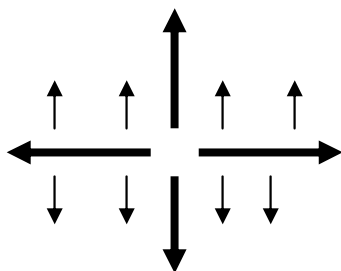
5. Vaporise the film using the vaporiser to prepare for squeegeeing. (FIG04)



(FIG 04)

6. Use the MPFSEC aluminium squeegee, respecting the direction: make a cross in the middle, then squeegee each of the four quarters starting from the middle and out towards the edges. (FIG05)

Reminder:



(FIG 05)

7. Cut the film to the right size all along the edge of the joint (as near as possible to the edge), pressing down on the MARNOIR squeegee. (FIG06)



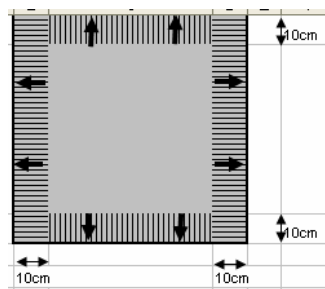
(FIG 06)

8. Wet and squeegee a second time with the MPFSEC aluminium squeegee, this time going as far as the edge. (FIG07)



(FIG 07)

9. Using the MARNOIR squeegee wrapped in absorbent paper, finish the application all around the edge with a margin of around 10 cm (FIG08) using the diagram below for guidance:



(FIG 08)

#### 4. DEALING WITH JOINS BY JUXTAPOSITION

If you have to make a joint on your window surface, be it horizontal or vertical, the method used will be identical:

- ✓ Put the second film into position, covering the first film already stuck to the window by about 15mm.
- ✓ Place the ruler in position all along the length of the superimposition, and in its centre.
- ✓ Using the CUTVITRE, cut in a single movement and with a certain amount of pressure both thicknesses of film. (FIG09)

Warning: excessive pressure could result in the glass itself being scored.

- ✓ Remove the surplus.



(FIG 09)

#### 5. SEAL JOINT *(for applying the film outside only !)*

If you wish to apply films outside, it is preferable to use a seal joint, specially designed for windows.

The seal joint is of particular importance as it will increase the lifespan of the films used outside. The air, natural or industrial pollution, stagnant rain water and other substances will no longer be able to attack the metallisation of the films from their edges! To do so, use a seal joint of the silicone waterproofing type:

- ✓ Make sure that the surfaces in question are dry.
- ✓ Apply the seal joint all around the edge of the outside window.

#### 6. CLEANING AND MAINTENANCE OF THE FILM

- ✓ Leave the film to dry for 1 week without touching it.
- ✓ Warning: wait for 30 days after application before cleaning the « filmed » window.
- ✓ Clean the « filmed » window with a standard cleaning solution and a soft cloth.
- ✓ Do not use any type of scraper or articles with an abrasive action.

## 7. REMOVING THE FILM

Films for buildings use a permanent adhesive but, if you follow the instructions below, it will be easier to remove the film.

- ✓ Using an electric heat gun, start in a corner and heat the film to a temperature of around 50°C (122°F). Do not overheat. Respect the temperature indicated.
- ✓ Gently lift a corner of the film using a knife –available in the toolbox- without damaging the substrate and progressively, as each section is heating, continue removing the film. The film should form an angle of 70-80° in relation to the substrate. A wider or narrower angle will result in the film breaking more easily.
- ✓ Always proceed gradually by delicately removing the film from small areas to decrease the risk of leaving traces of adhesive on the substrate.
- ✓ Continue heating and gently removing the film until it has been removed completely, always taking care to respect the temperature indicated, and the angle and speed at which the film is removed.
- ✓ If residue from the adhesive persists, use the GRATVITRE and PULVITRE vaporiser, wet the surface and scrape so as to remove all traces of adhesive.

*With thanks to the agency Quaranta, undergoing training at HEXIS when the photos for this bulletin were taken.*

For any further information of a technical nature, please consult the technical data sheets available for download from our internet site [www.hexisgroup.com](http://www.hexisgroup.com) in the Professionnals/Technical Data Sheet section.

The very wide range of substrates available, combined with the ever-increasing number of new possibilities, obliges the user to examine the extreme aptitudes of the product for each particular usage.

All the information given herein nevertheless does not constitute an absolute warranty factor. The sheller assumes no liability for any indirect damage and cannot be held financially responsible beyond the price of the his own products. All our specifications are liable to modification without prior notice. Our specifications are updated automatically on our site, [www.hexisgroup.com](http://www.hexisgroup.com).



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