

PRODUCT BULLETIN

APPLICATION AND REMOVAL METHOD

HEX'PRESS Cast Films: SATIN SUPER CHROME: HX30SCH00S

REQUIRED EQUIPMENT

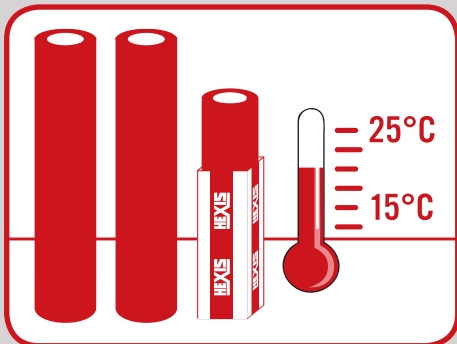
- › Adhesive tape Tesa® 7476
- › Masking tape
- › Liquids for the cleaning of application surfaces:
 - › ADHESIVE REMOVER or SHAGREMOV
 - › FINAL CLEANER or SHAGCLEAN
- › ProTech® SHAMPCAR vehicle shampoo
- › Liquid for an easier application: MAGICSPRAY
- › Squeegees upon your choice from the catalogue
- › ROLLRIV application wheel for applications over rivets
- › RIVETBRUSH application accessory for riveted surfaces
- › PISTHERMIQ heat gun
- › PISTLASER3 laser thermometer
- › Different HEXIS application tools
- › PROTECH® cleaning agents

STORE YOUR FILMS UNDER APPROPRIATE CONDITIONS

Keep the films away from any major source of heat (radiators and heaters, direct exposure to sunlight, etc.): the best temperature ranges from 15 °C to 25 °C (from 59 °F to 77 °F).

Store them in an atmosphere with low humidity (with relative humidity between 30 % and 70 %).

Keep your films in their original packaging. Each opened roll must be stored vertically or suspended in order to avoid pressure marks on the contact surface.



FEATURES

The satin Super Chrome films consist of a multilayered film with a metallised satin aspect and HEX'PRESS technology liner. Due to their high technical performance and conformability, they may be used on curved or textured surfaces (weldings and rivets). These products are specially designed for temporary vehicle wraps.

PREPARING YOUR APPLICATION SURFACE

HEXIS films can be applied to a wide variety of substrates as long as the target surface is clean, dry, smooth, non-porous and free from any traces of oil, grease, wax, silicone or other contaminants. To avoid unexpected outcomes, always assume that every substrate is dirty and needs to be cleaned. (cf. chapter 3).

Do not forget to carry out a preliminary trial on a small surface to check that the substrate remains undamaged.

For further technical information on the Super Chrome films, please refer to the technical data sheet available on our website at www.hexis-graphics.com.

CONTENTS

1. RECOMMENDATIONS:.....	2
2. PRELIMINARY TEST OF THE APPLICATION SURFACES:.....	2
2.1. Preliminary inspection of the substrate:.....	2
2.2. Tear-off test:.....	2
2.3. Degassing test:.....	2
2.4. Degassing procedure with flame treatment:.....	2
3. CLEANING:.....	3
3.1. Clean and soiled surface appearance:.....	3
3.2. Heavily soiled surface appearance:.....	3
3.3. Special case:.....	3
4. APPLYING THE SUPER CHROME FILM:.....	3
4.1. First steps and application of the Super Chrome film to flat surfaces:.....	4
4.2. Undulated surfaces:.....	5
4.3. Concave surfaces:.....	6
4.4. Convex surfaces:.....	8
4.5. Riveted surfaces:.....	8
4.6. Overlaps:.....	9
4.7. Additional information for a vehicle full wrap:.....	9
5. RELEASING TENSION:.....	11
6. USE OF THE HEAT GUN OR THE GAS TORCH:.....	11
7. CUTS AND FINISHINGS:.....	12
7.1. Straight cut with overlap:.....	12
7.2. Straight cut without overlap:.....	13
8. FINISHING:.....	13
9. CLEANING AND MAINTENANCE OF THE SUPER CHROME FILMS:.....	14
9.1. Soiled surfaces:.....	14
9.2. Slightly soiled surfaces:.....	14
10. REMOVAL PROCEDURE:.....	14

1. RECOMMENDATIONS:

- › The colour of the films is controlled by HEXIS in order to ensure faithful reproduction of the colour tints. Nevertheless, should your project require the use of several rolls of a single colour reference, HEXIS recommend to use only one batch number of this colour.
- › Avoid applying the film to unpainted components (side strips, front or rear bumper, wing mirrors...).
- › The best adhesion of the Super Chrome films is achieved after 24 hours of contact.
- › Super Chrome films must only be installed by qualified professionals.

2. PRELIMINARY TEST OF THE APPLICATION SURFACES:

Before proceeding with any application, the installer must first inspect the substrate and the paint to which the film will be applied.

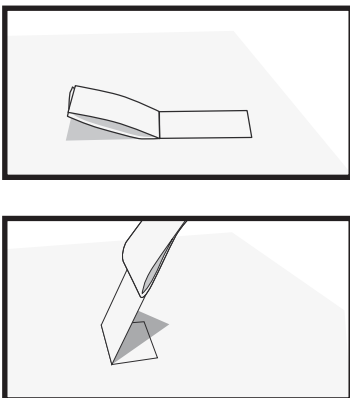
The installer and the customer are responsible for the suitability assessment of the target surface to be covered.

2.1. Preliminary inspection of the substrate:

- › Any fresh new paint must be dried for at least 7 days at 25 °C (77 °F) in order to degas completely. A degassing test must be carried out before applying the film.
- › Any old, powdery or flaky paint must be sanded and renewed before application and must undergo a tear-off test.

 *Application of the film to an unsuitable paint, releases HEXIS from any liability.*

2.2. Tear-off test:



Using a TESA® 7476 adhesive tape, or similar, apply it to a surface of 2.5 cm x 5 cm (1 in. x 2 in.) plus some overhang material for easier removal. Fold and promptly tear it off perpendicularly to the substrate surface. No traces should remain on the ripped-off adhesive tape. Repeat this process in several places.

> On request, HEXIS can provide you with a Tesa® adhesive tape in 2.5 cm x 5 cm (1 in. x 2 in.) size.

2.3. Degassing test:

Use a square piece of around 15 cm x 15 cm (6 in. x 6 in.) of self-adhesive polyester or of the film to be applied. Wait for 24 hours or 2 hours at 65 °C (149 °F). The appearance of bubbles indicates that the substrate has not sufficiently degassed. Therefore, this process should be repeated after a couple of days; or the procedure described below should be carried out.

2.4. Degassing procedure with flame treatment:

(Polycarbonate, translucent or diffusing methacrylate, expanded PVC, etc.)

This method consists of changing the surface tension of a substrate by swiping it with the flame of a gas burner. Using the flame's blue tip, proceed evenly with fast sweeps horizontally and vertically along the whole substrate surface.


 *MOVE THE FLAME IN SWIPING MOTIONS ON THE SUBSTRATE (RISK OF DESTROYING THE SUBSTRATE IF A FIXED POINT IS HEATED MORE THAN A SECOND).*

The film must be applied right after this treatment as this light surface treatment disappears after a few minutes.

> *HEXIS are not liable for any bubbles caused by degassing.*

3. CLEANING:

Cleaning of the substrate is required before performing the application. It should always be assumed that the substrate is contaminated with dirt. Some residues or contaminants may not be visible; however, they may impact the adherence of the film.

 *Before using any cleaning liquids or chemicals, please refer to the Technical Data Sheets and Safety Data Sheets available for download on our website at www.hexis-graphics.com.*

3.1. Clean and soiled surface appearance:


For vehicle wraps, it is advised to wash the vehicle with the SHAMPCAR vehicle body shampoo, then carry out a final cleaning using the FINAL CLEANER or SHAGCLEAN.



Shampcar
Concentrated vehicle
shampoo

3.2. Heavily soiled surface appearance:

For vehicle wraps, it is advised to wash the vehicle with the SHAMPCAR vehicle body shampoo, then use the ADHESIVE REMOVER or SHAGREMOV.

 *The cleaning with the ADHESIVE REMOVER and SHAGREMOV must be carried out in a ventilated area. Wear protective goggles and gloves.*

Prior to treatment, run a compatibility test on a small, inconspicuous area of the substrate to be treated. Indeed, certain plastic materials might be damaged by the ADHESIVE REMOVER or SHAGREMOV.

- › Spray the ADHESIVE REMOVER or SHAGREMOV onto the dirty surface and spread out using a dry cloth.
- › Then wait for a few minutes. Spray the ADHESIVE REMOVER or SHAGREMOV again, then wipe it dry with a clean cloth or squeegee.
- › When the substrate is clean and dry, carry out a final cleaning using the FINAL CLEANER or SHAGCLEAN.




Adhesive Remover
Powerful cleaning
agent

3.3. Special case:

Remember to adapt the preparation methods to the substrate type and its condition. Thus, painted surfaces must be dry and hard, baked paints must be cooled down. Air-dried paints or car paints need to be dried for a minimum of one month before applying the film.

- › For bare metallic surfaces in the case of a full wrap:
 - › Clean the substrate with soapy water and then with a cloth soaked with FINAL CLEANER or SHAGCLEAN.

 *Before using any cleaning liquids, refer to the Product Safety Data Sheet.*

- › Thoroughly wipe the surface after the cleaning process.



Final Cleaner
Cleaning and
degreasing finishing
agent

4. APPLYING THE SUPER CHROME FILM:

- › Super Chrome films must be applied according to the "dry" application method using a squeegee covered with an unused felt sheet.

The HEX'PRESS technology allows easy repositioning of the vinyl on the substrate during application.

However, the Super Chrome film must be firmly squeegeed to achieve optimum adhesion to the substrate.

- › Before any application of the Super Chrome film, make sure that all surfaces are clean (cf. Paragraph 3) and dry, paying particular attention to critical areas such as corners, edges, curves, etc.

⚠ *Hygrometry may also impact the adhesion of the film on the substrate.*

- › The perfect application temperature ranges from 20 °C to 25 °C (68 °F to 77 °F) and must be respected for both the ambient and the substrate temperatures.
- › The minimum application temperature is 20 °C (68 °F). Avoid applications in colder environments. Due to their specific structure, these products tear off easily in cold working conditions.

HEXIS advice: To enhance the surface sliding of the squeegee on the film while limiting the risk of micro-folds during this phase, it is highly recommended to spray the application liquid MAGICSPRAY on the squeegee surface whenever needed, until completion of the film application.

- › The installation should be carried out wearing GANTSCOV gloves.
- › To avoid deformation of the film during storage, it is essential to store the rolls closed.

⚠ *The opened rolls must be properly closed right after use, using a Tiro-like adhesive tape in order to avoid the formation of tunnelling.*

4.1. First steps and application of the Super Chrome film to flat surfaces:

- › Before any application, you must thoroughly inspect the entire film surface.

HEXIS disengage from any liability in the case of complaints produced after the report of an appearance flaw (scratches, bubbles, matt area...) observed after removal of the HEX'Press liner.

⚠ *Be careful not to go beyond the limits of the product: the Super Chrome films may undergo a slight and irreversible alteration of their appearance (whitening, loss of gloss) if the films are stretched or deformed beyond their limits. The maximum acceptable deformation is 20 %.*

⚠ *Due to their composition, the satin Super Chrome films accumulate heat rapidly and for a long time. The rise in temperature of the film during installation with a heat gun or a gas torch is faster and more long-term than that of other products of the HX30000 series. Such a behaviour should be taken into account during installation. In particular, take care not to burn yourself while handling the film.*

Any heating operation indicated below must be carried out with the heat gun or the gas torch by performing sweeping motions at a reasonable distance. The temperature must be checked with the laser thermometer on the film's surface, in the heated area, right after withdrawal of the heat gun's hot air flow.

⚠ *If the heat flow is maintained on a fixed spot or near the surface of the film, it may result in an irreversible deterioration of the product. Do not measure the temperature in the air flow of the heat gun. This would give a wrong measurement and could lead to an insufficient reheating temperature (risk of the film peeling off later on).*

- › Wear GANTSCOV gloves.



Figure 01

- › Position the film on the target surface and tape it into place. (FIG. 01)

- › Apply a strip of masking tape across the upper section of the graphic in order to create a horizontal hinge; preferably on a flat part of the surface. (FIG. 02)



Figure02

- › Peel off 10 cm (4 in.) of the liner. (FIG. 03)

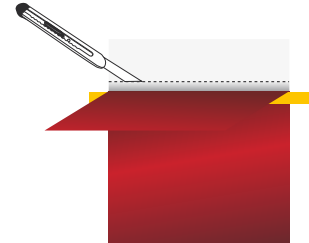


Figure03

- › Start applying the film with a squeegee (covered with felt beforehand), by forming a 45° angle with the substrate, and by working from the centre towards the edges. (FIG. 04)

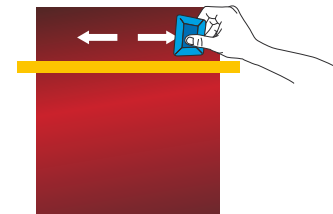


Figure04

HEXIS advice: To facilitate the surface sliding of the squeegee on the film, it is highly recommended to spray the application liquid MAGICSPRAY on the surface of the latter whenever needed, until completion of the film application.

- › Remove the top hinge and continue removing the liner, depending on the surface pattern (cf. paragraphs below). (FIG. 05)
- › During application to flat surfaces, squeegee the entire surface by gradually removing the liner, and by firmly pressing on the edges and corners.

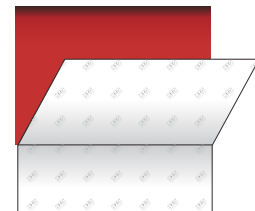


Figure05

4.2. Undulated surfaces:

Any heating operation indicated below must be carried out with the heat gun or the gas torch by performing sweeping motions at a reasonable distance. The temperature must be checked with the laser thermometer on the film's surface, in the heated area, right after withdrawal of the heat gun's hot air flow.

⚠ *If the heat flow is maintained on a fixed spot or near the surface of the film, it may result in an irreversible deterioration of the product. Do not measure the temperature in the air flow of the heat gun. This would give a wrong measurement and could lead to an insufficient reheating temperature (risk of the film peeling off later on).*

Having completed step 4.1, you may come across slight or heavy undulations for which the application process will be different.

4.2.1. Slight undulations: "stretched application":

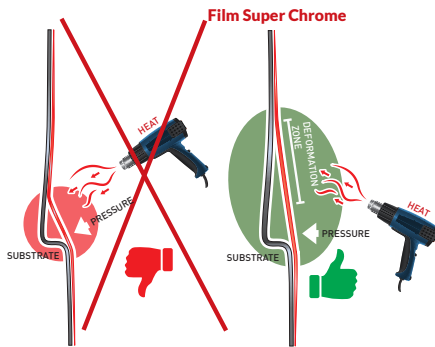


Figure 06

- › Remove the whole liner.
- › Apply the stretched vinyl over the substrate so as to have it stick only to the peaks of the undulation. (FIG. 06)
- › Apply the peaks with a finger or a squeegee.
- › Then heat the stretched areas to a temperature ranging from 30 °C to 40 °C (86 °F and 104 °F) with the heat gun.
- › While continuing to heat the film, press it into the hollow of the undulation with your thumb from both sides so as to properly make the adhesive stick.
- › Without heating, apply the area between the two undulations from the centre to the rims using the squeegee.
- › Now cut the contours if your undulated substrate is composed of several parts.
- › Once the application is finished, heat all the areas which have undergone heavy deformation to a temperature ranging from 80 °C to 90 °C (from 176 °F to 194 °F) in order to kill the shape memory of the film.

4.2.2. Heavy undulations: "extended application":

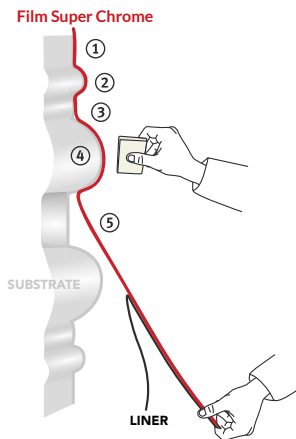


Figure 07

- › Gradually remove the liner while pulling it downward. (FIG. 07)
- › Apply the film with the thumb or a squeegee horizontally by progressing slowly into the hollow of the undulation.
- › Start applying the hollow ①, then the peak ② and finally the hollow ③.
- › Continue onto the next undulation ④, then keep going ⑤ until completion of the application.
- › As the film was not deformed, it is not necessary to heat again to 80 °C (176 °F).
- › The application is completed.

⚠ In the hollow parts, the HEX'PRESS adhesive technology requires sufficient pressure in order to completely expel any air that could remain in the micro-channels. This is because the air that has not been evacuated and that is not visible to the eye may later result in the film peeling off from its substrate.

HEXIS advice: To enhance the surface sliding of the squeegee on the film, it is highly recommended to spray the application liquid MAGICSPRAY on the surface of the latter whenever needed, until completion of the film application.

4.3. Concave surfaces:

Any heating operation indicated below must be carried out with the heat gun or the gas torch by performing sweeping motions at a reasonable distance. The temperature must be checked with the laser thermometer on the film's surface, in the heated area, right after withdrawal of the heat gun's hot air flow.

⚠ If the heat flow is maintained on a fixed spot or near the surface of the film, it may result in an irreversible deterioration of the product. Do not measure the temperature in the air flow of the heat gun. This would give a wrong measurement and could lead to an insufficient reheating temperature (risk of the film peeling off later on).

When step 4.1 is finished, proceed as follows:

- › Remove the whole liner. (FIG. 08)



Figure 08

- › Stretch the vinyl over the substrate so that it touches the peaks only.

- › Apply the peak with your finger or a felt-covered plastic squeegee. (FIG. 09)

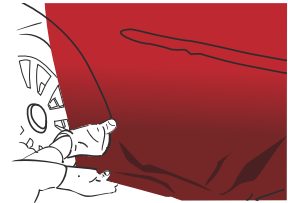


Figure 09

- › If necessary, lift and stretch the film again; then apply it.

- › Heat to a temperature ranging from 30 °C to 40 °C (from 86 °F to 104 °F) and press the film with your thumb into the hollow area so as to properly apply the adhesive. (FIG. 10)



Figure 10

! *HEX'PRESS adhesive technology allows very easy repositioning of the film during its application to the substrate and air evacuation. However, particularly in concave areas, the HEX'PRESS adhesive technology requires sufficient pressure in order to completely expel any air that could remain in the micro-channels. The air that has not been evacuated and that is not visible to the human eye may later result in the film peeling off from its substrate. HEXIS recommend you pay particular attention to the application of HEX'PRESS films to concave areas.*

HEXIS advice: In order to reduce the risk of micro-folds generated during the air evacuation phase, it can be necessary to increase the surface sliding of the squeegee on the film. For this purpose, spray the application liquid MAGICSPRAY on the squeegee surface whenever needed, until completion of the film application.

- › Once this step is completed, heat all the hollow parts which have undergone heavy deformation to a temperature ranging from 80 °C to 90 °C (from 176 °F to 194 °F) to kill the shape memory of the film. (FIG. 11)

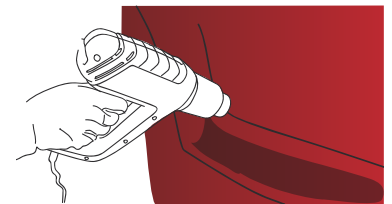


Figure 11

If any areas turn out to be too concave, we recommend you to make the appropriate cuts in the following manner:

- › Put on a glove and apply the slightly raised parts. (FIG. 12)
- › Make a cut with the cutter on one of the sides of the concave area. (FIG. 13) (Be careful not to scratch the substrate under the vinyl)



Figure 12

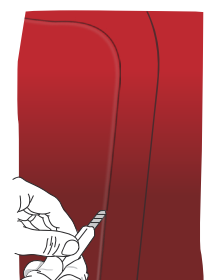


Figure 13

- › Heat the uncut hollow area to a temperature ranging from 30 °C to 40 °C (from 86 °F to 104 °F) and use your finger to go into the hollow and press down the adhesive. (FIG. 14)



Figure 14



Figure 15

Tip: To avoid the substrate appearing at the cut (FIG. 15), you can apply a strip of vinyl to the concave part of the substrate where you will make the cut. Thus, when you apply the film and make the cut, the overlap of the vinyl will conceal the substrate. Cut and remove the surplus material right after application.

4.4. Convex surfaces:

Any heating operation indicated below must be carried out with the heat gun or the gas torch by performing sweeping motions at a reasonable distance. The temperature must be checked with the laser thermometer on the film's surface, in the heated area, right after withdrawal of the heat gun's hot air flow.

⚠ *If the heat flow is maintained on a fixed spot or near the surface of the film, it may result in an irreversible deterioration of the product. Do not measure the temperature in the air flow of the heat gun. This would give a wrong measurement and could lead to an insufficient reheating temperature (risk of the film peeling off later on).*

When step 4.1 is finished, proceed as follows:

- › Remove the liner.

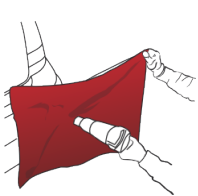


Figure 16

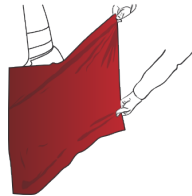


Figure 17

- › Heat the vinyl (FIG. 16) to a temperature ranging from 30 °C to 40 °C (from 86 °F to 104 °F), then stretch the film so as to completely wrap the convex surface. (FIG. 17)

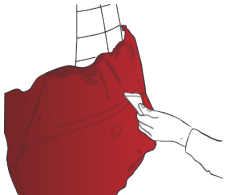


Figure 18

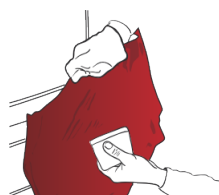


Figure 19

- › Apply the film over the whole surface using a felt-covered, plastic squeegee, and carefully wipe over the convex area (FIG. 18) to eliminate any tensions and folds.

- › If necessary, lift the film, stretch it again and completely wrap the convex surface, then apply it. (FIG. 19)

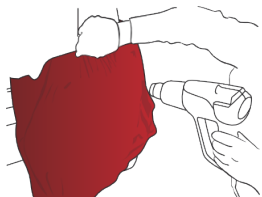


Figure 20

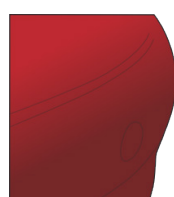


Figure 21

- › After this operation, heat to a temperature ranging from 30 °C to 40 °C (from 86 °F to 104 °F) (FIG. 20) and stretch to eliminate all folds using the squeegee.

- › Cut, if necessary, and heat again all the edges to a temperature ranging from 80 °C to 90 °C (from 176 °F to 194 °F).

- › The application is finished. (FIG. 21)

⚠ *Take particular care when heating the stretched film (FIG. 16) (FIG. 20). The hot air gun or the gas torch must never be held at a right angle to the surface of the film. It should be inclined so as to heat a larger surface area. Keep the hot air gun moving all the time. Heating the film from a reduced distance and over a prolonged time may irreversibly damage the film.*

4.5. Riveted surfaces:

Any heating operation indicated below must be carried out with the heat gun or the gas torch by performing sweeping motions at a reasonable distance. The temperature must be checked with the laser thermometer on the film's surface, in the heated area, right after withdrawal of the heat gun's hot air flow.

⚠ *If the heat flow is maintained on a fixed spot or near the surface of the film, it may result in an irreversible deterioration of the product. Do not measure the temperature in the air flow of the heat gun. This would give a wrong measurement and could lead to an insufficient reheating temperature (risk of the film peeling off later on).*

After having completed step 4.1, proceed as follows:

- › Stretch the film when you come across a rivet. Gently heat at a temperature ranging from 40 °C to 50 °C (from 104 °F to 122 °F). Then dab the rivets (while being very careful) with the RIVETBRUSH to apply the film to them.

- › Then slide the ROLLRIV over the film to make it adhere to the entire rivet surface. Press it all around the rivet using a squeegee or your thumb. (FIG. 22)

- › To finish, use the RIVETBRUSH and firmly apply it to the rivets (while dabbing carefully).

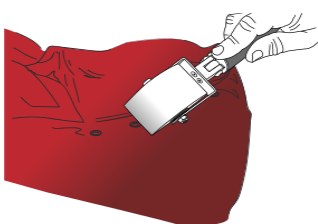


Figure 22

⚠ *The stiffness of the bristles of the RIVETBRUSH can, in case of excess use, scratch the film irreversibly.*

- › Then heat each rivet again to 80 °C - 90 °C (176 °F - 194 °F). (FIG. 23)

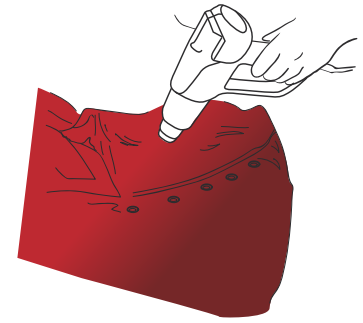


Figure 23

4.6. Overlaps:

If two film parts or two widths of the same reference need to overlap, it is important to comply with the following instructions in order to achieve coherent appearance (colour, gloss, texture...) and optimum adhesion of one film on the other:

- › Clean the lower film using a microfibre cloth soaked with HEXIS FINAL CLEANER or SHAGCLEAN. Leave to dry.
- › Unroll the upper width or upper part in the same direction as the lower width or lower part.

⚠ *If the upper film needs to be repositioned, separate the lower film with extreme care.*

- › Apply the upper film. Press down strongly on the overlapped area using your gloved hand or a squeegee while heating the area at around 30 °C (86 °F).

4.7. Additional information for a vehicle full wrap:

It is recommended to dismantle as many components as possible (covers, trims, indicator lights, etc.) before installing the film.

- › For vehicles, application on the window and body panel seals, any unpainted areas such as trim strips or unpainted bumpers that may not have been removed is strictly prohibited.

It is recommended to wrap each part separately and independently.

4.7.1. Overlap of widths:

- › If an overlap of widths is necessary, HEXIS recommend to do it over 1 cm (0.4 in.) with:

- Horizontal overlap: The upper part of the film (above) is applied to the lower part of the film (below) (tiling strategy).
- Vertical overlap on a mobile surface: Assuming you always apply the film starting from the rear of the vehicle and moving to the front, then the overlapping will be done in the same way. (FIG. 24)

⚠ *If the upper film needs to be repositioned, separate the lower film with extreme care.*

4.7.2. Horizontal installation:

- › Whenever a horizontal application becomes necessary as on engine hoods or roofs, this may lead over time to a slight fading of colour or gloss compared to vertically exposed areas. In regards to the product's durability, HEXIS are in no way liable for the areas which are most exposed to sunlight or severe climatic changes.

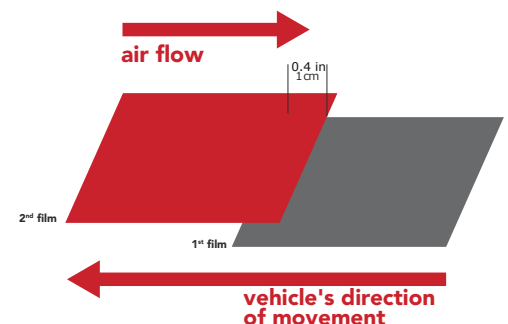


Figure 24

4.7.3. Application method:

Any heating operation indicated below must be carried out with the heat gun or the gas torch in sweeping motions at a reasonable distance. The temperature must be checked with the laser thermometer on the surface of the film during heating.

⚠ *If the heat flow is maintained on a fixed spot or near the surface of the film, it may result in an irreversible deterioration of the product. Do not measure the temperature in the air flow of the heat gun. This would give a wrong measurement and could lead to an insufficient reheating temperature (risk of the film peeling off later on).*

For whichever part to be wrapped:

- › Measure the areas to be wrapped. Cut the film by leaving a margin of at least 10 cm (4 in) all around the surface so as to be able to hold it taut during application and avoid leaving fingerprints.

Install the film proceeding part by part (e.g. doors, hatch, bonnet, etc.).

- › Avoid applying the Super Chrome film to unpainted components such as trims or unpainted bumpers.
- › The initial steps are the most important and here is some essential guidance:
 - › Make a horizontal hinge as indicated above (chapitre 4.1. First steps and application of the Super Chrome film to flat surfaces:, page 4) just above the door handles.
 - › Cut and remove the liner from the upper part.
 - › Hold the film taut and apply it using a felt-covered squeegee.
 - › Once the upper part is applied, remove the remaining liner from the lower part.



Figure 25

- › Hold the film taut over the door handles and, using a squeegee, apply the film all around the door handle contours. (FIG. 25)

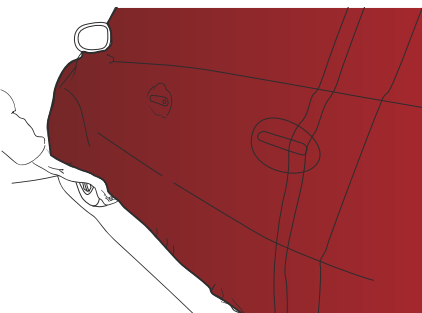


Figure 26

- › Once the door handles are done, hold the film taut down to the bottom of the vehicle body. (FIG. 26)

- › If necessary, lift and stretch the film again, by heating it to a temperature ranging from 30 °C to 40 °C (from 86 °F to 104 °F) so as to remove any folds.

- › The film is now stretched over the entire surface area to be wrapped. Now you can apply the film (FIG. 27) as described in the paragraphs 4.2 to 4.4 according to the type of surface.

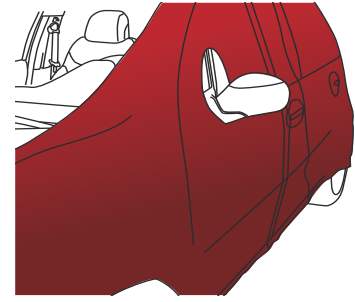


Figure 27

5. RELEASING TENSION:

Before proceeding with cuts, it is necessary to release the tension along the edges of the film to eliminate the curling and shrinkage effect that may appear during heating.

Any heating operation indicated below must be carried out with the heat gun or the gas torch in sweeping motions at a reasonable distance. The temperature must be checked with the laser thermometer on the surface of the film during heating.

! *If the heat flow is maintained on a fixed spot or near the surface of the film, it may result in an irreversible deterioration of the product. Do not measure the temperature in the air flow of the heat gun. This would give a wrong measurement and could lead to an insufficient reheating temperature (risk of the film peeling off later on).*

- › Peel off about 2 cm (1 in.) of the film from the vehicle body.
- › Heat the edges of the film to a temperature ranging from 30 °C to 40 °C (from 86 °F to 104 °F).

Any curling or waves appearing indicate a wrong installation and particularly tension problems. In this case, peel off the film from the vehicle body, heat it to a temperature ranging from 30 °C to 40 °C (from 86 °F to 104 °F) to return to normal tension and apply it again with the felt-covered squeegee without exercising too much pressure. Then start step 5 from the beginning.

- › If no curl or shrinkage is obvious, apply the film until the edge of the vehicle body using a felt-covered squeegee.

6. USE OF THE HEAT GUN OR THE GAS TORCH:

Any heating operation indicated below must be carried out with the heat gun or the gas torch in sweeping motions at a reasonable distance. The temperature must be checked with the laser thermometer on the surface of the film during heating.

! *If the heat flow is maintained on a fixed spot or near the surface of the film, it may result in an irreversible deterioration of the product. Do not measure the temperature in the air flow of the heat gun. This would give a wrong measurement and could lead to an insufficient reheating temperature (risk of the film peeling off later on).*

- › Once the application is finished, heat once more all the parts which have undergone severe deformation using the heat gun. (FIG. 28)

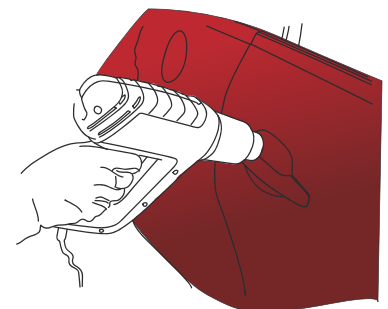


Figure 28

- › The heating temperature must range from 80 °C to 90 °C (from 176 °F to 194 °F). Check it using the laser thermometer (PISTLASER3).

Heating enables the acceleration of the adhesion process of the pressure-sensitive adhesive. In this way, the film will be definitively thermoformed.

Due to their composition, the Super Chrome films accumulate heat rapidly and for a long time. The rise in temperature of the film during installation with a heat gun or a gas torch is faster and more long-term than that of other products. Such a behaviour should be taken into account during installation. In particular, take care not to burn yourself while handling the film.

7. CUTS AND FINISHINGS:

7.1. Straight cut with overlap:

To avoid scratching the substrate, the cutter blade must always be parallel to and flush with the vehicle body.

- › Put on GANTSCOV gloves.
- › Use a cutter with a new blade.

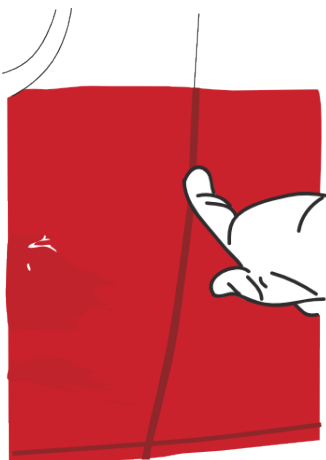


Figure 29

- › Trace the contours of the area with your gloved finger. (FIG. 29)



Figure 30

- › For the cut, the cutter blade must be placed against the edge of the adjacent area. When cutting, make sure you always go along the same line with the blade inclined towards the outside OR make sure you always follow this edge with the blade inclined towards the outside. (FIG. 30)

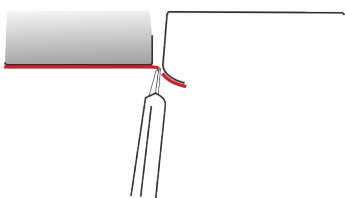


Figure 31

- › After the cut, 2 to 3 mm of the film (1 to 1½ in.) should be left over the edge of the vehicle parts. (FIG. 31)

If there are no adjoining areas, cut the film surplus leaving just 2 to 3 mm of film (1 to 1½ in.).

- ▶ To finish, run the squeegee over the cut. Incline the squeegee towards the thinner edge. (FIG. 32). Firmly apply the film over the edges, round parts and neighbouring or opposed areas.
- ▶ Remove any excess film.



Figure 32

7.2. Straight cut without overlap:

This method is used for a cut along a seal or any trim that cannot be disassembled.

- ▶ Use a cutter with a new blade.
- ▶ Trace the contours of the area with your finger. Lift the vinyl of the adjacent part and drag it into the hollow using a squeegee so as to mark the seal edge. (FIG. 33)

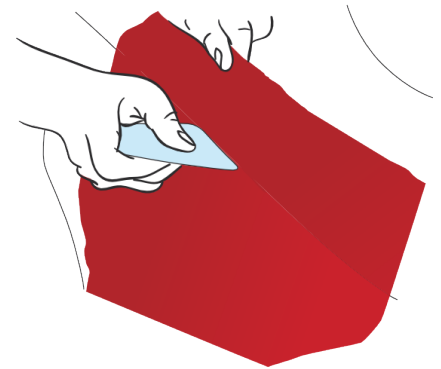


Figure 33

- ▶ For cutting, the cutter blade must be placed in a flat position, between the body and the seal, and perpendicular to the seal. Carry out the cutting operation by always maintaining this blade orientation. (FIG. 34)



Figure 34


- ▶ Remove any excess film.
- ▶ Finish off by running the squeegee over the cut.

8. FINISHING:

At the end of the application, leave the vehicle (or the wrapped component) in an environment with a temperature ranging from 15 °C to 25 °C (from 59 °F to 77 °F) and a relative humidity between 30 % and 70 % for at least 12 hours.


Finally check all areas where the film was cut. If the film peels off or wrinkles, restick the edges under strong pressure using the squeegee.


In order to achieve a perfect mat aspect with the Super Chrome film, we recommend that you complete the application work by cleaning the film's surface with a microfibre cloth and the «MATCLEAN» maintenance product.

 *After its application, wait for at least 24 hours before proceeding to the final cleaning in order to ensure optimum film adhesion.*

9. CLEANING AND MAINTENANCE OF THE SUPER CHROME FILMS:

To maintain a perfect finish over time, the Super Chrome films may require more frequent and more careful cleaning than other self-adhesive films. For optimum maintenance of your Super Chrome film, HEXIS suggest to use their range of ProTech® cleaning agents specially designed for full wraps.

 *However, do not wash the film within the 92 hours following its application as this can affect the adhesion that may result in the film peeling off.*

 *As the Super Chrome films are fragile products, the numerous abrasive particles (sand, dust, etc.) that may deposit on the surface of the film during its life cycle may during successive washings irrevocably deteriorate the film. HEXIS decline all liability for damages occurred during washings.*


9.1. Soiled surfaces:

- › Generously moisten the film with water to remove all dust.
- › Carefully wash the vehicle with the SHAMPCAR vehicle shampoo distributed by HEXIS and a natural sponge.
- › Completely dry the vehicle using microfibre cloths.
- › Use ProTech® maintenance products distributed by HEXIS for the final finish.

9.2. Slightly soiled surfaces:

For a regular cleaning of the vehicle, use the ProTech® MATCLEAN product distributed by HEXIS with a clean microfibre cloth.

- › Spray directly onto the surface (± 40 cm x 40 cm / 15 in. x 15 in.).
- › Wipe with a microfibre cloth before the product dries.

 *Cleaning the Super Chrome films in automatic car washes and / or high-pressure cleaners must absolutely be avoided. HEXIS decline all liability for any damages caused by these cleaning methods.*

10. REMOVAL PROCEDURE:

The Super Chrome films feature a permanent adhesive and therefore their removal needs some attention. Nevertheless, by following the instructions below, the removal will be relatively easy.


- › Using a heat gun, start from a corner and heat the film to a temperature of around 60 °C (140 °F) (use the laser thermometer).
- › Lift the corner gently with the cutter without damaging the substrate, and gradually remove the film previously heated; the film should form an angle of 70° to 80° relative to the substrate.


 *An angle more or less wide will cause the film to break more easily.*

- › Always proceed gradually by heating small areas while carefully removing the film so as to limit the risk of leaving any adhesive on the substrate or tearing off the film.
- › Continue to carefully heat and peel off the film gently until it is completely removed

while keeping a watchful eye on the heat applied, on the pulling angle of the film, and the pulling speed.

- ▶ If any adhesive remains on the substrate, take a cloth soaked with our ADHESIVE REMOVER or SHAGREMOV and rub the surface until all traces disappear.

 *Prior to treatment, run a compatibility test on a small, inconspicuous area of the substrate to be treated. Indeed, certain plastic materials might be damaged by the ADHESIVE REMOVER and SHAGREMOV.*

 *Before using any of our liquids, please refer to the technical data sheets on our website at www.hexis-graphics.com.*

For further technical information, please refer to the Technical Data Sheets available for free download from our website www.hexis-graphics.com, on the "Professionals" pages.

Due to the great variety of substrates and the growing number of new applications, the installer must check the suitability of the media for each application. All the published information does not however constitute a binding guarantee. The seller cannot be held liable for indirectly related damages and assumes no liability for claims that are higher than the replacement value of the purchased product. All specifications are subject to potential changes without prior notice. Our specifications are automatically updated on our website www.hexis-graphics.com.

