PRODUCT BULLETIN

APPLICATION AND REMOVAL METHOD

HEX'PRESS Cast Films:

SUPER CHROME HX30SCH00B

REQUIRED EQUIPMENT

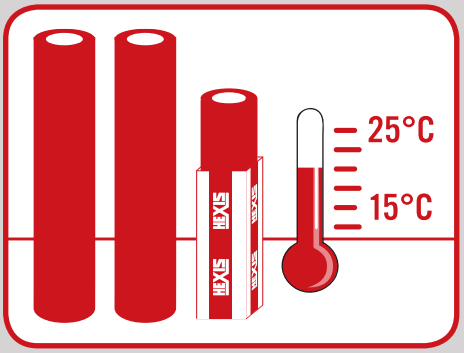
- Adhesive tape Tesa® 7476
- Masking tape
- « System 1, 2, 3 » cleaning liquids:
  - 1-Remover
  - 2-Pre Cleaner
  - 3-Final Cleaner
- ProTech® SHAMPCAR vehicle shampoo
- Liquid for an easier application: MAGICSPRAY
- Squeegees upon your choice from the catalogue
- ROLLRIV application wheel for applications over rivets
- RIVETBRUSH application accessory for riveted surfaces
- MALCOV HEXIS tool case
- 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 Super Chrome films consist of a multilayered cast film, a clear surface protection film and a structured HEX'PRESS silicone liner. Given their composition, the Super Chrome films have a gloss surface finish with mirror effect. 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.

By their very nature, the Super Chrome films are more fragile than paints and require more regular maintenance.

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.

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Application methods are based upon HEXIS' experience and are non-restrictive. Comply with instructions to ease application of HEXIS films.
HEXIS also offer training sessions for beginners and professionals to achieve optimum results.

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

The installer and the client are responsible for the suitability evaluation of the target surface to be covered.

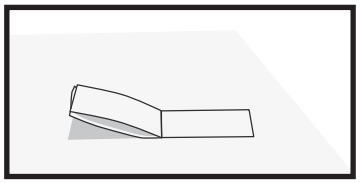
2.1. Preliminary inspection of the substrate:

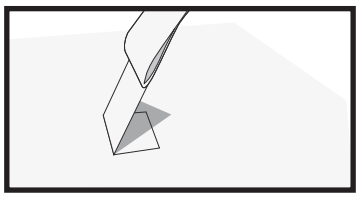
› Any fresh new paint must be dried for at least 7 days at 25 °C (77 °F) to outgas completely. An outgassing test must be carried out before applying the film.

› Any old, powdery or flaky paint must be sanded and renewed before application and must undergo a tear-off test.

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

2.2. Tear-off test:





Using a TESA® 7476 adhesive tape, or the like, apply on 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 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. Outgassing test:

(For checking) Use a square 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 insufficiently outgassed. Therefore, this process should be repeated after a couple of days; or else the procedure described below should be carried out.

2.4. Outgassing 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 that treatment as this light surface treatment disappears after few minutes.

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

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 adhesion 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 or soiled surface appearance:

For vehicle wraps, it is advised to wash the vehicle with the SHAMPCAR vehicle body shampoo, then use the PRE CLEANER (product n° 2).

› Spray it onto the surface.

› Let it work for a few minutes, then wipe it dry with a clean cloth.

› Carry out a final cleaning using the FINAL CLEANER (product n° 3).

Shampcar
Concentrated vehicle shampoo

Pre Cleaner
Powerful universal cleaning agent

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 (product n° 1).

Work in a ventilated area. Wear protective gloves and goggles.

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 (product n° 1).

› Spray it onto the dirty surface and spread out using a dry cloth.

› Then wait for a few minutes. Spray the ADHESIVE REMOVER (product n° 1) again, then wipe it dry with a clean cloth or squeegee.

› When the substrate is clean and dry, clean again with the PRE CLEANER (product n° 2), then finish with the FINAL CLEANER (product n° 3) (as explained above).

Adhesive Remover
Powerful cleaning agent

Final Cleaner
Cleaning and degreasing finishing agent

3.3. Special case:

Remember to adapt the preparation methods upon 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, clean the substrate with soapy water and then with a cloth soaked with PRE CLEANER (product n° 2), then FINAL CLEANER (product n° 3) in the case of a full wrap.

Refer to the product safety data sheet.

⚠ *Thoroughly wipe the surface after the cleaning process.*

4. APPLICATION OF THE SUPER CHROME FILM:

› Super Chrome films must be applied according to the “dry” application method using a squeegee covered with a 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 on the substrate.

› Before any application of the Super Chrome film, make sure that all surfaces be 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 ideal application temperature is between 20 °C and 25 °C (68 °F and 77 °F) and should be evenly complied for both the ambient and the substrate temperatures.

› The minimum application temperature is 20 °C (68 °F). Avoid applications in colder environments. Indeed, due to their specific structure, these products tear off easily in cold working conditions.

› Super Chrome films get easily scratched (in particular from swiping squeegees). For this reason during application of these films, particular attention must be paid to ensure that:

- the squeegees used are covered with a unused felt sheet
- the optimum working angle of the squeegee is complied with.

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 as soon as necessary, until completion of the film application.

› The installation should be carried out wearing GANTSCOV gloves also available in the MALCOV.

› 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. Removal of the surface protection film:

Super Chrome films have been provided with a clear surface protection film to protect them against dust, scratches, traces of handling, etc. during storage and after opening, and give them a higher storage rigidity. For notification at receipt, you will find an information sheet affixed to the roll.

› The clear protection film must be removed right before applying the product.

› There are two options when removing this protective film:

4.1.1. In the case of a new roll:

An adhesive strip is positioned on a corner, between the protective film and the Super Chrome film.

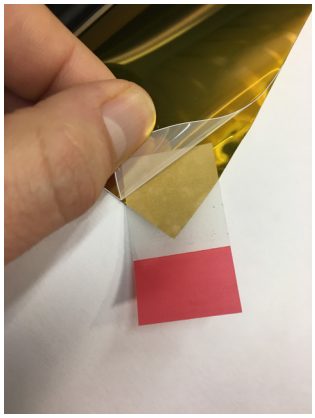


Figure 01

› Lift the protective film at the strip position so that it can be easily removed. (FIG. 01)

4.1.2. In the case of a used roll:

› Using a cutter is mandatory.

› Slide out several blades (4-5).

› Draw a line with the cutter into the protective film, 3 or 4 cm (1.81 or 1.57 in.) from the corner, without cutting the Super Chrome film + liner. (FIG. 02)

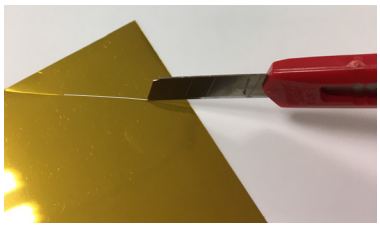


Figure 02

› Place the cutter tip in the notch and lift the protective film. (FIG. 03)

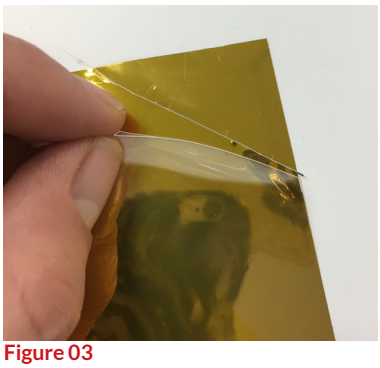


Figure 03

› It is now possible to remove this film.

4.2. First steps and application of the Super Chrome film on 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…) made after removal of the HEX'Press liner.

⚠ *Be careful not to go beyond the limits of the product: the Super Chrome films may undergo 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 mirror finish, the Super Chrome films store rapidly and durably heat. The rise in temperature of the film during installation with a heat gun or a gas torch is faster and longer 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 (also available in the MALCOV toolbox)

› Position the film on the target surface using pieces of adhesive tape (FIG. 04)

Figure 04

⚠ *Do not use magnets or other accessories to position the film as the risk of scratching is particularly high.*

Figure 05

› Using masking tape, make a horizontal hinge on the top part, preferably on a flat area. (FIG. 05)

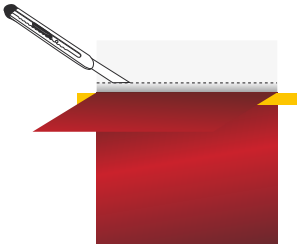


Figure 06

› Peel off 10 cm (4 in) of the liner. (FIG. 06)

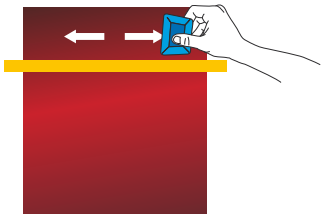


Figure 07

› Start applying the film with a squeegee (previously covered with felt), by forming a 45° angle with the substrate, and by working from the centre towards the edges. (FIG. 07)

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 as soon as necessary, until completion of the film application.

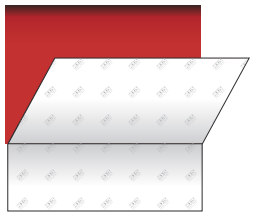


Figure 08

› Remove the top hinge and continue removing the liner, depending on the surface pattern (cf. paragraphs below). (FIG. 08)

› During application on flat surfaces, squeegee the entire surface by gradually removing the liner, and by firmly pressing on the edges and corners.

4.3. 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 4.2, you may come across slight or pronounced undulations for which the application process will be different.

4.3.1. *Slight undulations: "stretched application":*

› Remove all the liner.

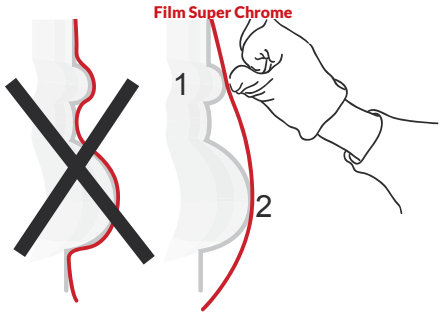


Figure 09

› Stretch the vinyl onto the substrate so that it touches the raised surface. ((FIG. 09) ① and ②)

› Apply the raised surface with a finger or squeegee.

› Then heat the stretched surface to a temperature ranging from 30 °C to 40 °C (86 °F and 104 °F)

› While continuing to heat the film, run your thumb down the hollow part of the undulation on both sides to stick the adhesive.

› Without heating and using the squeegee, apply the area between the two undulations from the centre to the edges.

› Now proceed with the cuts if your undulated substrate has several parts.

› Once you have finished, heat again all the parts which have undergone heavy deformation to a temperature ranging from 80 °C to 90 °C (from 176 °F to 194 °F) to thermoform the product definitively.

4.3.2. *Pronounced undulations: "extended application":*

› Gradually remove the liner while pulling it downwards (FIG. 10)

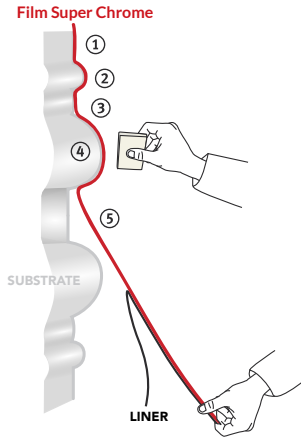


Figure 10

› Apply the film with the thumb or the squeegee by wiping down horizontally into the hollow part of the undulation.

› Start applying the hollow part ①, then the raised part ②, and then the hollow part ③.

› Go onto the following undulation ④, then keep going ⑤ until completion of the application.

› As the film was not stretched permanently, 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 out any air that may remain in the micro-channels. This is because the air that has not been egressed 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 as soon as necessary, until completion of the film application.

4.4. 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 4.2 is finished, proceed as follows:

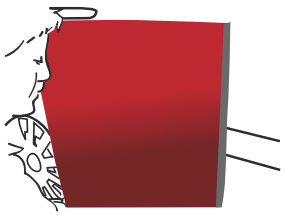


Figure 11

› Remove the whole liner by pulling it off. (FIG. 11)

› Stretch the vinyl on the substrate so that the film touches the raised parts only.

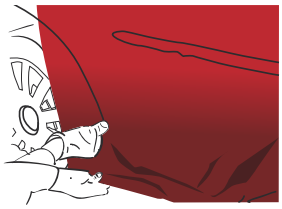


Figure 12

› Apply the raised parts with a finger or a felt-covered plastic squeegee. (FIG. 12)

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

Figure 13

› Heat to a temperature ranging from 30 °C to 40 °C (from 86 °F to 104 °F) and lower your thumb in the hollow part so as to properly apply the adhesive. (FIG. 13)

⚠ *HEX'PRESS adhesive technology makes the film repositionable during application and allows easy elimination of air bubbles. However, particularly in concave areas, HEX'PRESS adhesive technology requires sufficient pressure in order to completely expel out any air that may remain in the micro-channels. Indeed, the air which has not been eegressed and which is not visible to the eye may later result in the film peeling off from its substrate. HEXIS recommend you to pay particular attention to the application of HEX'PRESS films in 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 as soon as necessary, until completion of the film application.

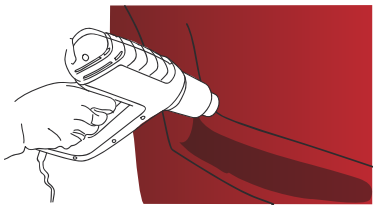


Figure 14

› Once this step is completed, heat again all the hollow parts which have undergone heavy deformation between 80 °C and 90 °C (176 °F and 194 °F) to thermoform the product definitively. (FIG. 14)

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

Figure 15

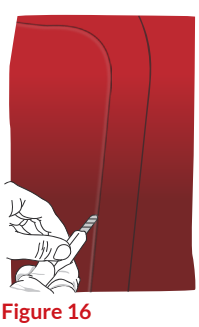


Figure 16

› Put on a glove and apply the slightly raised parts. (FIG. 15)

› Make a cut with the cutter on one of the sides of the concave area. (FIG. 16) (Be careful not to scratch the substrate under the vinyl)

› 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. 17)

Tip: To avoid substrate appearing at the cut (FIG. 18), you can apply a strip of vinyl on 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.

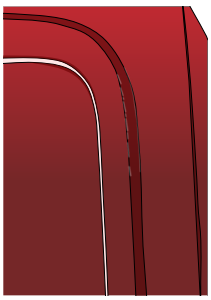


Figure 17

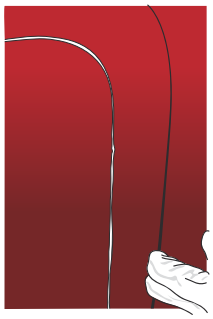


Figure 18

4.5. 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 od 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 4.2 is finished, proceed as follows:

› Remove the liner

› Heat the vinyl (FIG. 19) 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. 20)

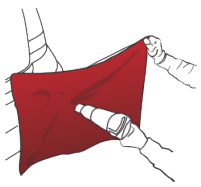


Figure 19

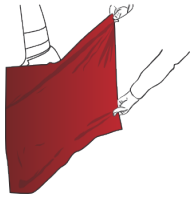


Figure 20

› Apply the film over the whole surface using a felt-covered, plastic squeegee, and carefully wipe over the convex area (FIG. 21) to eliminate any tensions and folds.

› If necessary, lift the film, stretch it again and completely wrap the convex surface, then apply it. (FIG. 22)

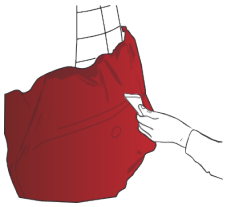


Figure 21

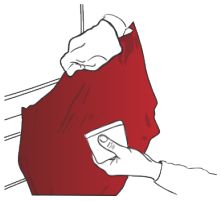


Figure 22

› After this operation, heat to a temperature ranging from 30 °C to 40 °C (from 86 °F to 104 °F) (FIG. 23) 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. 24)

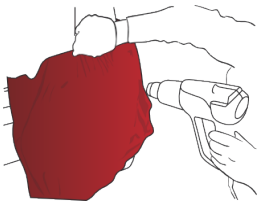


Figure 23

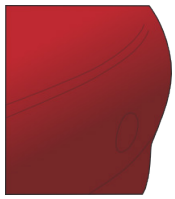


Figure 24

⚠ *Take particular care when heating the stretched film (FIG. 19) (FIG. 23). 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.*

4.6. 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).*

When step 4.2 is finished, proceed as follows:

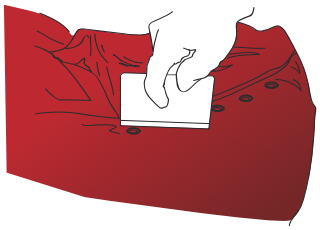


Figure 25

› When you come across a rivet, the film is stretched. 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 on 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. 25)

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

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

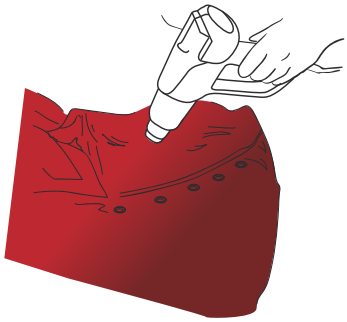


Figure 26

› Then heat each rivet again to 80 °C - 90 °C (176 °F - 194 °F). (FIG. 26)

4.7. 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 (Product n° 3). 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).

4.8. 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.

4.8.1. 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. 27)

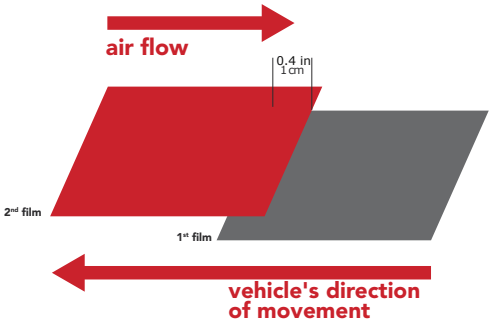


Figure 27

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

4.8.2. 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.

4.8.3. 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 tension it 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 on unpainted components such as trims or unpainted bumpers.

› The initial steps are the most important and here are some essential advices:

› Make a horizontal hinge as indicated above (chapitre 4.2. First steps and application of the Super Chrome film on flat surfaces:, page 5) just above the door handles.

› Cut and remove the liner from the upper part.

› Tension the film and apply it using a felt-covered squeegee.

› Once the upper part is applied, remove the remaining liner from the lower part.

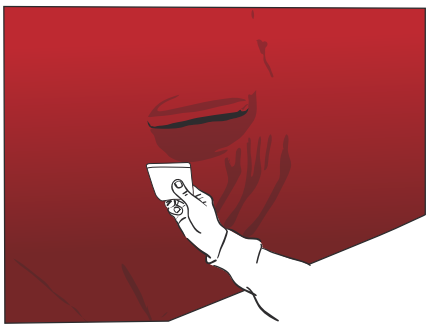


Figure 28

› Tension the film over the door handles and, using a squeegee, apply the film all around the door handle contours. (FIG. 28)

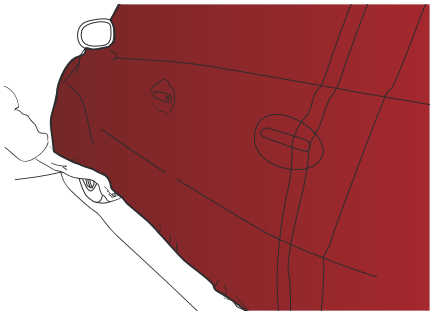


Figure 29

› Once the door handles are done, tension the film down to the bottom of the vehicle body. (FIG. 29)

› 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.

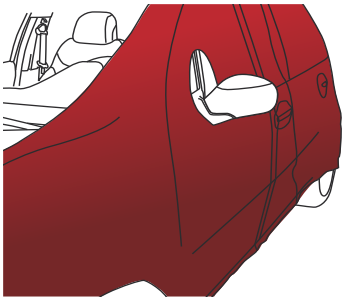


Figure 30

› The film is now stretched over the entire surface area to be wrapped. Now you can apply the film (FIG. 30) as described in the paragraphs 4.3 to 4.5 according to the type of surface.

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 the film from the vehicle body over about 2 cm (1 in.).

› 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 again all the parts which have undergone severe deformation using the heat gun. (FIG. 31)

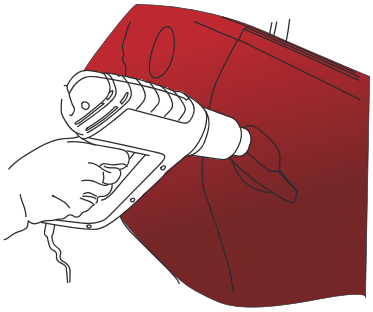


Figure 31

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

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 mirror finish, the Super Chrome films store rapidly and durably heat. The rise in temperature of the film during installation with a heat gun or a gas torch is faster and longer 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 in contact with the vehicle body.

› Put on GANTSCOV gloves, also available in the MALCOV toolbox.

› Use a cutter with a new blade.

› Shape the film with your gloved finger on the part's contours. (FIG. 32)

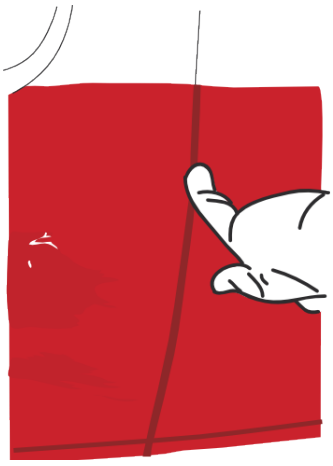


Figure 32

› For the cut, the cutter blade must be placed against the edge of the adjacent part. When cutting, make sure you always go along the same line as the cut with the blade is inclined towards the outside. (FIG. 33)

Figure 33

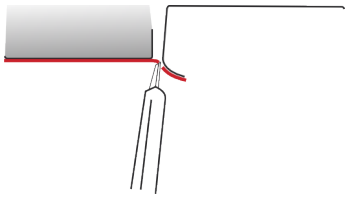


Figure 34

› 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. 34)

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

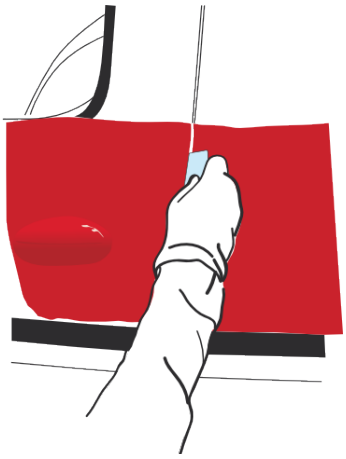


Figure 35

› To finish, run the squeegee over the cut. Incline the squeegee towards the thinner edge (FIG. 35). Firmly apply over the edges, round parts and neighbouring or opposed areas.

› Remove any excess film.

7.2. Straight cut without overlap:

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

› Use a cutter with a new blade.

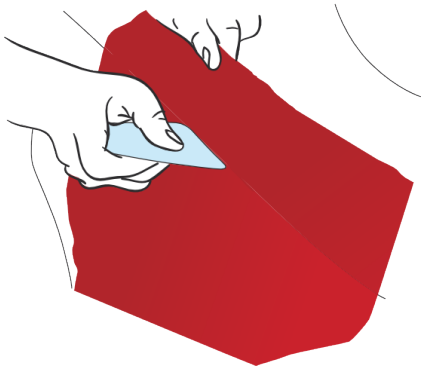


Figure 36

› Shape the film with your finger on the part's contours. Lift the film of the adjacent part and drag it into the hollow using a squeegee so as to shape the joint edge. (FIG. 36)

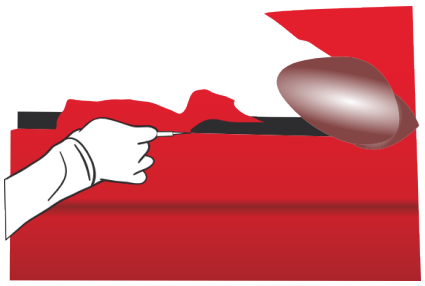


Figure 37

› For the cut, the blade must be placed in a flat position, between the body and the joint, and perpendicular to the joint. When cutting, have the blade run carefully along in the same direction. (FIG. 37)

› 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, apply again the edges under strong pressure using the squeegee.

In order to achieve a perfect mirror aspect with the Super Chrome film, we recommend you to complete the application work by cleaning the film's surface with a microfibre cloth and the LASERWASH 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 the total wrap.

⚠ *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® LASERWASH 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 – available in the tool case – 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 or acute 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 (product n°1) 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 (product n° 1).*

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

www.hexis-graphics.com

HEXIS S.A.
Z.I. Horizons Sud - CS 970003
F - 34118 FRONTIGNAN CEDEX
FRANCE
Tel. +33 4 67 18 66 80
Fax +33 4 67 48 38 79
E-mail: assistance@hexis.fr