

PRODUCT BULLETIN

APPLICATION AND REMOVAL

Cast Vinyl Film With Extra High Tack Adhesive
On uneven surfaces (bricks, concrete, chipboard...).

VCSR100WG1

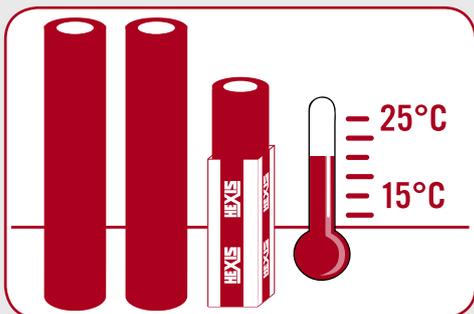
NECESSARY MATERIAL

- › An electric heat gun up to minimum 500°C
- › Heat-safety gloves
- › PC30G2 or PC30M2 cast laminate
- › Cutter
- › Laser thermometer
- › Masking Tape
- › VR7077 edge sealing varnish
- › A WALLCOV application kit comprising:
 - › A ROULMOUS foam roller
 - › A BROSPLATE flat brush
 - › A BROSLONGUE brush with semi-rigid bristles.

ALWAYS STORE VINYL ROLLS AT THE RECOMMENDED CONDITIONS

Keep the film away from sources of heat (radiators, exposure to direct sunlight...): the ideal storage temperature is between 15 and 25°C (59 and 77°F). Store in an atmosphere with low humidity (30 to 70% relative humidity).

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



FEATURES

The VCSR100WG1 consists of a 50µm PVC film, coated with an extra high tack adhesive, suitable for use on uneven surfaces such as bricks, concrete, chipboard etc. The film's flexibility makes it possible to apply it to flat, corrugated, concave, convex and riveted surfaces

PREPARING YOUR APPLICATION SURFACE

HEXIS films can be applied to a wide variety of substrates under the condition that the target surface is clean, dry, smooth, non-porous and without any traces of oil, grease, wax, silicone or other contaminating agents. In order to guard against all eventualities, always assume that the substrate is contaminated and requires cleaning (cf chapter 3). Do not forget to carry out a preliminary test in a small inconspicuous area to check that the substrate does not deteriorate.

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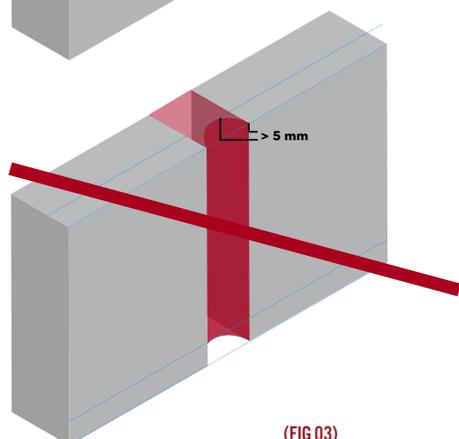
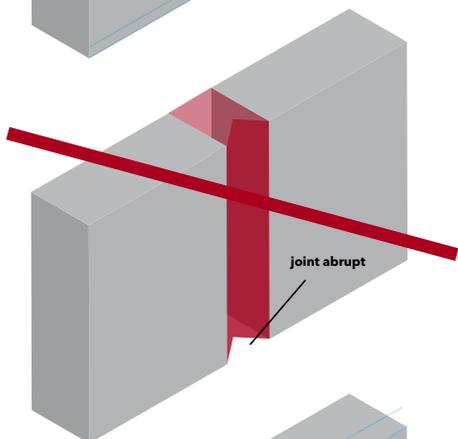
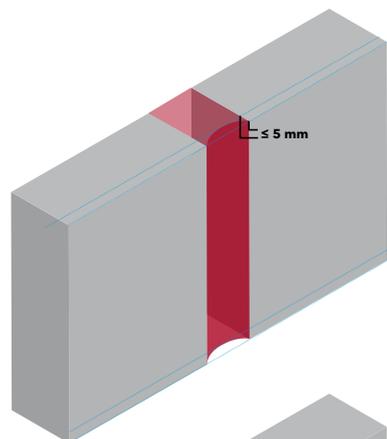
8 Removal procedures



(FIG 01)



(FIG 02)



(FIG 03)

1. RECOMMANDATIONS

› The technique for applying VCSR100WG1 on an uneven surface requires the vinyl to cover all the substrate surfaces (using a heat gun and suitable tools). Remember the structure and relief of subjacent substrate will be visible through the film, adopting all the substrate's uneven surfaces. (FIG 01)

› Nevertheless it is not possible, at the risk of tearing, to have the vinyl cover the abrupt and over-5mm-deep deformations, joints or cracks. If the substrate has a large number of deep and abrupt joints or cracks, repair the substrate and fill the deep cracks.

(FIG 02) (FIG 03)

› Avoid all sandy and friable substrates as there is a risk of it breaking or uplifting from the vinyl contact. Besides the film not sticking well, the removal of it could also damage this sort of substrate.

› When applying on an outside surface, or subjected to extreme dampness, humidity may accumulate on the back of the vinyl. This may cause the vinyl to unstick and/or damage the subjacent wall (coating damage, mildew build-up on the back of vinyl ...).

› An exception for outdoor application on a wall with a side facing outwards and a side facing a heated interior. This difference between dampness and temperature between the two environments causes a natural transfer of water vapour from the inside outwards. Freeze and thawing cycles outside may result in water appearing (as well as salt crystallization) on the back of the vinyl potentially causing rising and crackling of the wall surface.

› Painted surfaces must be dry and hard. For fresh paint, 7 to 10 drying days are required before applying the films. Any paint which has not dried enough may outgas. A vinyl application on such a surface would result in unsticking, bubbles and tears. Proceed with a outgassing test (paragraph 2.2) on this kind of surfaces

› Make sure the paint or coating holds well on the substrate. Bubbles, unsticking and rising of the so-called covering will appear if the paint or coating of the adhesion is not strong. In this case, do not apply the vinyl, or repair the wall beforehand (without forgetting the paint drying time before coating). Applying vinyl on a low-adhesive paint surface will result in a weak adhesions and/or damaging the wall when removing. Proceed with a tear-off test (paragraph 2.1) on this kind of surface.

› Some wall coatings (wallpaper ...) may be damaged when removed. Proceed with a tear-off test (paragraph 2.1) on this kind of surface.

› The application technique for uneven surfaces requires significant substrate heating. Before any application, check the consistent substrate temperature (paragraph 2.3).

› Foresee a sufficient time to carry out your work. Count an application speed between 2 to 3 m²/h. The application speed depends on the substrate type and wall complexity.

› The best adhesion of cast films is after 24 hours of adhesion.

› It is not recommended to use transfer tapes for uneven surfaces as removal could cause the vinyl being torn from the substrate.

› If the application is required for several panels, foresee an overlap of 1 to 1.5cm. Never apply edge to edge.

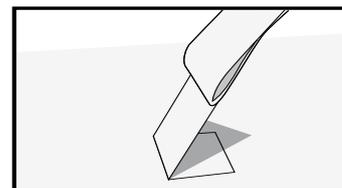
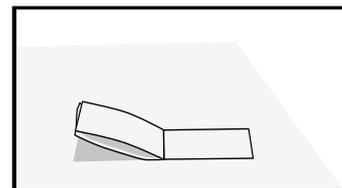
2. PRELIMINARY SUBSTRATE TESTS

2.1 Tear-off test and substrate compatibility test

› Using the methods described in paragraph 5, apply a film application sample, allowing an unstuck overlap to operate more easily

› Watch the immediate reaction of the sample. If any delaminating is noticed, the application technique is not suitable, or the substrate is not compatible for this sort of application.

- › If the immediate reaction is satisfactory, leave the sample in place for a minimum of 24 hours.
- › Check the sample again. If delaminating is noticed, the application technique is not suitable, or the substrate is not compatible for this sort of application.
- › Then quickly remove the sample test in one go, perpendicularly to the substrate surface. There should be no trace left on the adhesive. If traces appear, the substrate is not compatible for this sort of application.



2.2 Outgassing test (on painted surface)

(to check) A square of around 15cm x 15cm of PG836 or AG700 – type polyester, or application film. Wait 24 hours. If bubbles appear, there is insufficient outgassing of substrate. This operation should be renewed after a couple of days.

2.3 Hold-out test according to substrate temperature

The application method for uneven surfaces requires a high heat level for substrate (around 100°C – vinyl temperature). Carry out a heat-resistance test beforehand of your substrate.

- › Heat a small surface at 100°C for 2 seconds and check the non-damage of substrate.

3. CLEANING AND SUBSTRATE PREPARATION

Only apply on a totally clean surface.

3.1 Aspect surface propre

- › Dust the surface using an appropriate brush (BROSPLATE available in the WALLCOV kit) or vacuum cleaner.
- › Make sure the substrate is completely spotless: eliminate any potential dirt, pieces of mortar or building material which is not part of the substrate and which risks breaking off in the future. A suitable rigid brush should be used to carry out this task.
- › Pay special attention to cleaning the corners and angles.

 This cleaning must be carried out just before applying the film

3.2 Dirty substrate appearance

For any contaminated, stained and/or greasy surfaces:

- › To clean, use a brush a special wall-detergent solution, sold in large supermarkets and specialized stores.
- › Use clear water to finish off the cleaning.
- › Let dry for a minimum of 24 hours.
- › Dust the surface using a dry brush just before application.

4. LAMINATION

We recommend you laminate the VCSR100WG1 film with the PC30G2 (gloss surface finish) or PC30M2 (matt surface finish) laminates.

Ensure that the film is dry before application: the printed VCSR100WG1 is touch dry after 10 minutes at the most, however it may be necessary to wait for 48 hours before applying, laminating or cutting the film. To ensure the solvents evaporate completely leave the cut sheets to dry in ventilated racks.

5. APPLICATION OF VCSR100WG1 ON UNEVEN SURFACES

Only apply on a perfectly dry and clean surface (cf. paragraph 3). For an outside application, make sure to not apply immediately after it has rained as the wall will still be wet with dampness (even if the surface seems dry). Wait at least 48 hours after a rainfall

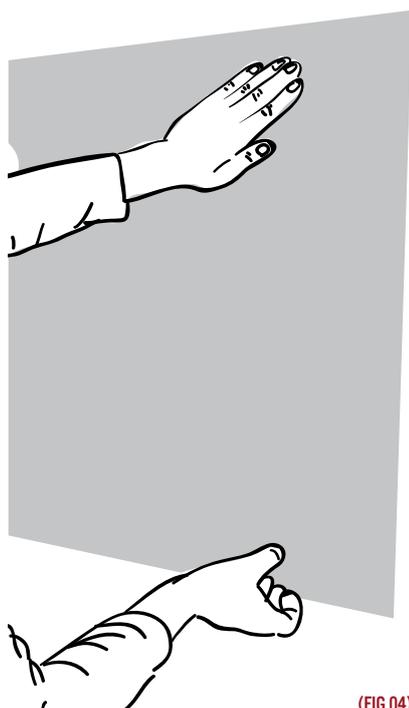
or water cleaning before application.

In all cases, it is recommended to heat the substrate using a heat gun before application.

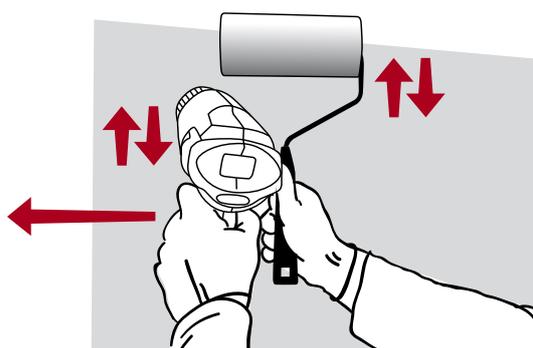
Applying VCSR100WG1 on an uneven surface (such as bricks or concrete) must be done only by a dry process. Never use a wet process when applying on this type of substrate.

The ideal application temperature is a minimum of +15°C which must be respected for the atmosphere as for the substrate temperature.

Note: the heating temperature values indicated in this document are the vinyl surface temperatures. If necessary, check the temperatures using a laser thermometer.



(FIG 04)



(FIG 05)

5.1. Application of VCSR100WG1 on slightly textured surfaces:

- › Put on a pair of safety gloves to protect the hands against the heat and hold the application tool.
- › Take off around 15cm of the liner, fold it and position the vinyl in its allotted space. (FIG 04)
Note: for a small sized visual (<1 m²) remove all the liner and position the vinyl in its allotted space.
- › Press lightly with hands to secure, but not finalize, the application.
- › Heat, at around 100°C, for 2 seconds using a heat gun, a small vinyl area and apply, using the roller ROULMOUS (available in the WALLCOV kit). The roller should be used immediately after the heat gun so as to carry out the application while the vinyl is still hot. Never directly heat the roller to avoid burning it.
To do this: (FIG 05)
- › Place the roller immediately next to the heat gun, having each tool in one hand.
 - › Advance tools forward in straight, horizontal lines, moving both hands at the same time.
 - › Make vertical up and down movements with the two tools.
 - › Move down about 5 to 10cm and repeat the same movements. At the same time, go back over the work already done to ensure a balance and consistency.
- › Slowly pull off the remaining liner part (using both hands for large sizes) and repeat the same actions as above.
- › Finish your work, not forgetting to pay particular attention to the edges.

Check your work. If you are not satisfied with the film adhesion on the substrate, continue working by using the application method for textured surfaces (paragraph 5.2.2).

5.2 Application of VCSR100WG1 on textured surfaces

5.2.1 Pre-application step

- › Put on a pair of safety gloves to protect the hands against the heat and hold the application tool.
- › Take off around 15cm of the liner, fold it and position the vinyl in its allotted space. (FIG 04)
Note: for a small sized visual (<1 m²) remove all the liner and position the vinyl in its allotted space.
- › Press lightly with hands to secure, but not finalize, the application.
- › Heat, at around 100°C, for 2 seconds using a heat gun, a small vinyl area and apply, using a roller. The roller should be used immediately after the heat gun so as to carry out the application while the vinyl is still hot. Never directly heat the roller to avoid burning it.
To do this: (FIG 05)
- › Place the roller immediately next to the heat gun, having each tool in one hand.
- › Advance tools forward in straight, horizontal lines, moving both hands at the same time.

- › Make vertical up and down movements with the two tools.
- › Move down about 5 to 10cm and repeat the same movements. At the same time, go back over the work already done to ensure a balance and consistency.
- › This first step merely serves to hold the vinyl in its final position and the actual application will happen in the following paragraph (paragraph 5.2.2). Do not apply too much pressure to avoid cracking the film
- › Do not mould the vinyl so as to allow the air bubbles to evacuate during the application step (paragraph 5.2.2).
- › Slowly pull off the remaining liner part (using both hands for large sizes) and repeat the same actions as above.

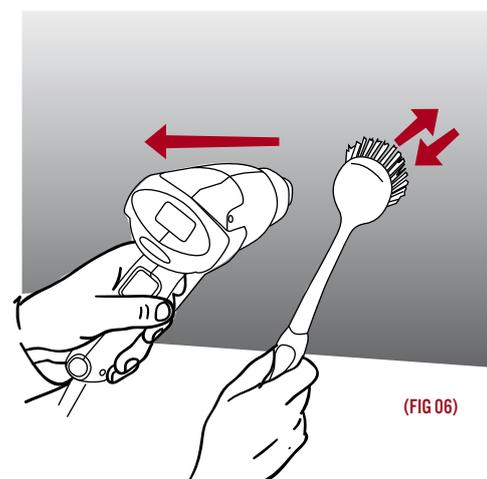
5.2.2. Application step

Once the visual is pre-applied on the substrate (cf paragraph 5.2.1), proceed with the actual application:

› Using a heat gun, heat at around 100°C, a small part of the vinyl for around 2 seconds... Tap energetically, repeatedly and perpendicularly the vinyl surface which you just heated using the BROLONGUE brush (included in the WALLCOV kit). Here again, the application with the brush must be done immediately after the heat gun so as to carry out the application while the vinyl is still hot. Never directly heat the brush to avoid burning it.

To do this: (FIG 06)

- › Place the brush immediately next to the heat gun, having each tool in one hand.
- › Advance tools forward in straight, horizontal lines, moving both hands at the same time.
- › Tap repeatedly on the vinyl surface using a brush.
- › Move down about 5 to 10cm and repeat the same movements. At the same time, go back over the work already done to ensure a balance and consistency.
- › It is important to have the vinyl stick and fit, as much as possible (see paragraph 5.4) into all the uneven parts, irregularities and deformations of the substrate, to avoid it tearing off.
- › Finish your work, not forgetting to pay particular attention to the edges.
- › Pay specific attention to the corners (see paragraph 5.5) and door/window frames. These areas may be reinforced by adding a side strip.



(FIG 06)

5.3 Application temperature

The application temperature is a very important aspect for this method.

Over- or extended heating will damage the film.

A low heat will prevent film from ensuring the required flexibility. Even the immediate adhesion appears fine, low heat may lead to the vinyl peeling off after several days.

⚠ Careful: If burned areas appear on the vinyl, lower the temperature and/or the heating time.

⚠ Careful: If bubbles appear under the vinyl, slightly increase application temperature and/or apply more pressure on application tool.

5.4. Specific case with joints or cracks.

VCSR100WG1 sticks perfectly on mortar joints, if not too deep (max 5mm) or too abrupt. If the joints or cracks are too deep, there is no way of sticking the vinyl without the risk of it breaking. Should this happen, do not try and reshape the vinyl but let it interlace on either side of the uneven surface. (FIG 07)

If the substrate has too many deep joints and cracks, it is preferable to first repair the wall before the application.

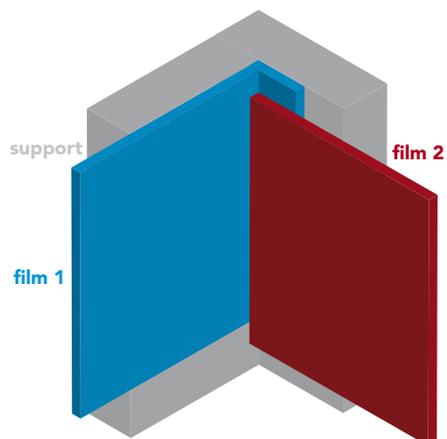
5.5. Corner areas

- › Place the last panel of the first wall by having it overlap 5cm on the second wall.



(FIG 07)

› Then place the panel on the next wall by having it start directly from the corner, so as to have both panels overlapping by 5cm. (FIG 08)



(FIG 08)

6. SEALING VARNISH

⚠ *Careful: The potential tearing off of the sealing varnish on a very textured surface, such as brick or stone, may be bad. In certain cases, removing the sealing varnish is impossible without damaging the subjacent substrate.*

⚠ *Hexis is not liable in the event of tearing off of VR7077 sealing varnish on textured substrates.*

For outdoor sealing, a VR7077-type sealing varnish or acrylic building joint, will increase the film durability and reduce any water infiltration along the edges.

- › Make sure the surfaces are dry
- › Apply 2 pieces of masking tape
 - › 1 on the substrate at 5mm (0.2in) from the VCSR100WG1.
 - › 1 on the VCSR100WG1 at 5mm (0.2in) from the edge (FIG 09)
- › After having put on safety gloves and glasses, apply the varnish in one layer using a paintbrush.
- › Remove the masking tape 15 minutes after application.
- › Drying time is variable depending on the thickness of the varnish applied and the ambient temperature. For a film applied with a normal coating, the optimal drying time is 24 hours. Any physical strains (cleaning, abrasion ...) should be prohibited during this time.

⚠ *There must be no contact between the varnish and the window seals.*

7. CLEANING AND FILM MAINTENANCE

For cleaning a VCSR100WG1 film on an uneven surface, avoid any spatters or sprays from liquid agents directly on the surface. You should proceed, preferably, using a non-abrasive cloth or a slightly wet sponge.

You can also just dust using a dry non-abrasive cloth

⚠ *Caution: the film should not be cleaned in the 48 hours following the application at the risk of altering its adhesion which might result in the film lifting off.*

⚠ *Caution: corrosive agents and detergents are prohibited.*



(FIG 09)

8. REMOVAL PROCEDURE

› Slowly pull of the vinyl, starting from the top. Pull the vinyl with two hands, at a regular angle of 70° to 80°. If necessary, lift the corner using a cutter blade.

› If adhesion is too strong, use a heat gun, starting from a corner and heat the film at a temperature around 50°C.

› Pull up the corner using a cutter without damaging the substrate and slowly lifting the heated parts. Continue pulling the film at a 70° to 80° angle compared to the substrate.

⚠ *If the angle is too wide or acute, there is a risk of the film cracking.*

› Always work on small heated areas by gently pulling up the film to decrease the risks of leaving adhesive on the substrate or of tearing the vinyl.

› Continue heating and gently pulling off the film until there is none left. Always be aware of the active heat, the tearing angle and the tearing speed.

For any additional technical information, please refer to our technical data sheets which may be downloaded at no cost on our Website at www.hexis.group.com in the section "espace pro" / "professional space", technical data sheets.

This great diversity of marking substrates and ever-changing new possibilities should make the user examine the extreme aptitudes of the product for each specific usage.

Nevertheless, all this information is not infallible. The salesperson is not liable for any indirect damages and will only be held responsible up to the product price. All our specifications are subject to changes without prior notification. Our specifications are updated automatically on our Website:

www.hexisgroup.com.



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