

Introduction and important information

DESARDI self-adhesive wall media is designed for easy indoor peel & stick wallpaper applications in residential and low-to-medium traffic commercial areas. The information in this document is written to provide a general understanding of self-adhesive applications, especially to interior latex painted walls.

DESARDI will warrant its material to be free of manufacturing defects. However, DESARDI cannot definitively determine compatibility of its products when applied to latex painted wall surfaces, due to so many variances in paint and wall types.

The information in this document is designed to assist the material specifier and installer with a basic understanding of how to appropriately test for compatibility between the material and the painted wall to determine viability.

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1. Important information – Paint Formulation and Recent Industry Changes

Over the past several years, the paint industry has made significant changes to paint formulations in an effort to make less of an impact on our environment. Additionally, paint formulations are now more durable, and have additives designed to repel dirt and moisture.

Consequently, this shift has made it more challenging to achieve a successful self-adhesive wallcovering installation to these newer paint formulations.

Pay special attention to paint coatings that are listed as having the following attributes:

- Zero-VOC
- "Washable"
- "Scrubable"
- "Stain-Blocking"

These types of paint coatings may present adhesion challenges between the wallcovering and the paint coating.

2. DESARDI Adhesive Type Definitions

Definition of Removable and Permanent Adhesive Performance

Removable Adhesive:

- Ideal for short-to-medium term applications
- Application on smooth surfaces only
- Should remove cleanly within 2-3 years
- After 2-3 years, becomes more permanent with reduction in removal properties
- Minimal damage to paint should occur during removal if wall was properly painted, with most damage occurring over patched or repaired areas

Permanent Adhesive:

- Ideal for medium-to-long term applications
- Application on smooth and lightly textured surfaces
- Stronger adhesive power than removable adhesive when applied to standard Zero VOC Paint
- May cause damage to the wall upon removal

3. Pre-Installation Wall Inspection

When inspecting a painted wall to determine if it's adequate to apply self-adhesive wallpaper to, it is important to understand that not all surfaces are suitable for wallpaper application.

Self-adhesive wall media can only successfully be applied to surfaces that are clean, dry and non-porous. Additionally, any of the following conditions may cause poor adhesion or product failure.

- Hard-to-Stick Zero-VOC, "Washable", "Scrubable", or "Stain Blocking" paint coatings; Wallcoverings tend to lift and release from the wall when applied to these paint types.
- Aged, flaking, or poorly maintained paint;
- Poor paint to substrate bond;
- Poorly painted wall perimeter, corners, and edges with too thin of a painted top coat;
- Patched areas that have not been properly primed and painted;
- Portions of walls that are near heating and air conditioning vents or registers blowing air directly at graphic edges;
- Moisture behind the drywall, which can cause the drywall paper to release; Watch for walls that back up to cooling systems, water pipes, overhead windows and windows that have been boarded up. These areas are prone to condensation that may not be obvious at the time of installation.
- High humidity areas such as garages, entryways, aquatic centers, locker-rooms, bathrooms, etc.;
- Dust, dirt or other contaminants on the wall;
- Wallpaper or other wall coverings that are not securely bonded to the wall;
- Cuts made to the wallpaper during the installation process that penetrate both film, paint, and wall substrate;
- Freshly primed or painted walls that have not had ample time to cure. Wallpapers tend to bubble and release from the wall while paint is in the curing process.

4. Applications to Newly Primed and Painted Walls

If the wall is to be newly painted, the goal is to achieve a good bond between the substrate and the primer/paint. When applying the primer, it is important to use a high quality primer. Freshly applied paint should cure for approximately 3- 6 weeks prior to applying self-adhesive wallpapers. Cure times may vary depending on temperature and humidity conditions.

5. Applications to Primer Only

If it is determined that the wall is currently painted with a latex paint coating, containing "Washable", "Scrubable", or "Stain Blocking" technologies, it is acceptable to have a paint coatings professional coat the wall with a high quality primer that allows wallpaper application. Once the primer has had ample time to dry for a minimum of 4 days, perform an adhesive test with a small sample of your DESARDI self-adhesive wall media to ensure the primer coat has cured and is compatible with the wallpaper. Please note that wallcoverings applied directly to primer may become extremely permanent and offer little to no expectation of clean removability at the end of product life.

Disclose to the client that they should expect damage to the primer and wall substrate upon removal.

6. Surface Preparation & Material Recommendations

If the paint has had ample time to cure, it's important to clean the surface before performing adhesion testing or applying self-adhesive wall media to the wall. Discuss the following and attain written consent from the customer stating that it's ok to proceed, prior to performing any of the following actions:

- Paint damage to the wall may occur during surface preparation and adhesive testing.
- There is no way to understand how well the paint is bonded to the wall surface.
- Cleaning procedures to be performed:
 - Wipe down the wall surface with a moist rag to remove dust or other contaminants that may prevent the film from adhering properly.
 - If the wall is contaminated it may need to be wiped down with a mixture ratio of 50% water and 50% Isopropyl Alcohol.
- When wiping down the wall, colour or pigment may be pulled from the paint and appear on the rag, and cause some inconsistency in the paint colour.
- Allow 15 minutes for the wall surface to air dry, then wipe once more with a dry micro-fiber rag.

7. Testing Recommendations

Adhesion to Painted Walls

Do not produce or apply any printed self-adhesive wallcovering without first performing adhesion testing to each wall surface that will receive a graphic.

- Determine the best product to use.
- Review the list of materials in the following DESARDI Compatibility Guide below for compatibility recommendations.

Removable self-adhesive wallcovering products are designed to remove cleanly from most clean, sealed, non-porous surfaces to which the graphic is applied, however, it's not guaranteed that the graphic will remove cleanly from a latex painted wall surface without some damage occurring. Removable adhesive materials have a delayed acclimation period and become more permanent over time. These products are ideal for temporary wallcovering installation and murals where removal will be necessary within 2-3 years.

Compatibility Guide

Material	Surface	Adhesive
DESARDI Eco Fleece 150g SA/R	Smooth only	Removable
DESARDI Eco Fabric 170g SA/R	Smooth only	Removable

Please refer to the technical datasheet of each material for full product specifications

8. Adhesive Testing Procedures

- Based on customer requirements, determine which material to use for the project.
- With a squeegee, apply a small test sample of the material to the wall that will receive the printed wallpaper.
- Keep the test sample on the wall for at least 24 hours.
 - Visually inspect the sample for signs of bubbling, lifting, or curling.
- For those samples that appear to be adequately adhered to the wall, slowly peel away the test sample from the painted wall surface.
 - You should feel a healthy amount of adhesive peel strength or resistance when peeling the test sample from the wall.
 - If you hear a high-pitched crackly sound during the removal, you may be dealing with a hard-to-stick "washable scrubbable" paint coating.
- Discuss with the client and receive written approval to proceed in testing permanent adhesive products on the wall. Or recommend priming and repainting the wall surface.
Then repeat above steps.

Once you have qualified the appropriate self-adhesive wallpaper that provides appropriate adhesion, move forward with next steps.

8. Printing and Printed Graphics

DESARDI Self-adhesive wall media is compatible with most of the latest wide format inkjet printers. Always check the compatibility of the material with your printer. In order to achieve the best print results it is recommended to use a dedicated ICC profile for the media.

In the case of UV-cure printers it is recommended to start with the settings for thin soft media. A drying time of 24 hours minimum is recommended with the print laid out flat in the case of (Eco)Solvent inks. Keeping the prints rolled-up will prevent the solvents to evaporate completely.

Please bear in mind that excessive over inking may have an influence on the performance of the adhesive. In case the product is used in HP Latex printers it is recommended to first feed the media through for approx. 50 cm out of the printer to avoid head strikes due to the stiffness of the material, the use of edge holders is recommended. Keep the curing temperature below 95 °C.

To achieve the best results during application, it is important that the print has dried completely, any solvent presence may influence the adhesive properties and increase the risk of edge lifting or adhesive transfer.

It is recommended to use one batch number for a single job.

Printed Graphics

It is important that the printed graphics are rolled up with the printed image on the outside, with a minimum diameter of 76 cm (e.g. 3 inch core), to avoid tunnelling of the media. Make sure the print is completely dry and protected in a plastic bag. A smaller diameter may cause tunnelling / delamination, making easy application more difficult. During transportation or storage, avoid exposing the print to extreme temperature and humidity changes.

9. Installation

Please note that the wall surface the material is applied to has a major influence on the success or failure of the project. The surface must have been inspected carefully, as described in point 3 and 5.

When installing your printed self-adhesive wallpaper, always apply the material using a dry application method; under no circumstances should a wet application be used.

The temperature of the space where the product is applied should stay above 18 °C for the first 24 hours of application.

Lay the printed wallpaper with the image-side down, on a flat surface and pull back the liner about 15-20 centimetres. Sharply crease the liner while holding it away from the adhesive.

Align the graphic on the wall and use finger pressure to tack in place. Using a Squeegee, work from the center to the edge, then return to the center and work to the opposite edge.

If your graphic is made up of more than one panel, avoid using horizontal seams when possible. When the entire graphic has been applied to the wall, reapply pressure with the Squeegee around the edges of the graphic multiple times to ensure a good bond.

If the graphic will come into contact with regular cleanings, such as mopping, soil removal, etc., graphics should be sealed in those areas. This is especially important where the graphic is terminated at the floor. Use of a clear silicone sealant along the edges of the graphic is recommended.

10. Care & Maintenance

In order to maintain the wallpaper, it is important to adhere to the following guidelines:

- When cleaning the graphic, only use a mild detergent-and-water solution.
- If the printed graphic will need to be cleaned frequently, lamination is required to maintain print integrity.
- Clean printed graphics beginning at the top and work down toward the bottom.
- Use lint-free cloth rags or sponges for cleaning.
 - DO NOT use scrubbing pads or scouring sponges.
- If your wall graphic has seams, be sure that you DO NOT wipe cleaning solution into the seam. This could cause the edges to lift and curl up from the wall.
- Use a lint-free micro-fiber cloth to dry after cleaning.

11. Removal

In short-term applications, the material can be removed without damaging the surface or leaving adhesive residue behind. Exception are soft fibrous surfaces such as paper and very smooth surfaces such as glass and aluminium that are exposed to elevated temperatures and/or strong sunlight.

The adhesive force may increase in long-term applications. High temperatures and chemical spills may influence the properties of the adhesive, some adhesive residue may stay behind. In most cases this can be easily removed with warm soapy water.

Medium to long-term permanent adhesive installation may cause damage on the wall surface upon removal.

Note

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be completely cured. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material.