TECHNICAL BULLETIN



GRAPHICS DIVISION

SELF-ADHESIVE MATERIALS: APPLICATION TO WALLS

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Introduction

Ritrama created a dedicated series of self-adhesive materials that can be applied to a wide range of wall/concrete surfaces (textured or smooth; indoor or outdoor). Before applying the film, it is important to consider the application surface (wall) and the environment to which the film will be exposed in order to utilize the required treatment that guarantees a successful result. Here following some recommendations when applying self-adhesive materials to various surfaces. The substrates must be free of contaminants such as grease, dust, silicon, etc.

For this reason, thorough cleaning is the key to reach the optimum level of adhesion.

Suitability substrates

A key aspect is the make an inspection prior to decorating the walls. During the decoration or retraining evaluation must be kept by account two fundamental aspects, such as humidity and temperature.

- 1. Moisture is a very important and critical factor in the laying of an adhesive vinyl, so that might be rendered vain while applications made. The main difficulty is the identification of areas where this variable may occur, since very often, the humidity in normal conditions of a wall is not visible and allows same to the surface not covered by a vinyl to "breathe" without determining stains or visible halos. This feature can be controlled using instruments that detect the presence, in order to evaluate whether to modify or apply the decoration of the insulating primer.
- 2. The temperature, as with all self-adhesive materials, is a factor to be taken into account when laying the vinyl. It requires that the film is applied in conditions of constant temperature between +16°C (60,8°F) and +25°C (77°F) and in the next step of development of adhesion curve the temperature does not have excessive temperature changes. This phase of growth and polymerization of the adhesive varies between 24 and 48 hours.

Always estimates of random tests with the laying of the adhesive product on the wall or the wall and determine its behaviour on the surface by removing the film.

Only for plasterboard: if you notice a very easy paint removal with large damaged areas, you can determine the absence of the bottom on the plasterboard.

Attention to walls treated with silicone quartz where it might not be possible to apply self-adhesive films.

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Cleaning Recommendations

Where you have plasterboard surfaces, it is recommended the application of vinyl primers that allow the elimination of the so-called "dusting" phenomenon, that determine the creation of dust decreasing the adhesive performance of the product. Clean the substrate with dry cloth, avoid cleaners or preparations containing waxes, oils or lotions.

Ensure that substrates are completely clean and free of dust. If necessary, use a heat gun to increase immediately the adhesion of vinyl.

Application of complex graphics in multiple pieces

For indoor wall surfaces make sure you prepare all necessary steps for the application of the vinyl film.

For a large surface, for example 10 m (32,8 ft), high 2,70 m (8,86 ft), you should consider that the first part of the graphics should be applied in the centre of the wall, not near a corner (the corners may not be evenly squared, which may cause the application of the material to be out of line with the rest of the wall). It is essential to use a tape measure to ensure the first graphic is properly aligned.

Bear in mind that the unit of measure for walls and is cm, while the field of digital graphics uses mm.

To decorate outdoor walls, it is necessary to apply the vinyl film in line with the contours of the underlying surfaces.

In order to apply the graphics swiftly, it is advisable to use temperature-resistant silicone rollers.

An application in multiple pieces requires an overlap of at least 1 cm (0.4 inches). The application of the film must be dry, please avoid the use of water.

Important Notes

- Painted surfaces must be completely dry and hardened before being covered by a graphic.
- Irregularities greater than 3-5mm can cause dangerous air pockets and lifting of the film.
- Paint dried at room temperature require several days (3 to 5) for drying. Only then, the graphics can be applied.
- Solvent residues of paint film (not perfectly dried paint) can influence the bond and cause excessive shrinkage or blistering.

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• Damaged surfaces can also influence the level of adhesion: will therefore be taken into serious consideration the restoration of the art.

In case of doubt, ask for further information:

https://www.ritrama.com/en/contacts/#information-request

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The methods of conversion and application of Ritrama's self-adhesive materials are multiple and it is therefore essential that the users are aware of the particular method to be used, prior to commencing the production.

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