

Installation Guidelines: Marmoleum® Sheet Wainscot

General Installation Guidelines

- Marmoleum® is available in rolls 79" in width and up to 105 linear feet in length. It can be installed with the roll length aligned either vertically or horizontally for wainscot applications. Vertical seams can be avoided in most cases with horizontal alignment, but longer lengths may be challenging to install. Material waste is often reduced with vertical alignment.
- Areas where Marmoleum® is to be installed should be clean, fully enclosed, and weathertight. The permanent HVAC must be fully operational, controlled and set at a minimum of 68° F (20° C) for a minimum of seven days prior to, during, and seven days after the installation. The material and adhesive should be conditioned in the same environment for at least 48 hours prior to the installation. Areas to receive the material shall be adequately lighted to allow for proper inspection of the substrate, installation and seaming of the material, and for final inspection.
- Store Marmoleum® rolls standing upright.
- Marmoleum® can be successfully installed over a variety substrates provided the surface is sound, smooth, flat, clean, and permanently dry. Drywall and wood panels are the most common substrates used in wainscot applications. For recommendations regarding other substrates, contact Forbo Technical Services.
Regardless of the specific type of substrate that is being installed over, the final determination of suitability for that purpose is the responsibility of the installer and/or installation contractor.
- Always conduct adhesive mat bond tests before beginning the installation. Bond testing will aid in identifying both the working characteristics of the adhesive (open time and working time) for the site conditions, and also any potential bonding problems.
- Material should always be visually inspected prior to installation. If there are any questions regarding the quality of material, contact your local Forbo representative or Forbo Technical Services PRIOR to installation.
Any costs (including labor) associated with the replacement of material that was installed with visual defects that could have been seen prior to installation are not covered under warranty.
- Ensure that all recommendations for substrate and jobsite conditions are met prior to beginning the installation. Beginning the installation is an implied acceptance of site conditions by the parties involved and liability for any failure directly related to inadequate site conditions becomes the responsibility of the installer and/or flooring contractor.
- Use Forbo L 910W adhesive.
- Use a 1/16" x 1/16" x 1/16" square notch trowel to apply the adhesive.
- Use material from the same batch/dye lot.
- Install cuts in order by roll sequence and cuts from each roll.
- Do Not Reverse sheets for installation. The material should all run in the same direction.
- Remove fresh adhesive residue immediately with a clean white damp cloth. Dried adhesive residue can be removed with a clean white cloth and mineral spirits.
- Install protective outside corner guards over all outside corners.
- Take pride in your work and be Professional at all times.
- For additional information, contact Forbo Technical Services.

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Substrates

Drywall

1. Drywall substrates must be securely fastened and finished in accordance to ASTM C 840.
2. Newly installed drywall should be primed with a good quality primer/sealer.
3. Existing drywall finishes must be in good condition and well bonded. Glazed or glossy surfaces should be fully sanded using coarse grit sandpaper. Textured surfaces must be sanded smooth and/or smoothed using appropriate materials, and primed with a good quality sealer/primer. Do not install over existing paper or vinyl wallcovering materials. Refer to the Notes section following these guidelines for additional information.

Wood Panels

1. Wood panels should have a minimum thickness of 1/4".
2. The preferred panel should be rated or manufactured as an underlayment for resilient flooring products. At a minimum, wood panels must have a surface free of irregularities that may telegraph through the Bulletin Board and be manufactured using adhesives that will not be affected by the water-based adhesive used for installation.
3. Panels should be loosely stacked and allowed to acclimate to site conditions for a minimum of 48 hours prior to installation.
4. Wood panels must be securely fastened and free from movement, especially at joints and edges. Always follow the panel manufacturer's recommendations for fastening and joint treatment. In lieu of specific recommendations, experience has shown that satisfactory results for panels 1/4" - 3/8" thick can be obtained by lightly butting panel edges and fastening with ring shank nails or narrow crown divergent point staples 4" apart in the middle of the panel and 2" apart along edges. Variations in panel thickness can be corrected by sanding the thicker panel at joints. Where satisfactory results cannot be obtained by mechanical fastening, panels 1/4" - 3/8" thick should be fully adhered to a flat surface using an adhesive suitable for that purpose.
5. All surface irregularities must be corrected using a good quality patching material intended for that purpose.

Adhesive Application

Proper adhesive application is essential for achieving a secure bond. Marmoleum® must be installed into **wet** adhesive.

1. Apply adhesive using a 1/16" x 1/16" x 1/16" square notch trowel. A double sided, replaceable trowel blade is supplied with each four-gallon pail of L 910W adhesive; the trowel handle is not included and can be purchased separately. Keep the trowel notches clean, and replace blades when they begin to wear in order to ensure an adequate and uniform coverage of adhesive.
2. Place the material into the adhesive and roll while the adhesive is still wet enough to achieve a 90% - 100% wet transfer of adhesive to the material backing. Never allow the adhesive to dry to a point that **wet** transfer to the material backing does not occur.
 - The working characteristics (open time and working time) of adhesives are affected by temperature, humidity, air circulation, porosity of the substrate, type of adhesive, and trowel notch; and will vary. In some situations the adhesive will dry more slowly, necessitating an "open time" before placing the material to allow the adhesive to develop body. In other situations the adhesive will dry more rapidly and require that the adhesive be applied incrementally so that the material can be placed and rolled while the adhesive is still wet enough to achieve the transfer necessary for a secure bond. It is the installer's responsibility to recognize the working characteristics of the adhesive for a given situation and make any adjustments to technique that may be required to achieve a secure bond.
3. Remove fresh adhesive residue immediately with a clean white damp cloth. Dried adhesive residue can be removed with a clean white cloth and mineral spirits.

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Vertical Installation

1. For each wall, cut pieces of Marmoleum® to the required length and width, adding 1" - 2" in each direction to allow for final trimming.
2. Relax the "roll curl" by back rolling the material with the face of the material to the inside of the roll. Refer to the Notes section following these guidelines for additional information.
3. Where inside corners are involved, it is best to work away from corners where Marmoleum® has already been installed on the adjacent wall.
4. Plan the layout to allow for approximately 1/2" - 3/4" to be trimmed from each factory edge for seaming, and so that seams will fall at least 6" away from joints in the substrate.
5. Allowing for trimming, draw a plumb line on the wall where the seam for the first piece will fall.
6. Using a Forbo Seam and Strip Cutter, or a straightedge and knife, trim 1/2" - 3/4" from the seam edge of the first piece. Angle the knife *slightly* to create an undercut.
7. Trim the sheet and "dry" fit it to the wall section, making sure that the seam edge will align with the plumb line on the wall. Traditional scribing methods generally produce the best results. Establish "set marks" on both the material and the wall to aid in positioning the sheet during installation. Refer to the Notes section following these guidelines for additional information.
8. Adhering the sheet:
 - Starting from the corner, spread adhesive in the area where the first piece will be installed. The plumb line is the boundary for the side opposite the corner. Depending on conditions, it may not be possible to spread adhesive in the entire area without the adhesive becoming too dry before the material is placed. If necessary, only spread adhesive a short distance from the starting point and stop the adhesive spread along a straight vertical line. Do not spread more adhesive than can be covered while the adhesive is still sufficiently wet to achieve a 90% - 100% **wet** transfer to the material backing.
 - Using the set marks and plumb line established during fitting, position the Marmoleum® on the wall, starting at the corner. Roll immediately with a three-section wall roller. Roll thoroughly in both directions, first across the width and then along the length, so that the material backing is firmly pressed into the wet adhesive and any trapped air bubbles are released. Clean excess adhesive while it is still wet. When it is not possible to adhere the entire piece at one time, fold the un-adhered portion of the material back over the adhered portion up to the adhesive spread line. Starting at the spread line, being careful not to overlap the adhesive, continue spreading adhesive toward the plumb line, placing and rolling the material as you go, until the entire piece has been adhered.
9. Trim the seam edge for the second piece in the same manner as for the first piece.
10. Allowing for 1/2" - 3/4" overlap at the seam, draw a plumb line on the wall where the second seam will fall.
11. Adhere the second piece in the same manner as the first piece, working away from the seam.
12. Immediately after adhering, use an under scribe to scribe the seam. Cut along the scribe line and roll the seam with a steel seam roller. Do not allow the adhesive in the seam area to dry before cutting and rolling the seam. Refer to the Notes section following these guidelines for additional information.
13. Repeat this process for each piece along the wall, completing the installation of each piece as you go.

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Horizontal Installation

1. For each wall, cut pieces of Marmoleum® to the required length and width, adding 1" - 2" in each direction to allow for final trimming.
2. Relax the "roll curl" by back rolling the material with the face of the material to the inside of the roll. Refer to the Notes section following these guidelines for additional information.
3. Trim the sheet and "dry" fit it to the wall section. Traditional scribing methods generally produce the best results. Establish "set marks" on both the material and the wall to aid in positioning the sheet during installation. Refer to the Notes section following these guidelines for additional information.
4. Adhering the sheet:
 - Where inside corners are involved, it is best to work away from corners where Marmoleum® has already been installed on the adjacent wall.
 - Begin spreading adhesive at one end of the wall, working away from the end. Depending on conditions, it may not be possible to spread adhesive on the entire wall without the adhesive becoming too dry before the material is placed. If necessary, only spread adhesive a short distance from the starting point and stop the adhesive spread along a straight vertical line. Do not spread more adhesive than can be covered while the adhesive is still sufficiently wet to achieve a 90% - 100% **wet** transfer to the material backing.
 - Using the set marks established during fitting, position the Marmoleum® on the wall, starting at the corner. Roll immediately with a three-section wall roller. Roll thoroughly in both directions, first across the width and then along the length, so that the material backing is firmly pressed into the wet adhesive and any trapped air bubbles are released. Clean excess adhesive while it is still wet. When it is not possible to adhere the entire length of the wall at one time, fold the un-adhered portion of the material back over the adhered portion up to the adhesive spread line. Starting at the spread line, being careful not to overlap the adhesive, continue spreading adhesive along the remaining length of the wall, placing and rolling the material as you go, until the entire length of the wall has been adhered.
 - Repeat this process for each wall.

Notes

- Using a primer/sealer will provide a uniform porosity over the entire surface of the wall, reduce the absorbency of more porous substrates, improve bond over dry, dusty surfaces, and improve the working characteristics of the adhesive. It is recommended to perform a bond test to evaluate the integrity of the "system", and ensure that a secure bond can be achieved. When choosing a primer/sealer, always choose products of the highest quality and always follow the manufacturer's recommendations for use and application. Any liability for the performance of primer/sealers rests solely with the user and/or manufacturer of the product, not with Forbo.
- During storage in roll form, tension develops in Marmoleum® that will cause the ends of pieces cut from the roll to "cup", or not lay flat. This is commonly called "roll curl". This tension must be relaxed prior to installation so that the material will remain flat and in full contact with the adhesive while the adhesive dries. Back rolling pieces prior to installation will remove most of this tension. When short lengths of material are required, it is best to back roll longer pieces before cutting into shorter lengths. It is often necessary to further relax this tension from the very ends of cut pieces. This can be accomplished by folding the corner of the material at an angle to the end, and applying pressure where the fold intersects the end of the piece. Apply pressure firmly across the entire width of the material in a rolling motion until the end lays flat. Care must be taken not to apply too much pressure, which may damage the material.
- Marmoleum® shrinks slightly in the length when installed in wet adhesive. Back rolling the material will minimize shrinkage, but compensation must be made for shrinkage in cuts longer than approximately 20' in length to avoid fitting errors. For longer pieces, only trim to fit at the end where the installation will begin, leaving extra material at the opposite end. Begin adhering the piece at the fitted end and adhere the piece normally, stopping 4' - 5' from the unfitted end; shrinkage will occur as the piece is being installed. Once most of the piece has been adhered, fit the remaining end and adhere normally.
- Marmoleum® may expand slightly in the width when installed in wet adhesive. To compensate for any expansion, make sure the under scribe is adjusted to create a "net" fit (no fullness) and that both seam edges are *slightly* undercut.