



INSTALLATION INSTRUCTIONS

MARILO

PN 5430/2025



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1. GENERAL SECTION

The installation manual is intended for the installation of Marilo tiles.

These high-quality tiles have the character of luxury floor coverings. In terms of appearance and durability, they meet the strictest criteria.

Marilo tiles are manufactured in size 1200 × 180 mm with patterns that imitate natural materials.

Marilo floor coverings are designed for stress levels 23, 33, and 42 according to EN ISO 10874 classification. Marilo floor coverings is intended for residential, commercial, and light industrial use.

1.1 MARILO PACKAGING

| | SIZE (mm) | PIECES PER CARTON | QUANTITY IN CARTON (m ²) | CARTON WEIGHT (kg) |
|--------------|------------|-------------------|--------------------------------------|--------------------|
| FLOOR BOARDS | 1200 x 180 | 20 | 4.32 | 12.5 |

2. SUBSTRATES

Floor coverings are intended for installation by skilled, professional, and trained individuals with a trade licence in flooring.

A prerequisite for professional work or floor covering installation is a flawless substrate.

Essentially, the substrate must have the following properties before the floor covering is laid: it must be level, crack-free, dust-free, sufficiently solid and smooth, rigid and dry.

The construction project must prescribe the quality of the floor structure, particularly the type of levelling screed, the binder used, the arrangement and thickness of the individual layers, the insulating and sealing properties and the placement of expansion joints.

These details are mandatory because different substrates require different preparatory work. The installer's inspection of compliance with the details prescribed by the construction project mainly relates to the quality of the substrate surfaces and their moisture. Requirements for the quality of substrates are prescribed by ČSN 74 4505. If the substrates do not meet the prescribed quality in terms of their flatness or strength, levelling compounds suitable for the specific application and type of substrate must be used. Levelled surfaces must be sanded before the actual application of the floor covering, especially in the corners of rooms, and the sanded material must be thoroughly removed from the substrate. Follow the manufacturer's instructions on the packaging when applying the levelling compounds.

The actual inspection of the quality of the substrate surfaces is carried out using tools and instruments:

- > a 2-metre measuring (weighing) rod with measuring wedges for checking flatness,
- > measuring instruments for determining the moisture content of the substrate,
- > a hardness tester for determining the hardness of the substrate,
- > thermometers and hygrometers for measuring the climate in the rooms.

2.1 APPLICATION ON SUBSTRATES EQUIPPED WITH AN UNDERFLOOR HEATING SYSTEM

When laying floor coverings on an underfloor heating system, the system must be started up before laying to ensure sufficient drying of the substrate. Each underfloor heating system has certain operating conditions depending on the heating system and the substrate used. In order to avoid functional problems, all standards and regulations specified by the manufacturer of the heating system must be strictly followed.

For screeds up to 70 mm thick with a heating pipe in the middle of the layer, the temperature of the heating medium is increased by 10 °C/day until a temperature of (+45±5) °C is reached and maintained for 12 days. Subsequently, the temperature of the heating medium is reduced by 10 °C/day to the temperature before the start of the heating system start-up cycle. After the temperature drops to +15 °C, a second heating is carried out until the maximum temperature is reached (see Chart 1), and the residual moisture is then measured. A report signed by the interested parties must be issued for the heating test, which the client must present before starting the floor covering installation.

Sampling points for measurement must be marked when the heating pipes are laid.

The maximum permissible residual moisture is 1.64% CM for cement screeds and 0.4% CM for anhydrite screeds. If the permissible residual moisture is not reached, heating must continue at the medium temperature of (+45±5) °C. The heated screed must not be covered by any construction or other materials. During the heating of the screed, short-term ventilation must be carried out at regular intervals.

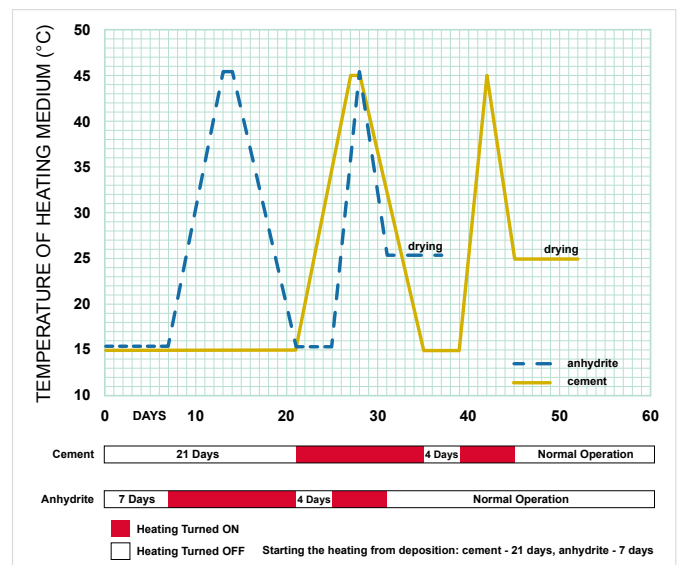
Installation should be carried out immediately after reaching the permissible residual moisture. If more than 7 days have elapsed between the moisture test and installation, or if wet processes (painting, etc.) have occurred during this time, it is recommended to conduct a new CM moisture test. During installation, it is recommended to maintain a surface temperature of approximately +18 °C and it must be maintained at this level (until the adhesive hardens). Early start-up of the underfloor heating system may cause the residual moisture in the adhesive to evaporate and cause bulges in the floor covering. During the entire downtime of the underfloor heating, an alternative solution must be provided to ensure the optimal temperature for the installation of the floor covering.

- > 3 days after installation, the temperature of the system must be gradually increased, but not exceed the substrate surface temperature of +28 °C.
- > Adhesives suitable for underfloor heating must be used.
- > The floor can be loaded after the adhesive has hardened.

CM device



An example of a start-up diagram for underfloor heating



2.2 CONCRETE SUBSTRATES

The surface of the substrates must comply with the requirements of section 2 of these instructions. The moisture content of an unheated concrete substrate must not exceed 3.5% by weight measured by the weight method (2.03% CM measured by the carbide CM method). The moisture content of a heated concrete substrate must not exceed 3% by weight (1.64% CM). The minimum required tensile strength of the surface layers of screeds under plastic coverings in offices is 1.0 MPa, for non-trafficable surfaces 0.8 MPa. To improve local flatness, grain size, and uniformity of substrate absorbency, cement screed surfaces are usually treated with a suitable levelling compound. Floor coverings must not be laid in rooms without a basement unless they are adequately insulated against rising moisture and in rooms with underfloor heating systems if the surface temperature permanently exceeds +28 °C.

2.3 ANHYDRITE SUBSTRATES

Anhydrite screed (AFE) is made from anhydrite binder, aggregate (sand, gravel) and water. Additives are often used to change the chemical or physical properties of the screed, e.g. workability, hardening or setting.

The term „anhydrite screed“ is now often replaced by „calcium sulphate screed“.

It is increasingly being used in construction due to its easy and quick application.

AFE is applied as a liquid self-levelling mixture. Given the processing method, uniform strength values and flatness tolerances can be guaranteed, which are not achievable with mixtures containing less water. AFE does not undergo additional deformations that can occur during the curing of conventional cement screeds. Another advantage is the possibility of creating large surfaces without joints.

However, there are two main disadvantages when applying floor coverings to AFE:

- > the moisture content of the screed,
- > the surface strength.

Before laying floor coverings on AFE, the floor layer must observe the following guidelines and principles.

To determine the required curing time to achieve the permissible residual moisture for AFE up to 40 mm thick, this empirical rule applies: about 1 week of curing for 10 mm. For AFE with a thickness over 40 mm, the curing time increases more than proportionally, i.e. about two weeks for every additional 10 mm of screed thickness. These practical values are always based on normal climatic conditions. In exceptional climatic conditions, such as high air humidity, the empirical rule cannot be applied. For an AFE thickness of 7 cm or more, the time to reach an acceptable level of residual moisture is extremely prolonged. To determine the residual moisture content of substrates, use the carbide method – CM device. The residual moisture content of an unheated AFE substrate must not exceed 0.5% CM when laying floor coverings. In the case of underfloor heating, the moisture content must not exceed 0.4% CM.

Electric moisture meters are not suitable and can be used at most to find damp spots.

Screed surfaces must in any case be treated by grinding to remove approximately 0.5 mm of the non-cohesive “film” layer, and then the surface strength is verified by a scratch test.

Due to the insufficient strength and quality of the surface, CA-C20-F4 (AE20) anhydrite is usually levelled. If there are unstable and defective areas on the surface, they must be repaired.

2.4 MAGNESITE SCREEDS

Magnesite screed is made from caustic magnesite, additives (quartz, wood or cork meal) and an aqueous salt solution, usually magnesium chloride.

Caustic magnesite is finely ground stone powder that is calcined from natural magnesite.

Magnesite screed with a raw material density of up to 1600 kg/m³ is called xylolite screed.

Determining the maturity of magnesite screed for flooring requires a great deal of experience.

Often, there is a softer substrate underneath a relatively hard surface layer. The situation is even more problematic for old two-layer xylolite screeds, where the surface layers are usually impregnated with wax or similar agent. In both cases, the substrates must be prepared for levelling with a compound by removing the surface layers and using suitable primers..

2.5 SUBSTRATES MADE OF CERAMIC AND CEMENT TILES AND CAST TERRAZZO

All tiles in the area must be intact and firmly bonded to the substrate. Loose grout must be removed from the joints. Surfaces should be degreased using a water-soluble degreaser, rinsed with a solution of washing soda dissolved in hot water, and neutralised with clean water. The surface must be roughened before applying the primer and levelling compound to increase adhesion.

2.6 SUBSTRATES MADE OF OLD FLOOR COVERINGS

Marilo floor coverings must not be installed over old PVC floor coverings. A warranty claim cannot be made on a floor covering laid in violation of the manufacturer's recommendations.

Any old floor coverings must be removed, including the adhesive. Apply a levelling compound with a suitable primer to the cleaned substrate. The removed floor covering must be disposed of in an environmentally friendly manner.

2.7 OTHER SUBSTRATES

For other base layers or to check on the chosen procedure, do not hesitate to contact the technician of the respective construction chemicals or board system manufacturer (e.g., Fermacell), which you will use to prepare the substrate. It is recommended that the choice of materials (primer, levelling compound, adhesive) be from one supplier.

3. TOOLS AND EQUIPMENT

A qualified floor installer must be equipped with a basic set of tools, which should be maintained in cleanliness and good condition.

The specific selection of tools and machines depends on the individual decision of the installer, the size of the installation, and the extent of the required preparation.

4. PREPARING THE SUBSTRATE BEFORE INSTALLING THE FLOOR COVERING

Gluing the pieces is carried out as the last operation after the completion of all the craft and dusty works of the construction.

The following information serves as a guide. All recommendations and instructions from the adhesive manufacturer (construction chemistry) must definitely be respected. Adhesives must be handled correctly under all circumstances.

4.1 INSPECTING THE EXISTING SUBSTRATE

Check the condition of the substrate and remove any defects according to ČSN 744505 Floors – General Provisions. The floor coverings must not be laid on old floor coverings (risks the migration of plasticisers, affecting the physical and mechanical properties of the product); any old floor coverings must be removed including the adhesive. They must also not be installed in rooms that are not sufficiently insulated against ground moisture and thermally against the formation of dew points (cold). In case of doubt, the condition of the waterproofing must be verified (checked) by a professional company.

Check the moisture content of the substrate and record the results in the handover report as well as the method used. A levelling compound must be made for full-surface gluing. It is important to choose the appropriate type of levelling compound and primer with regard to the substrate, the floor covering, and the intended use. Regarding the type of material (office chairs, heavier traffic loads, etc.), follow the recommendations of the manufacturer of the construction chemistry (technical data sheet).

4.2 PREPARING THE SUBSTRATE FOR LEVELLING

When using a levelling compound, observe peripheral – edge expansion joints at vertical structures (acoustics in apartment buildings, mechanical influences of structures). The working

and shrinkage expansion joints can be filled after curing (e.g., stitched), but structural and acoustic expansion joints must be preserved throughout their entire profile.

The prerequisite for producing a quality levelling compound is grinding or milling the substrate and then applying a bonding bridge – primer. We distinguish several types of primers: for absorbent and non-absorbent substrates, for residual moisture, for wooden substrates with filling material. For extremely absorbent substrates, it is advisable to prime twice (with the first coat diluted).

The purpose of priming is, among other things, to limit and unify the absorbency of the substrate so that there is no rapid removal of mixing water from the levelling compound needed for the maturation of the screed. The primer must also be allowed to cure, and the levelling compound must be subsequently dedusted by „washing“ it with diluted primer, thus unifying the absorbency of the levelling compound.

Above all, the substrate must be smooth, flat, dry, clean, dimensionally stable, and must not be dusty. Unevenness greater than 2 mm over a 2-metre length must be levelled with a self-levelling compound – the minimum thickness of the compound is 2.5 mm, on a non-absorbent substrate 3 mm.

4.3 LEVELLING THE SUBSTRATE

If the substrate already meets the requirement for flatness, the optimal thickness of the levelling compound is min. (2–3) mm (according to the manufacturer's technical data sheet). The levelling compound is usually spread using a steel trowel/hand float (notched trowel) with suitable dosing notches. To continuously aerate and level the screed, a suitable sheepfoot roller must be used. After drying and sanding the screed, the substrate is ready for gluing. Under optimal conditions (min 20 °C and max. 60% RH), the standard screed thickness of approx. 3 mm takes (24–48) hours to cure. Observe the screed drying times as indicated in the manufacturer's technical data sheet. The flatness and flawlessness of the screed are among the most important criteria affecting the overall impression of the finished floor. Therefore, it is recommended to pay sufficient attention to this phase of the preparation and handover of the substrate. Any defects and imperfections in the screed will adversely affect the appearance of the final floor. Possible mistakes, such as exceeding residual moisture in the substrate, poorly executed levelling, or failure to comply with technological procedures, can affect the quality of the overall installation. However, they cannot be a subject of a claim for defects in the floor covering. When applying self-levelling compounds in the summer months, or on days when the sun is shining intensely and the building has large windows, HS portals, or skylights, shading must be ensured. It is recommended to use blinds or other means of covering the glass surfaces to prevent excessive heating of the substrate surface. This shading must be maintained for 24 hours before application, during application and throughout the drying period.

5. SELECTING SUITABLE ADHESIVES FOR INSTALLING FLOOR COVERING

There are many different types of adhesives on the market, and their suitability depends on a number of factors. The selection and composition of the adhesive are influenced by various aspects, such as the type of floor covering, the type of substrate, the nature of the building (house or apartment), the site conditions and the operating conditions of the floor.

Detailed information on the type of adhesive, its usage, airing time, open time, type of notched trowel, storage conditions, and safety regulations are provided in the technical data sheets and on the adhesive packaging labels. Adhesive recommendations are based on laboratory and extensive tests by their manufacturers and are verified by many years of experience. Due to the high variability of site conditions, no claims can be made based on the information we provide. We assume no liability for the use of adhesive systems. Therefore, we recommend performing a test according to the manufacturer's specified technological procedure before installation or contacting the manufacturer's technical advisory department directly. Ensure that adhesives are not over-dried (unrolled), and avoid subsequent defects (gaps, dents, indentations) that are not subject to warranty claims.

6. INSTALLING FLOOR COVERING

6.1 INSPECTING THE MATERIAL DELIVERY

Before installation, check the pattern number, batch, quantity, and whether the cardboard packaging is damaged. By randomly opening several cartons, verify that the delivered goods match the order. Failure to install according to directional arrows may cause visual differences in surface gloss. The absence of an arrow on the underside of the floor covering is grounds for a complaint and subsequent replacement.

Visible defects in the installed floor covering and defects caused by mixed batches, damage, failure to follow the base line (deviations), failure to install according to the directional arrows, and failure to follow the instructions in the technical data sheet and the laying instructions of the manufacturer Fatra, a.s., cannot be claimed from the flooring manufacturer. These are defects caused by incorrect installation. Claims cannot be made for mechanical damage during transport, improper handling, storage and after installation.

6.2 ACCLIMATISING THE FLOOR COVERING BEFORE INSTALLATION

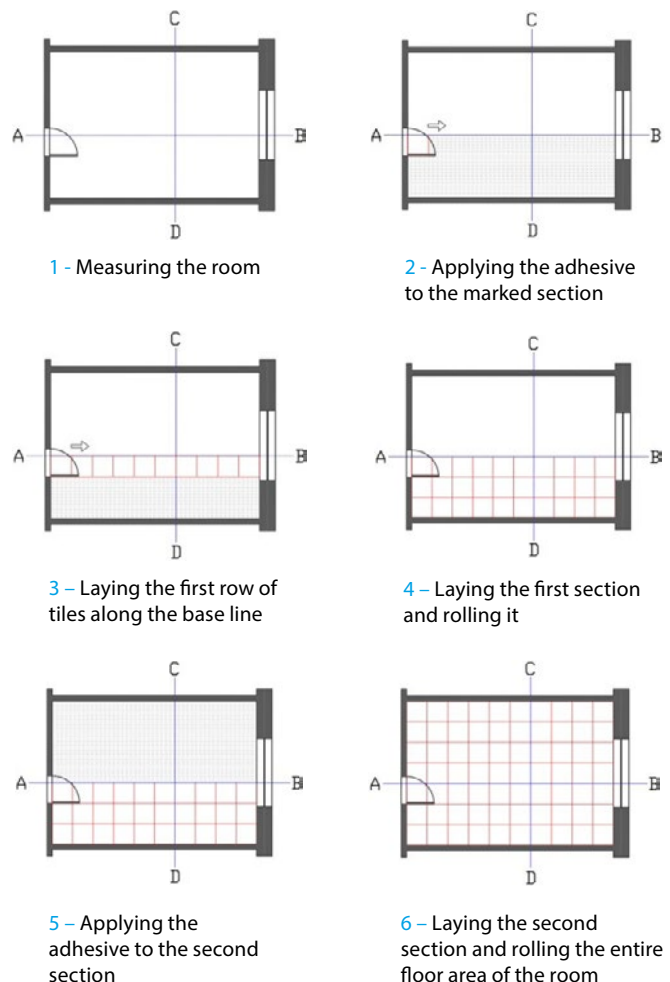
At least 24 hours before installation, the tiles need to be acclimatised. Cartons can be stacked to a maximum height of 5 cartons and at least 50 cm from the wall. Acclimatisation takes place under

conditions suitable for the installation of the floor covering. The air temperature must be in the range of (18-28) °C, the substrate temperature must be at least (18-25) °C, and relative humidity of the air (40-60)%.

The material should acclimatise until its temperature matches the ambient temperature: usually (24-48) hours. Do not install the material during extreme summer temperatures; the air temperature must not exceed +30 °C throughout the entire lifetime of the floor covering.

6.3 MEASURING AND MARKING THE AREA

- > Measure the room in both directions.
- > Use a chalk liner or laser to mark perpendicular lines A-B and C-D. These base lines generally guide the direction and starting point of the installation.
- > Check whether too small pieces come out at the edges of the room. If so, move the base line in one direction or the other. Highlight the base line with a pencil; subsequent vacuuming usually removes the chalk lines.



Regular tile shapes, especially when contrasting colours are used, can highlight deviations from the building's axes, which underscores the need for careful planning of the appearance. We lay the tiles loosely to test the final impression to achieve a satisfactory floor appearance from all viewing angles.

6.4 APPLYING ADHESIVE AND TILES

Gluing the tiles is the final operation after all craft and dusty work on the construction site is completed. The following information serves as a guide, and it is essential to follow all recommendations and instructions from the adhesive manufacturer. Handle adhesives carefully according to the technical data sheet and the manufacturer's recommended procedures.

For gluing vinyl tiles, use specially designated adhesives, not universal ones. The floor covering must be fully adhered to the levelling compound, as stated in the manufacturer's technical data sheet, to ensure adequate adhesion, prevent gaps (joints), and avoid indentations or impressions in the adhesive. Rolling is important to increase the durability of the adhesive, especially its shear strength. The adhesive ridge created by the notched trowel must be fully rolled out.

For areas with higher thermal loads, such as those with direct sunlight (south-east exposure, French windows, balcony doors) and areas with higher loads (office chairs, heavy cabinets), use specially designated adhesives with high shear strength. Glue vinyl tiles only with the second generation of adhesives with high shear strength and permanently hard bonds, intended for application to wet beds. The use of universal adhesives with permanently flexible bonds is not suitable because the lower strength of the flexible bond can cause gaps between the tiles and impressions in the adhesive.

In this way, you will avoid unwanted gaps and impressions, which are not subject to warranty claims. Start gluing the tiles from the base line, which can start at the wall or anywhere in the space, depending on the gluing method chosen. Overlaps on the bond must be at least the width of the slat (e.g. 180 mm for Marilo). Incorrect adherence to the base line or its absence can lead to the opening of joints, which should be tight and without gaps. Any incorrect installation technique can lead to gaps if the tile is not precisely positioned and shifted. Also, maintain perimeter dilations of 5 mm from vertical structures, and structural dilations must be preserved throughout the floor's height. Mix tiles from several boxes for a random pattern and continuously check the appearance to avoid potential claims.

Cut the perimeter tiles simultaneously with the installation. After shortening the tile, the cut side must be turned towards the wall to maintain an expansion gap of about 5 mm. This dilation must be maintained for all penetrating or adjoining structures (e.g., heating, different flooring types).

It is necessary to observe a uniform installation direction according to the arrows on the underside of the tiles, with the investor's approval. Failure to maintain the same installation direction of the directional arrows is not subject to warranty claims. Continuously roll vinyl tiles during installation.

6.5 ROLLING THE FLOOR

Before rolling the surface, thoroughly remove all dirt and vacuum the floor. Immediately after laying the tiles or a complete section, inspect the material against the light, possibly from multiple sides and angles, to capture any visual defects that were not visible during the detailed inspection of the tiles, and then roll them using a 50 kg segmented pressure roller (rolling out the adhesive ridge created by the notched trowel). Rolling must be carried out continuously during the installation, as it ensures that the adhesive is spread evenly over the surface.

It is important to press the tile to the substrate, which pushes out the air (eliminating local impressions) and ensures good contact between the tiles and the substrate, thus full-surface adhesion of the tile. After (1-4) hours, this operation must be repeated.

6.6 FINISHING WORKS

There is no universal guide for the best completion of flooring installation. The finishing work in most cases depends on the architect's imagination and the flooring installer's application skills. Only some possible finishing options can be mentioned.

Completion elements:

- > Plastic, wooden and metal skirtings for finishing wall structures
- > Expansion profiles
- > Transition profiles for connecting different surface types
- > Rosettes for penetrating structures
- > Stair profiles, etc.

Operational load on the floor in the room can occur only after the adhesive has cured, according to the type ([12-72] hours according to the adhesive manufacturer's technical data sheet).



6.7 SKIRTINGS

Before installing skirtings, ensure that the walls are smooth and straight, and the inner corners and edges are square. Use fittings to connect/finish the skirtings - inner corner, left and right end, outer corner, coupling.



Cut the skirtings to the required length and fit them with fittings. The length of the skirting with both ends fitted with outer corner ends will be the same as the length of the wall. Shorten the skirting with one end being the inner corner and the other one being the outer corner by 2 cm compared to the length of the wall. Shorten the skirting with inner corner ends on both its ends by 4 cm. Use a coupling to connect the skirtings on a straight wall, and a left or right end to finish. Attach the skirting to the wall with T-REX adhesive (manufacturer Soudal) or Mamut (manufacturer Den Braven) applied in dots every (20-30) cm. Gradually glue the skirtings and press them into the adhesive for (15-20) seconds. After (10-15) minutes, check the joints between the wall, skirtings and floor, and briefly press the skirtings once more against the wall and floor where a gap has formed. Alternatively, the skirtings can be fixed to the wall with dowels and bolts and to the wooden panelling with screws.

vacuuming with a hard floor nozzle) and tools (dry sweeping mop, vacuum cleaner). Routine cleaning should be carried out dry or wet using suitable neutral agents.

Steam mops and steam cleaners are prohibited.

6.8 CLEANING THE FLOOR COVERING AFTER INSTALLATION

After each installation of floor and wall coverings, it is necessary and important to carry out initial basic cleaning according to the manufacturer's instructions (e.g. Dr. Schutz Group, Bona) and to inform the user about its proper use and maintenance [see the handover report and maintenance section on the Dr. Schutz Group, Bona websites].

7. CARE AND MAINTENANCE

The Marilo floor covering has an upper layer composed of a PUR varnish coating. The PUR varnish serves several functions – it enhances the aesthetic value of the floor covering, simplifies cleaning, and increases resistance to stain formation.

After each installation of Marilo floor coverings, it is necessary and important to perform initial basic cleaning according to the manufacturer's instructions (e.g. Dr. Schutz Group, Bona) using a product suitable for PVC floorings with a PUR protective layer. No additional varnishing or waxing is required. In specific applications where there is a high degree of stress or where extreme maintenance conditions are imposed, it is recommended to apply an additional protective layer with a suitable product for vinyl floorings with a PUR protective layer.

The durability of the Marilo floor depends not only on the level of load during use but also on the care and maintenance methods. Use only products suitable for PVC with a PUR layer (e.g. Dr. Schutz Group, Bona). Follow the manufacturer's instructions for these products and consult technical advisers if necessary.

For regular cleaning, do not use any aggressive agents or products that reduce the surface tension of water (e.g., common detergents, products containing abrasives, alkalis, or high amounts of organic solvents and degreasing agents). Dirt acts like sandpaper and can damage your floor! Dust and dirt should be manually removed using appropriate methods (sweeping or

8. SUMMARY OF INSTALLATION INSTRUCTIONS AND HANDOVER INFORMATION FOR THE CONTRACTOR

- > Floor coverings are intended for installation by skilled, professional, and trained individuals with a trade licence in flooring.
 - > Floor coverings must not be laid in rooms that are not adequately insulated against subfloor moisture and temperature changes. If the investor or user is unsure about the condition of the insulation, it should be inspected by a professional company.
 - > Comply with the prescribed values according to ČSN 744505 Floors - General Provisions and the Installation Instructions of the manufacturer Fatra, a.s.
 - > Floor coverings cannot be applied over old or other floor coverings.
 - > Local flatness over a length of 2 m must be within +/- 2 mm. Values are not added together.
 - > Do not apply floor coverings in entrance halls or areas where climatic conditions and cleaning zones are not provided. The size, location and design of the cleaning zone should be considered at the project stage so that the solution is effective.
 - > For full-surface gluing, the substrate must be levelled with a smoothing compound.
 - > Underfloor heating must be switched off for 48 hours before bonding the floor covering. It is necessary to carry out heating/commissioning tests for underfloor heating. The test report must be provided before the floor covering is laid.
 - > Acclimatise the floor covering for 24 hours before installation.
 - > The floor covering must always be rolled after laying (min. 50 kg sectional pressure roller).
 - > Usage conditions:
air temperature (+15-30) °C, relative humidity (40-60)%.
 - > Do not expose the glued floor covering to water (for several hours) and long-term environments with relative air humidity exceeding 60% (e.g., shower cubicle).
 - > Sunlight in glazed rooms with southern exposure can cause the temperature of the floor tiles to rise above +28 °C. It is necessary to protect the floor covering with suitable shading techniques during substrate application and final laying (window film, external blinds, awnings, etc.).
 - > Direct ultraviolet (UV) sunlight causes gradual surface degradation and irreversible changes to the floor covering.
 - > Prevent contact of hot and smouldering objects with the floor covering, as they leave irreversible changes in colour and texture.
 - > The underfloor heating system, during regular use of the floor covering, must be set so that the substrate temperature does not exceed +28 °C.
 - > It is recommended to install temperature seals.
 - > Furniture legs and household electrical appliances should be equipped with quality and functional protective glides made of soft plastic, felt pads, etc. (e.g. Scratchnomore glides).
 - > It is also necessary to regularly check the functionality of protective means and clean them regularly.
 - > Use "W" type wheels for office chairs - soft plastic on a hard core, or protective PET mats intended for mobile furniture. Transport and work trolleys must have polyurethane wheels.
 - > Do not exceed the short-term and long-term point load on the flooring of 5 MPa. Do not stress the floor covering or floor in any way that contradicts the Installation Instructions and can cause irreversible changes. Claims cannot be made for mechanical damage, improper handling and use, including unsuitable maintenance.
 - > Rubber products (mostly dark and coloured rubber – rubber wheels, appliance protectors, shoe soles, etc.) cause irreversible colour changes in the wear layer of the floor covering with prolonged contact, manifested as yellowing, browning, or blackening of the surface at the contact point. Residues of asphalt strips in the substrate and similar substances can also cause surface degradation through migration. We do not recommend applying our floor covering in garages (migration of substances from tyres).
- Recommendation:** The resistance of the surface to the migration of plasticisers from rubber can only be achieved by additional application of a special 2-component polyurethane varnish Dr. Schutz PU Anticolor.
- > Prevention is the best way to maintain the overall functionality of the floor. Use products for PUR surfaces according to the manufacturer's instructions (e.g. Dr. Schutz Group, Bona).
 - > After each floor covering installation, it is necessary to carry out initial basic machine cleaning according to the manufacturer's instructions (e.g. Dr. Schutz Group, Bona).
 - > The use of steam mops and steam cleaners is prohibited!
 - > Ensure that the acceptance and handover report is appropriately filled in (available for download at fatrafloor.com).
 - > The installer must provide the user with information on the use and maintenance of the floor covering, confirmed by signature in the handover protocol.
 - > It is not recommended to combine different production batches.

9. QUALITY CONTROL AND EVALUATION OF FLOORING

The acceptance of the floor is governed by ČSN 74 4505. The appearance of the floor is evaluated visually from a standing position (i.e. from a height of 160 cm) under normal lighting. When evaluating, views against the light should be excluded (the light source must be located behind the observer). The finished flooring must not exhibit ripples or other deformations.

9.1 COMPLAINTS

Fatra, a.s. Napajedla, as the manufacturer of Marilo floor coverings, addresses defects in the quality, quantity, and execution of goods within the scope of liability for defects according to the respective purchase contract. The warranty does not cover defects caused by improper handling, transportation, and/or improper storage and/or improper application according to the company standard PN 5430/2025. The buyer is obliged to promptly notify the seller of any defects and provide credible evidence.

We recommend that implementation companies and the final customer keep documentation on the handover and acceptance of construction readiness, as per the sample handover report for the substrate, preparatory work and finished floor on fatrafloor.com.

If the surface of the PUR protective layer is scratched due to the movement of furniture without suitable protective means for contact surfaces with the floor, no complaints can be made regarding these scratches.

10. RULES FOR PRODUCT USE AFTER INSTALLATION

- Ensure effective measures to capture dirt – so-called cleaning zones.
- Floor coverings must not be laid in rooms that are not adequately insulated against subfloor moisture and temperature changes.
- If further work is to be carried out in a room with an installed floor covering, provide protection against damage, preferably with hard boards that effectively protect against mechanical impact.
- Do not move furniture across the floor.
- Prevent objects with sharp edges from moving across the floor surface, as they can cause surface damage (e.g., stones, grains of sand, vacuum cleaner nozzles, children's toys, pets, etc.). Claims cannot be made for mechanical damage after installation.
- Equip furniture legs with functional protective means (e.g.

Scratchnomore glides), soft plastic glides, felt pads, etc. Equip stationary furniture, such as tables and cabinets, with felt pads. Moving furniture, such as chairs, should be equipped with soft, functional pads, not felt (e.g., Scratchnomore glides).

- Use "W" type wheels for office chairs – soft plastic on a hard core, or use protective PET mats intended for mobile furniture. Use polyurethane wheels for transport and work trolleys.
- It is also necessary to regularly check the functionality of protective means and clean them regularly.
- Do not exceed the short-term and long-term point load on the flooring of 5 MPa (approx. 50 kg/cm³). Do not stress the floor covering or floor in any way that contradicts the Installation Instructions and can cause irreversible changes. Claims cannot be made for mechanical damage, improper handling and use, including unsuitable maintenance.
- Rubber products (mostly dark and coloured rubber – rubber wheels, appliance protectors, shoe soles, cleaning mats with a rubber underside, bitumen-containing substances, etc.) can cause irreversible colour changes to the wear layer of the floor covering with prolonged contact.

Recommendation: The resistance of the surface to the migration of plasticisers from rubber can only be achieved by additional application of a special 2-component polyurethane varnish Dr. Schutz PU Anticolor.

- Prevention is the best way to maintain the overall functionality of the floor. Use products for PUR surfaces according to the manufacturer's instructions (e.g. Dr. Schutz Group, Bona).
- Spilled liquids must be wiped up (chemicals need to be neutralised with clean water).
- Ensure the recommended air temperature range of (+15-30) °C and relative air humidity of (40-60)%.
- The underfloor heating system must be set so that the substrate temperature does not exceed +28 °C.
- The floor covering must not be exposed to sudden temperature changes; increase the underfloor heating temperature gradually (e.g., 5 °C per hour). The permissible temperature for the wear layer is (+15-28) °C.
- Sunlight in glazed rooms with southern exposure can cause the temperature of the floor tiles to rise above +28 °C, potentially causing irreversible damage to the floor covering. In such cases, protect the floor with suitable shading technology.
- Direct ultraviolet (UV) sunlight on the floor covering causes gradual surface degradation and irreversible colour changes.
- Prevent contact of hot and smouldering objects with the floor covering, as they leave irreversible changes in colour and texture.
- The use of steam mops and steam cleaners is prohibited!
- Follow the manufacturer's instructions, see the Fatra, a.s. Installation Instructions.

The Installation Instructions were created by the leading European company Fatra, a.s. with expert assistance from the Flooring Guild, manufacturers of construction chemicals, and manufacturers of cleaning products.

11. CHEMICAL RESISTANCE

The flooring exhibits high resistance to weak and diluted acids, alkalis and soaps. Petroleum products and strong acids do not cause harm if the relevant spillage is immediately rinsed off. Ketones, chlorinated solvents, and other solvents must not come into contact with the flooring. However, if this happens, the damage can be minimised by immediate rinsing with water. The flooring should only be subjected to load after the chemical residues have completely evaporated. Some chemicals contain very strong dyes that can cause stains on the flooring even after brief contact. Rubber products (mostly dark and coloured rubber – rubber wheels, appliance protectors, shoe soles, etc.) cause irreversible colour changes in the wear layer of the floor covering with prolonged contact, manifested as yellowing, browning, or blackening of the surface at the contact point. Where these types of materials are used, we recommend dark-coloured floor coverings to minimise the risk of staining. Burning and smouldering objects leave irremovable stains on the surface. The tables below provide an overview of the general chemical resistance of floorings (for description of the test method, see the note).

11.1 ORGANIC SUBSTANCES

| TYPE OF CHEMICAL | EFFECT | MEASURE |
|---------------------------------------|---|-------------------|
| Aldehydes | The flooring is attacked within a few minutes. | Wipe immediately. |
| Esters | | |
| Halogenated hydrocarbons | | |
| Ketones | | |
| Alcohols | Plasticisers leak out after several days, accompanied by shrinkage and embrittlement of the material. | Wipe immediately. |
| Ethers | | |
| Glycols | | |
| Hydrocarbons (aromatic and aliphatic) | | |
| Kerosene | | |
| Edible oil | | |

11.2 AQUEOUS SOLUTIONS

| TYPE OF CHEMICAL | EFFECT | MEASURE |
|------------------------|--|--------------------------------|
| Weak acids and alkalis | No effect. | |
| Strong alkalis | Damage to gloss and possible discoloration of some shades. | Dilute and remove. |
| Strong acids | Prolonged contact can cause discoloration. | Dilute and remove immediately. |
| Dyes (indicators) | Contact can cause discoloration. | Dilute and remove immediately. |

Note: Chemical resistance is tested by contact with the chemical for 24 hours at room temperature +21 °C, followed by washing with cold water.



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