

TECHNICAL INSTALLATION MANUAL

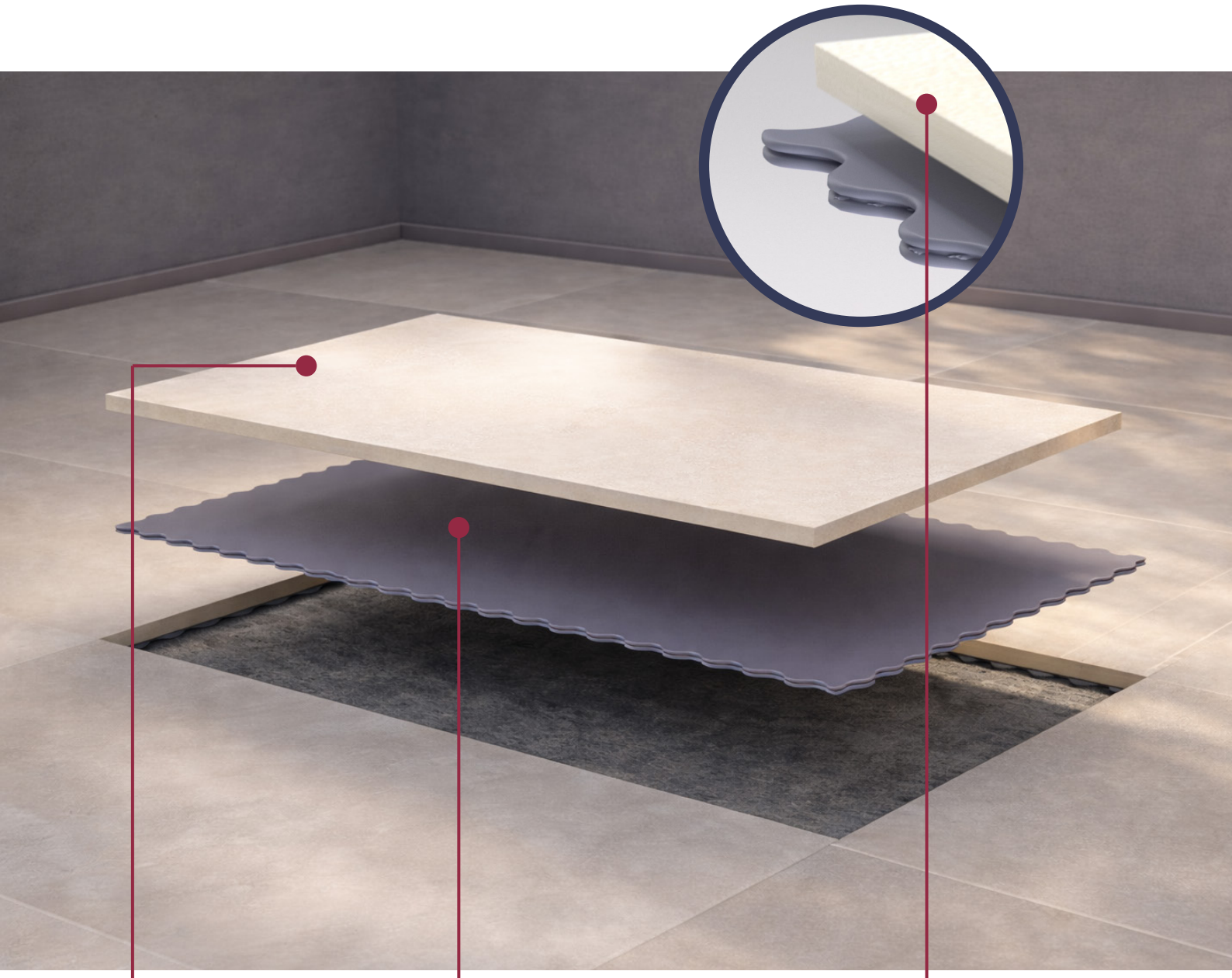
ondablock

Innovative dry tile system

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PRODUCT STRUCTURE



Porcelain flooring

Recycled thermoplastic polymer

Final result

PORCELAIN FLOORING

High-density, high resistance porcelain tiles manufactured from highly refined clays fired at temperatures higher than traditional ceramics. The result is an extremely hard material with very low porosity, making it practically waterproof and highly durable. In addition, it is one of the most versatile decorative materials available, capable of completely defining the style of both indoor and outdoor spaces.

Among its many advantages compared to alternative products , stand out:

- High wear resistance
- High impact resistance
- Very low water absorption
- Excellent resistance to cold and heat.
- Fire resistant
- Easy maintenance
- Wide range of designs

RECYCLED THERMOPLASTIC POLYMER

A recycled thermoplastic polymer is a plastic material that retains its original thermoplastic properties after being reprocessed. It undergoes shredding, melting, and heat molding without altering its thermoplastic nature and can therefore be remolded multiple times.
This makes recycled thermoplastic polymers particularly suitable for industrial solutions where clean joints, rapid installation, durability, and a certain degree of structural flexibility is required.

Main properties:

- Excellent mechanical performance: rigidity + stress absorption
- High resistance to moisture
- Low structural weight
- Remarkable termal performance
- High industrial processability (precise thin laminates)

LIST OF TOOLS

The tools required for the installation of porcelain flooring with the OndaBlock system are as follows:

- **Diamond tile cutter (manual or electric)**: for making precise cuts in ceramic tiles.
- **Tile cutter blade**: ideal for cutting the joining system and recycled thermoplastic polymer with precision.
- **Silicone sealant**: for sealing perimeter joints between the floor and walls, skirting boards, door frames, and/or columns.
- **Silicone gun**: allows controlled, precise, and uniform application of silicone during installation.
- **Tile spacers**: to achieve and maintain uniform joints (0.5–2 mm depending on style).
- **Grout**: adhesive paste for filling joints between tiles.
- **Rubber mallet**: useful for fitting and setting ceramic flooring without damaging it. It use is recommended.
- **Manual mixer**: used to prepare the grouting material.
- **Rubber trowel/float**: used for applying the grout.
- **Large sponge**: used to clean excess grout without damaging the joints.
- **Glazing wedges**: used to correct slight deviations in flatness or leveling of the installation substrate when necessary (1mm or 2 mm depending on the deviation).

It is important to mention that the correct execuion of joints (perimeter, intermediate, and between the pieces of the assembly) is part of the mandatory installation conditions.

The absence or incorrect execution of these joints will void the system warranty.

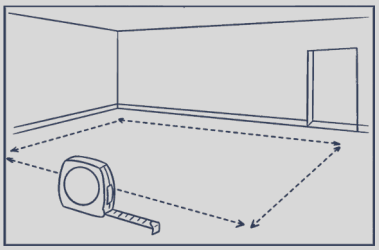
INSTALLATION

Please carefully read the Ondablock system installation instructions presented throughout this section in order to achieve an optimal installation result. In addition, the QR Video provides access to an explanatory video of the installation process, offering further guidance and support, if necessary, to ensure the most successful execution of the installation.

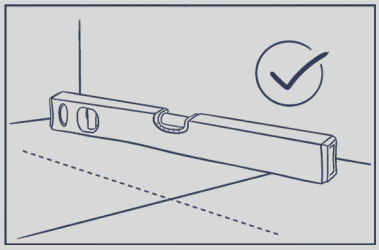
For additional information, including technical datasheets, contact: info@ondablock.es

SUBSTRATE PREPARATION

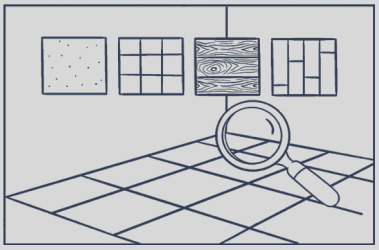
Before starting installation, it is essential to verify that the substrate meets the appropriate conditions to ensure a durable and optimal result.



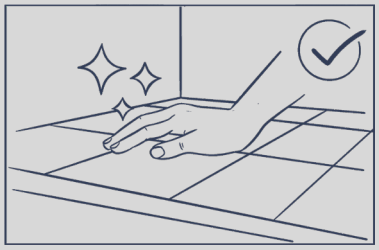
1 Measure the total dimensions of the installation area and determine the tile layout, with Ondablock system, avoiding excessively small border pieces.



2 Check the squareness and general leveling of the surface.



3 Identify the existing floor type (concrete, ceramic, parquet, floating floor, etc.).

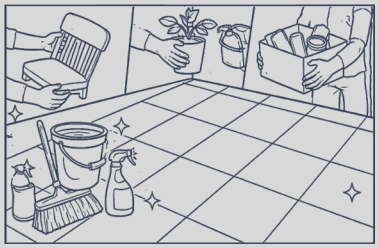


4 Confirm that the surface is firm, stable, and free of significant irregularities.

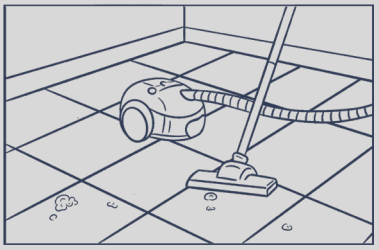
Before starting the installation, it is essential to verify that the substrate meets the appropriate conditions to ensure a durable and optimal result.

WORK AREA CLEANING

Once the substrate has been verified, prepare the work area.



1 Remove all furniture and any element that may interfere with the installation.

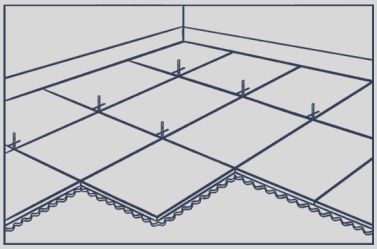


2 Carefully clean the substrate to remove dust, construction debris, grease, or any particles that may affect the proper seating of the system.

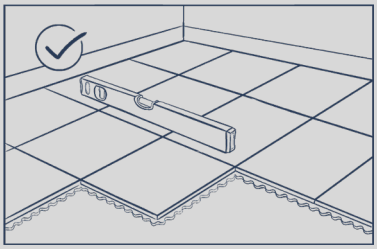
It is essential that the substrate is completely dry before proceeding.

LAYOUT AND INSTALLATION OF PORCELAIN FLOORING WITH THE ONDABLOCK SYSTEM

Once the preliminary conditions have been defined, establish the starting point of the installation.



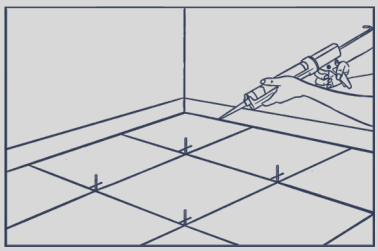
1 Begin from a corner of the area or from a previously defined reference axis. Use tile spacers to maintain uniform spacing between tiles.



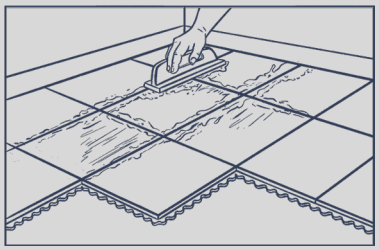
2 Ensure the correct alignment of the assembly (ceramic flooring + Ondablock) throughout the entire installation process. Always maintain the perimeter expansion joint and ensure the proper interlocking between modules (cutting the wave sections or modules that come into contact with walls or fixed elements). Use glazing wedges (1 mm or 2 mm depending on the deviation) to correct slight flatness or leveling deviations of the substrate when necessary. The alignment and leveling of the assembly must also be checked periodically during the installation process.

GROUTING

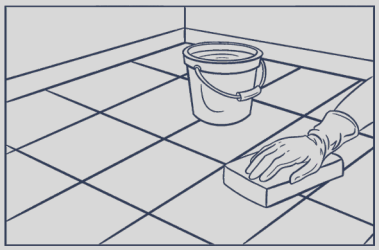
Once installation of the assembly (ceramic flooring + Ondablock) has been completed, proceed with the sealing of the joints.



1 Apply silicone sealant at specific junctions, especially in perimeter or transition areas, in order to absorb possible movements.



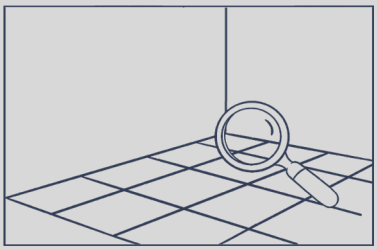
2 Apply the grouting material strictly following the manufacturer´s recommendations, to ensure proper filling of the joints. Thoroughly vacuum the tiles before grouting.



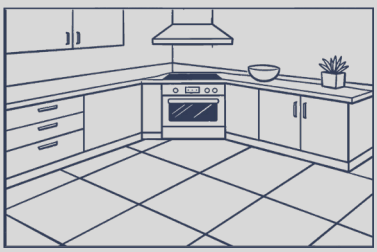
3 After application, remove excess material before it fully hardens and carry out Surface cleaning using a slightly damp sponge. It is very important to respect the drying time specified by the grout manufacturer, avoiding traffic on the substrate during the curing period.

COMPLETION AND COMMISSIONING

Once grouting is completed and the drying period has elapsed:



1 Perform a final inspection of the assembly, verify stability, alignment, and surface finish.



2 Once verified, the flooring is ready for use according to the OndaBlock system specifications.

FAQ (Frequently Asked Questions)

Can the Ondablock system be installed without applying joint sealing material ?

The installation of the Ondablock system without grout material between the ceramic tiles is not recommended under any circumstances. Grouting is an essential part of the system, ensuring assembly stability, protection against dirt and moisture ingress, and proper flooring performance under service conditions.

The system has been designed to work together with a suitable grouting system. The omission of the grouting process shall be considered a non-compliant installation outside the technical specifications and will void the system warranty.

Does the Surface need to be completely flat/level ?

Yes. The Ondablock system must be installed on a substrate that complies with the required conditions of flatness, stability, and strenfth.

Ondablock is not intended to correct structural irregularities or compensate for significant leveling deviations. Proper preparation and verification of the substrate are therefore the responsibility of the installer or site supervisor prior to installation.

Installation on substrates that do not meet the minimum technical requirements may compromise the stability and performance of the system and will void the system warranty.

The installation of the Ondablock system on a non-compliant substrate shall be deemed acceptance of the substrate condition by the installer.

Ondablock accepts no liability for defects resulting from substrate deficiencies, structural movement, rising damp, or subsequent settlement

Can the Ondablock system be installed over flexible materials such as carpets or floating flooring systems ?

The installation of the Ondablock system over flexible, deformable, or compressible substrates— such as carpets, cushioned vinyl flooring, foam underlays, or other non-rigid floating floor systems—is not recommended. The Ondablock system is designed to be installed on firm, stable, and structurally continuous substrates.

Does the substrate need to be completely clean at the time of installation ?

Yes. The substrate and work area must be clean and free from any elements that may interfere with the proper seating and performance of the Ondablock system.

The presence of dirt, construction debris, loose aggregates, accumulated dust, or small particles may cause localized unevenness, system rocking, localized stress concentrations, and unwanted movement or noise, among other issues.

How should a damaged ceramic tile be replaced within the Ondablock system ?

One of the advantages of the Ondablock system is the ability to perform localized tile replacement without requiring large-scale demolition or wet construction work.

The replacement procedure must be carried out carefully to avoid damage to adjacent tiles and always in accordance with the system specifications:

Recommended replacement procedure:

1. Remove the grout material around the affected tile using the appropriate tools.
2. Using a tile cutter, cut the Ondablock connection between the damaged tile and the adjacent connected tiles.
3. Carefully remove the tile + Ondablock assembly.
4. Install the replacement assembly, ensuring proper interlocking and fitting.
5. Verify the alignment and leveling.
6. Reapply grout to the affected joints.

The replacement operation must be performed while avoiding impact transmission or mechanical stress to adjacent tiles.

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