

altro

Installation instructions for Altro Ollero™ rubber flooring

Includes glue-down and adhesive-free installation instructions

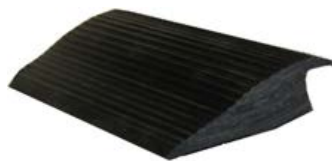
updated 06/06/23

Tools and accessories

- Altro Installation Guidelines
- A two-person installation is required for large areas (one to handle materials and one to handle adhesive - square-cut tiles only)
- Safety glasses
- Rubber gloves and boots
- Heavy duty utility knife
- Measuring tape
- Transit level and straight edge
- Chalk snap-line
- 1/16" x 1/16" x 1/16" V- Notch Trowel
- Carpenter's square
- Putty knife
- Masonite board, plywood or kraft paper
- 858ml adhesive caulking gun, if needed to adhere reducer strip
- 50lb or 70lb roller depending on thickness (square-cut tiles only)

Optional reducer strips

- 3/8" (10mm) x 12' length
- 1/2" (12mm) x 12' length



Adhesives (for square-cut tiles only)

- Varying temperature ranges will affect curing times, viscosity and pot life of adhesive, possibly resulting in adhesion problems.
- Use safety glasses, rubber boots, and rubber gloves when applying adhesive. Do not allow adhesive to cure on your hands.
- Room must be well ventilated.
- For first aid and safety instructions see labels on can and the safety data sheet.
- If adhesives other than the products listed below are being used, this could void the warranty. Contact Altro for verification.
- For detailed information and product use, refer to Technical Product Data Sheet, included and adhesive

Altro Adhesive (V.O.C. compliant)

- o Single component polyurethane adhesive
- o 4 US gallons: 57lbs (25.8kg)
- o Approximate coverage: 400ft² (37.16m²)

- o 1/16" V-notched trowel supplied.
- o 12-month shelf life

Chemrex Urethane 948 caulking (V.O.C. compliant)

Used when installing optional reducer strips.

- o Single component polyurethane adhesive
- o 858ml gun grade: (29oz tube)
- o Approximate coverage:
 - 1/8" (3mm) bead = 345 lineal feet
 - 3/16" (5mm) bead = 153 lineal feet
 - 1/4" (6mm) bead = 86 lineal feet
 - 5/16" (8mm) bead = 55 lineal feet
 - 3/8" (10mm) bead = 40 lineal feet
- o 12-month shelf life
- It is not uncommon for a moisture cure urethane product to develop a slight skin on the top surface in the can.
- The product is still good; simply remove the skin and mix adhesive well.
- Refer to batch number on adhesive and contact Altro to determine if it has expired.
- Altro is not responsible for adhesive used past its expiration date.

Preparation

- The subfloor must be flat/smooth, clean, and dry, structurally sound and all debris including old adhesive must be removed.
 - o Scraping may be required to remove debris.
- Particleboard, chipboard, Masonite™ and Luan Plywood are not considered suitable underlayment.
- If installing on an incline surface, start at the bottom and move up the surface to avoid sliding of the mats.
- Debris left under mats will cause height variations, telegraphing and undulations.
- Contact Altro technical services for verification.

Concrete and wooden subfloors

- **Both moisture vapor emissions test in accordance to ASTM F1869 and relative humidity in concrete test in accordance to ASTM F2170 must be completed.**
- Concrete substrates must not exceed 90% IRH and not exceed 5lbs water vapor emissions x 24-hours x 1,000 sq. ft.

- It is essential that pH tests be taken on all concrete floors. This must range between 7 and 9. If it does not, the sub-floor must be neutralized prior to the beginning of the installation.
- Subfloor must be smooth and flat to a tolerance not exceeding 1/8" in 10 lineal feet.
 - o The Concrete Surface Profile (CSP) must achieve a requirement of CSP2.
- If existing concrete is too rough, or does not meet the above criteria, apply a Portland cement based patching compound to smooth the surface. Follow all compound manufacturer's instructions.
- For Altro Ollero Interlocking tile Wood Subfloor surfaces are to be sealed for installation to be completed, a sealed wood subfloor surface is not required for Altro Ollero glued down tile.
- Wood subfloor must be a minimum of 1" thickness, and free from any flex movement. (5/8" on joists with a 3/8" overlay is acceptable).
- New plywood should be acclimatized for a 48-hour period prior to installation of the rubber flooring.
- CDX exterior smooth one side is suggested for new wood substrates.
- Secure all nails and screws to prevent future protrusion.
- Any cracks, holes, rough or uneven areas should be patched with a polymer-modified cement smoothing compound and/or sanded to achieve a smooth surface.
- It is vital that a moisture test be completed on all wood subfloors regardless of age prior to installation with records kept. No less than 20 spot checks per 1000 sq. ft. should be observed. Any readings higher than 13% WME (wood moisture equivalent) are not acceptable and installation must wait until levels are at or under 13%.
- **Do not** use markers (sharpies, pens, construction crayons, etc.), tapes or paints (construction or other) on the flooring or on the substrate as these items may bleed through or otherwise cause permanent staining.
- Warranty is not applicable if specified moisture ranges are not adhered to – this is for either concrete or wood.

Hazards

- **Silica Warning:** Concrete, floor patching compounds, toppings, and leveling compounds can contain free crystalline silica. Cutting, sawing, grinding, or drilling can produce respirable crystalline silica (particles 1- 10 micrometers). Classified by OSHA as an IA carcinogen, respirable silica is known to cause silicosis and other respiratory diseases. Avoid actions that may cause dust to become airborne. Use local or general ventilation or provide protective equipment to reduce exposure to below the applicable exposure limits.
- **Asbestos Warning:** Resilient flooring, backing, lining felt, paint, or asphaltic "cutback" adhesives can contain asbestos fibers. Avoid actions that cause dust to become airborne. Do not sand, dry sweep, dry scrape, drill, saw, bead blast, or mechanically chip or pulverize. Regulations may require that the material be tested to determine the asbestos content. Consult the document "Recommended Work Practices for Removal of Existing Resilient Floor Coverings" available from the Resilient Floor Covering Institute.
- **Lead Warning:** Certain paints can contain lead. Exposure to excessive amounts of lead dust presents a health hazard. Refer to applicable federal, state, and local laws and the publication "Lead

Based Paint: Guidelines for Hazard Identification and Abatement in Public and Indian Housing" available from the United States Department of Housing and Urban Development.

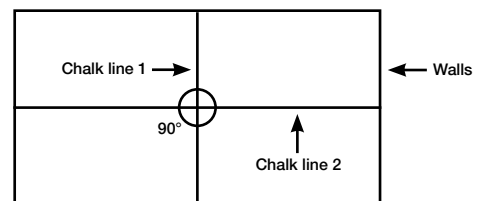
General information

- Prior to installing Altro Ollero, ensure all other trades have completed their work schedules.
- The use of Masonite board, plywood, RamBoard Temporary Floor Protection or kraft paper should be used to protect the rubber flooring from damage and debris.
- Product, sub-floor and adhesive **must all** be of the same temperature. This should be checked using an infrared digital thermometer.
- Altro is not responsible for any product failure if proper floor preparation and/or installation procedures are not followed.
- Check ambient temperature.
- All HVAC systems **must be** fully operational 24-hours prior to beginning the acclimation process.
- Rubber flooring may be installed between temperatures of 57°F (14°C) and 72°F (23°C).
 - o Room temperature must be consistent during the entire installation.
 - o Fluctuations in temperature or humidity will cause expansion or contraction.
- In-floor radiant heat should be shut off for 24-hours prior to acclimation (72-hours prior to installation), be shut off throughout installation and remain off for 72-hours after installation is complete.
 - o It is recommended that surface temperature does not exceed 77°F (25°C)

Chalk lines

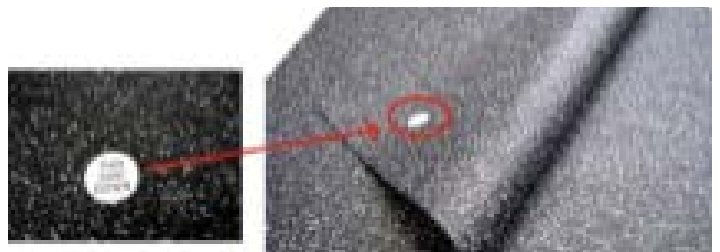
Locate the midpoint of the room, chalk a start line down the center. Chalk another similar start line 90° to the first one. (See Figure 1)

Figure 1



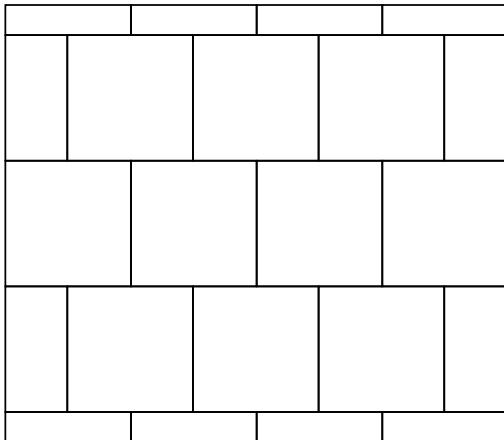
Mat layout for square-cut tiles

- All Mats, square glue-down and interlocking tiles are to be laid in an Ashlar / staggered fashion.
- Each mat is marked with a label stating:
 - o Do not remove "this side down" labels until final glue down commences.
 - o Make sure that all mats are laid down with the "label" pointing in the same direction. (I.e. Bottom right corner)
 - o Install mats same side up as received, Do Not Flip Over (I.e. sticker bottom right)



- The installer should have all relevant information about the mat arrangement from the owner.
- Begin mat layout from the point where the two chalk lines intersect.
- Work outwards in both directions.
- Start second row on either side of the center line towards the chalk line.
- Make sure that second row is installed by staggering mats.
 - This will avoid any four corners from meeting at one spot. (see figure 2A)

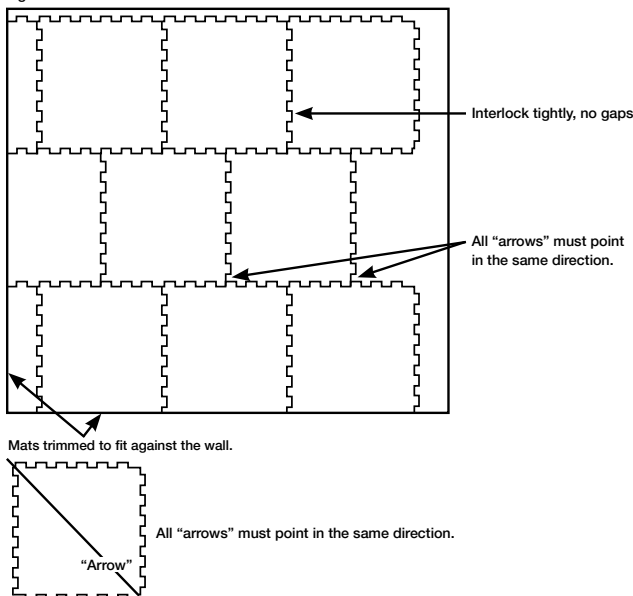
Figure 2A



Mat layout for interlocking tiles

- All Mats, square glue-down and interlocking tiles are to be laid in an Ashlar / staggered fashion.
- Each mat is designed with an arrow indicating the direction each mat should be installed
 - Install mats same side up as received, **do not flip over**.
- The installer should have all relevant information about the mat arrangement from the owner.
- Begin mat layout from the point where the two chalk lines intersect.
- Work outwards in both directions.
- Start second row on either side of the center line towards the chalk line.
- Make sure that second row is installed by staggering mats.
 - This will avoid any four corners from meeting at one spot. (see figure 2B)

Figure 2B



Acclimation and dry lay

- **Acclimation/Dry Lay Checklist is required to be completed or warranty will be void.**
- A minimum of 48 – 72 hours before starting the installation.
 - Storage longer than 2 weeks may require a longer acclimation period.
 - Mats in the lower portion of the stack will compress to a greater degree than those in the upper portion.
 - A mat laid down in the morning hours at 32°F (0°C) would be a different size than a mat laid at 68°F (20°C) later in the day.
 - Acclimation should only begin once the sub-surface has reached a temperature between 57°F (14°C) and 72°F (23°C).
- Lay out all mats on the sub-surface in piles of 2 or less:
 - Be sure to mix mats from several different pallets to blend minor shade variations.
 - Allow them to acclimate until they have reached a consistent size.
 - Some products under certain conditions have shown expansion and contraction in size of up to 1/8" (3.2mm).
 - Check for any shading or uneven color distribution.
 - This is not considered to be a product defect.
 - Rotating the mat 90° or installing it in a less visible area may help improve the effect.
 - Inspect all mats for visible defects.
 - Ensure the defective product is identified prior to the start of the installation, notify Rep/Dealer immediately.
 - Labor will not be covered if any defective product is installed.
 - Scythe marks are inherent in the manufacturing of recycled rubber flooring products and are considered normal.
 - Certain lighting conditions can accentuate these marks and as such is not considered a product defect.

Cutting

- Lay mat on a flat surface, hold the metal straight edge on the cut line, and cut with sharp utility knife.
- Keep scoring the cut until separated.
- Change or snap off blades frequently to ensure clean cuts.
- For odd angles, circular patterns, etc. a pattern or cardboard template is suggested.
- Join factory edges together. Hand cut edges should be used against the perimeter walls only.

Glue-down installation

- Lay mat on a flat surface, hold the metal straight edge on the cut line, and cut with sharp utility knife.
- Keep scoring the cut until separated.
- Change or snap off blades frequently to ensure clean cuts.
- For odd angles, circular patterns, etc. a cardboard template is suggested.
- Join factory edges together. Hand cut edges should be used against the perimeter walls only.
- Roll glue down flooring 4mm glue down tile—50lb roller is minimum and a 75lb roller is acceptable. Thicker materials—minimum 75lb roller and 100lb is acceptable.

Mat installation

- Put the mat that you are installing on top of the mat already glued down and pull towards the area you want to fill until the mat falls into place, then firmly press the mat up to edge of the existing mat.
 - Over compressed seams will cause peaking, care should be taken when compressing seams.
- This will keep excess adhesive from protruding between the seams. (see figure 3)

Figure 3



- Leave ¼” gap to all walls for mat expansion.
 - Allow 72-hours setting time before post install cleaning.
 - Avoid heavy traffic or rolling loads during curing to prevent indentation or movement of mats.
 - Never leave adhesive ridges or puddles. They will telegraph through the material.
- **Do not use tapes on the flooring.** If left on the flooring for any prolonged time, the adhesive from the tape will cause permanent staining.

Clean up adhesive

- Do not get adhesive on the top surface of the rubber flooring as it is impossible to remove when cured.
 - Immediately use a clean damp cloth to remove any adhesive.
- Altro does not warranty product where the attempt to remove adhesive has been made. Any damage to the mat because of adhesive removal is solely the responsibility of the installer.
- Intense scrubbing of the seams will also darken the edges.
- Contact your Altro supplier immediately for suggested cleaning methods if this happens.

Caution: the use of mineral spirits can cause the area to appear darker.

Adhesive-free installation

- **Do not install** mats if the appropriate thickness and dimensions have not been reached.
- Intended for indoor use only and should not be installed in areas where the temperature is inconsistent.
- For a multistage install on larger projects, any unretained edges will need to be anchored with double sided tape until the installation resumes.
 - Failing to secure the open edges will result in shifting of the surface and gaps between the tiles.
- Any perimeter tile will need to be cut to fit against the wall, allow a ¼” inch gap around the perimeter for expansion and contraction.
- Create a finish straight edge by removing all interlocking tabs along the outside edge. (See Cutting section for directions)
- Make sure all tiles must be laid with the arrow pointing in the same direction.

Post installation

Initial cleaning

- When installation is complete, and adhesive is fully cured (at least 72-hours).
 - Sweep floor to remove any debris, then dust mop thoroughly to remove all surface dust and dirt using a dust mop or microfiber mop.
 - Use AltroClean 44 Cleaner or AltroClean 48 cleaner/maintainer. (see dilution rates on label).
 - Do not use any oil base cleaners as they will deteriorate the mats.
 - Damp mop with AltroClean 44 Cleaner or AltroClean 48 cleaner/maintainer diluted with a warm water; use a microfiber mop.
 - Use a two-bucket system and change the water frequently.
 - If floor has an excessive amount of dirt or dust present, additional cleaning with a lightweight auto scrubber may be required.
 - An RPM of 185 and brush pressure between 35 and 85lbs are recommended.
 - If disc type equipment is used, be sure to use a soft nylon brush, not a pad.
 - Do not flood floor.
 - Allow to dry thoroughly.

Recycled Rubber Treatment

- Please note that treating recycled rubber is not required for all applications.
- Mats with a predominance of light-colored EPDM will be easier to clean and maintain if treatment is applied.
- For most installation, it is not necessary to seal or coat Altro Ollero.
- In certain installations, a treatment may be appropriate.
- Contact your Altro representative for the correct choice in your application.