



METROPOLITAN SYSTEMS

Complete[™] AMB Installation Instructions

PRODUCT USE & INSTALLATION OPTIONS

PLEASE READ THESE INSTRUCTIONS COMPLETELY BEFORE BEGINNING THE INSTALLATION.

Installer's / Owner's Responsibility

Metropolitan Systems Complete (MSC) AMB is manufactured to highest standards of product quality, but occasional manufacturing defects may occur in the product. It is the sole and joint responsibility of the installer and owner to conduct a quality inspection before installation. Any MSC AMB that has been installed will be deemed to have been inspected and accepted by the installer and owner, even if the owner is not present at the time of installation. If defects are found, please contact your dealer. It is the sole responsibility of the flooring installer to ensure that the job site, subfloor and installation and materials meet or exceed all applicable industry standards. Metropolitan accepts no responsibility for problems arising from incorrect or improper site preparation or installation procedures.

INSTALLATION METHOD CHART

	Engineered Hardwood	Laminate without pad attached	Glue down LV
Method #1 AMB Floats: Flooring is glued to AMB	✓		
Method #2 AMB Floats: Flooring is floated over	✓	✓	
Method #3 AMB is glued to subfloor; flooring is glued to AMB	✓		✓

RADIANT HEAT SYSTEMS

It is the homeowner's responsibility to determine if the radiant heat system being considered is compatible for use under the floor being installed. We recommend that the homeowner contact the system manufacturer and get written confirmation that the system is approved for use with engineered wood flooring and under what operating conditions. If you are unable to obtain this information, please contact Metropolitan's Technical Services Team at techserv@metrofloors.com. Prior to installation, ensure that the radiant heat system is in full working order and has been fully tested and running for a minimum of two weeks. The system should be turned off for 24 hours prior to installation in the install zone. After installation, Metropolitan recommends that the surface temperature of the floor never be allowed to exceed 82°F / 28°C and that changes in temperature be moderated in increments of 5°F/2°C per day to avoid 'shocking' the floor.

Where possible, we recommend the use of a data logger to monitor and record temperature and humidity conditions; this provides a record of the environmental conditions and may also help take preventive measures where conditions are outside of recommended levels. We accept no responsibility for any damage to the floor caused by a radiant heat system. Such damage is not covered by the product warranty.

SITE PREPARATION

INSTALLATION IN NEWLY CONSTRUCTED HOME

Installation of flooring is one of the last jobs of a new home construction. Prior to installing a floor, the following conditions must be met:

The building is completely enclosed with all outside doors and windows in place and securable, including a door from an attached garage to house interior

- All concrete, masonry, plastering, drywall, texturing, painting, tiling and other wet work is complete and dry
- Finished basements must be maintained as per the environmental requirements of the rest of the house (see climate control)
- Unfinished basements must be dry (no standing water) with adequate air circulation.
- Crawlspace must be dry, with no standing water and adequate cross-ventilation. Exposed earth crawlspaces must also have a vapor barrier (ASTM D 1745 Standard) Wood Subfloors must have a minimum of 18" of ventilated air space below. Metropolitan recommends crawl spaces should conform to latest version of International Residential Code(IRC) Section R408.1 Underfloor Space Ventilation for vented crawl space and Section R408.3 for unvented crawl spaces.
- For commercial and multi-family structures refer to International Building Code (IBC) section 1202.4.1.1 Ventilation Area for Crawl Spaces with open earth floors and section 1202.4.1.2 Ventilation area for crawl spaces with covered Floors.
- Gutters and downspouts are in place, directing water away from the building
- Landscaping is directing water away from the building
- HVAC systems are fully operational, enabling heat and humidity levels to be controlled and maintained throughout the home, and have been operating for a minimum of 5 days prior to installation
- Subfloor is properly inspected and prepared for installation in accordance with these instructions
- If installing over radiant heat, ensure that the system is in full working order and has been fully tested and running for a minimum of two weeks prior to installation. The system should be turned off for 24 hours prior to installation in the install zone.

INSTALLATION IN EXISTING HOME (RENOVATION)

- Installation in an existing home must meet the same conditions as a new home. If part of a larger remodeling project, ensure that all wet work (painting, wallpapering, texturing, etc.) is completed and thoroughly dry before commencing flooring installation.
- Remove all furniture, artwork and other valuables from installation area
- Remove baseboards and moldings
- Undercut door casings and jams (use a piece of the flooring as a depth gauge)
- Remove existing flooring, if necessary
- If installing over radiant heat, it is strongly recommended that a radiant heat technician be consulted prior to installation to ensure that the heating system can be operated effectively at temperatures acceptable to the wood flooring. The system should be turned off for 24 hours prior to installation in the install zone.

STORAGE, ACCLIMATION AND TEMPERATURE

Always store material in an upright standing position.

Condition MSC AMB in a dry, temperature-controlled environment out of direct sunlight with permanent HVAC in place, UV glass and or window coverings present to prevent excessive heat build-up on the floor.

For optimal results, MSC AMB should be acclimated and maintained at the same temperature before, during and after installation as recommended by the Kentwood, Evoke and other flooring manufacturer's installation guides. Temperatures for acclimation and heated floor systems should always stay in the range of 65 F (18 C) to 85 F (29 C) for vinyl and laminate. 65F (18 C) to 82F (28C) for wood. Consult the flooring manufacturer's installation instructions for recommended ranges.

Acclimate underlayment an adequate time to assure the materials and job site conditions are of equal temperature. Prior to installation roll out underlayment to allow the product to relax and lay flat.

SUBFLOOR

The flooring contractor is responsible for minor substrate preparation. The overall responsibility for the provision of acceptable substrate and surface conditions is that of the general contractor. Reminder - Installation constitutes acceptance.

All subfloors must be flat, clean, dry, structurally sound, free of squeaks, and protruding fasteners. The subfloor must be flat to within 3/16" over 10 feet, or 1/8" in 6 feet radius.

All subfloors must be tested for moisture content, and the moisture content of both subfloor and flooring must be within allowable limits before commencing installation.

PLYWOOD OR OSB SUBFLOORS

The minimum acceptable thickness of the subflooring will be determined by the truss/joist spacing. In addition to meeting or exceeding the minimum acceptable thickness requirement, the subfloor must be secure to the joists, free of squeaks, and protruding fasteners. Subfloor moisture content must not exceed 12%.

Truss/joist spacing (Measured on center)	Minimum acceptable thickness, 4x8' sheets
16" (406mm) or less	5/8" (19/32", 15.1mm) CD Exposure 1 plywood -or- 3/4" (23/32") Exposure 1 OSB
More than 16", up to 19.2" (488mm)	3/4" (23/32", 18.3mm) T&G CD Exposure 1 Plywood, glued or mechanically fastened, -or- 3/4" (23/32", 18.3mm) Exposure 1 OSB, glued and mechanically fastened
More than 19.2" (488mm) to a max. of 24" (610mm)	7/8" T&G CD Exposure 1 Plywood, glued and mechanically fastened -or- 7/8" Exposure 1 OSB, glued and mechanically fastened -or- two layers of subflooring

CONCRETE SUBFLOORS

Follow all guidelines listed in the most recent ASTM F710 "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring" and the American Concrete Institutes ACI 302.1R-08 "Guide for Floor and Slab Construction"

Concrete substrate moisture can not exceed 99% RH (ASTM F 2170) or 12 Lbs. Calcium Chloride (ASTM F 1869) and pH 12

For all installations where subfloor is below or on grade, determine if there is a physical vapor barrier in place that will prevent the continuing release of moisture through concrete.

MSC AMB should not be installed over concrete substrates that have a history of standing water or hydrostatic pressure.

Manufacturer, distributor, or dealer is not responsible for any floor installation failures associated with unaddressed site conditions such as, but not exclusively: vapor transmission, moisture permeation, improper pH levels, contaminated concrete, or damaged subfloors.

The ultimate responsibility for subfloor acceptability and compatibility resides with the architect, designer, contractor, and installer. Note that tests done today do not guarantee long term performance of substrate. Guard against long term exposure to moisture by installing proper vapor barrier and channeling water away from building.

INSTALLATION OF MSC AMB

- MSC AMB and the flooring should be acclimated to the temperature requirements and conditions stipulated by the manufacturer of the flooring being installed on MSC AMB. Do not subject the flooring system to extreme temperature variations. After installation follow all of the requirement's stipulated by the manufacture of the flooring being installed on MSC AMB.
- MSC AMB and installed flooring should not be subjected to direct sunlight or other heat sources that can cause excessive thermal expansion of the flooring possibly resulting in visible damage to the flooring system.
- Gypsum substrates must have 5% or less moisture content when tested with the gypsum underlayment manufacture approved test meter set to gypsum scale and be rated at 2500 PSI minimum.

MSC AMB FOR LVT/LVP INSTALLATION METHOD DOUBLE GLUE DOWN INSTALLATION

Installation method

Double glue down installation only to approved substrates.

- Complete Resilient adhesive is applied with a 1/16"x1/32"x1/32" U notch trowel at a rate of 175 to 250 square feet per gallon. Adhesive can be back rolled with a 3/8" nap microfiber roller to help speed adhesive drying and minimize the possibility of trowel ridges telegraphing through MSC AMB after install,
- Adhesive must be allowed to dry to the touch before installing MSC AMB
- MSC AMB is a nonporous surface. Follow the adhesive instructions for installations over nonporous substrates.
- MSC AMB Moisture Seal Tape is required to be used on seams when utilizing the glue down installation method on or below grade installations ONLY. When applying the Moisture Seal Tape to the seams, Remove releasable paper from the double-sided tape. troweling adhesive over MSC AMB, also trowel directly over the exposed tape to achieve a full coverage of adhesive.
- When rolling out the MSC AMB, butt side edges to one another. do not leave gaps or overlap edges.
- Care should be taken to not trap air pockets under MSC AMB during installation onto the adhesive.
- MSC AMB must be rolled with a 100lb three section roller during and after installation to assure full contact with the adhesive.
- Flooring must be installed across (perpendicular) to MSC AMB seams. stagger flooring so material overlaps seams in MSC AMB by at least 4" . See diagram below
- After flooring installation. All floors must be rolled with a 100 lbs. three section roller. Use a hand roller with firm pressure to roll areas that can not be accessed with the stand-up roller.
- Note on Telegraphing of MSC AMB seams:
- In some instances, there may be some show through (Telegraphing) of MSC AMB seams through the flooring after install. Seam telegraphing is generally only noticeable on smooth flooring and in direct light.
- For installing the LVT/LVP on the MSC AMB follow the installation guide for Luxury Vinyl Installation at <https://evokeflooring.com/installation-guides>

MSC AMB FOR ENGINEERED WOOD INSTALLATION

Installation method

- Floating MSC AMB over substrate
- MSC AMB should only be installed in indoor environments that can be acclimated and maintained per the acclimation requirements set by the engineered wood flooring manufacturer, conditions must be maintained before, during and after installation. Do not subject the flooring system to temperature and humidity variations outside of wood manufacturers requirements.
- First Row: Roll out MSC AMB onto subfloor. Trim to size, maintaining the required expansion space at all vertical obstacles.
- Second Row: Roll out another section of MSC AMB, tightly abutting the side edges to one another. Leave no gaps and do not overlap edges. Seal the seam using a continuous piece of MSC AMB Moisture Seal Tape. Use a hand roller along the entire length of the seam to ensure a complete bond of the tape to the underlay. Use a

push broom to work out any air pockets and flatten the MSC AMB to the subfloor.

- MSC AMB Moisture Seal Tape is required on all seams.
- Repeat for subsequent rows.
- Use only 100% solids Urethane wood adhesive approved by Metropolitan Hardwood Flooring to bond engineered wood flooring to MSC AMB. We recommend doing a 24 hour bond test before installation.
- Apply adhesive per engineered wood manufacturers trowel notch requirements for non-porous substrates. Follow all wood manufacturers requirements for glue down installations
- When installing your new Engineered Hardwood flooring directly abut another floor covering type, such as tile or carpet:
 - Apply a 6" wide band of adhesive between the subfloor and MSC AMB using a 1/16" x 1/16" x 1/16" square notched trowel.
 - Use the same urethane that was used to adhere the flooring to the MSC AMB.
 - Using a hand roller, roll over the MSC AMB to assure a good bond and eliminate any air pockets.
 - Flooring must be installed across (perpendicular) to MSC AMB seams. See diagram below
 - For installing the Engineered Wood Flooring on the MSC AMB follow the installation guide for Kentwood Engineered Hardwood Floors

Installation method

Double glue down installation

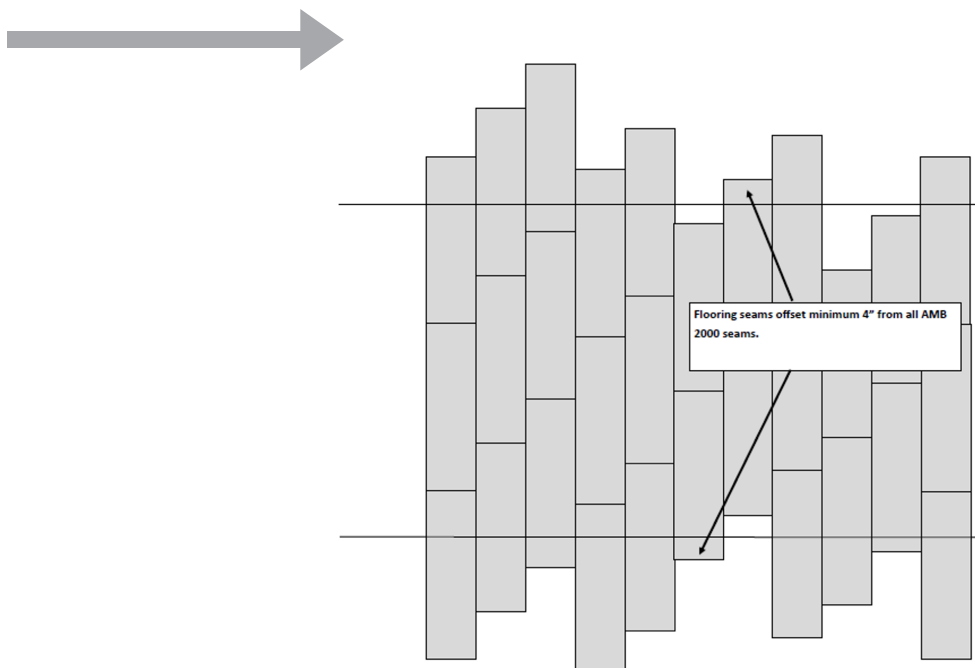
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- Adhesive must be allowed to dry to the touch before installing MSC AMB
- MSC AMB is a nonporous surface. Follow the adhesive instructions for installations over nonporous substrates.
- MSC AMB Moisture Seal Tape is required on all MSC AMB seams. When applying the Moisture Seal Tape to the seams, Remove releasable paper from the double-sided tape. troweling adhesive over MSC AMB, also trowel directly over the exposed tape to achieve a full coverage of adhesive.
- Butt side edges to one another. Do not leave gaps or overlap edges.
- Care should be taken to not trap air pockets under MSC AMB during installation onto the adhesive.
- MSC AMB must be rolled with a 100lb three section roller during and after installation to assure full contact with the adhesive.
- Flooring must be installed across (perpendicular) to MSC AMB seams. stagger flooring so material overlaps seams in MSC AMB by at least 4" See diagram below
- For installing the Engineered Wood Flooring on the MSC AMB follow the installation guide for Kentwood Engineered Hardwood Floors

EXCLUSIONS

- Seam show through/telegraphing/shadow effect.
- Damage caused by flooding of the floor or top/down moisture exposure to the finished floor.
- Excessive vapor/moisture/pH above stated limits.
- Deformation due to dimensionally unstable flooring or substrates which could include gapping, cupping, curling, doming, or issues arising from inadequate acclimation or temperate variants outside of manufacturer's stated limits.
- Bonding issues when our required adhesives are not used or are used improperly.
- Damage or indentation to the finished floor and underlayment due to weight loads either rolling, moving or stationary or by improper maintenance procedures.
- Damage to the finished floor due to improper subfloor preparation or damage of any kind when installation guidelines were not followed.
- Labor or related expenses incurred to replace or repair product that has been installed with evident defects.
- If installing near a fireplace or stove, use a fire-back or fire-retardant mat to protect the area in front of the fireplace from direct heat.

DIAGRAM

MSC AMB Installation Direction Floor installed perpendicular



To learn more, visit: metrofloors.com

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