

January 24, 2018
This version supersedes all previous.

METROFLOR®
ENGAGE®
featuring UNICLIC®



Installation Manual

100% WATERPROOF

FLOATING LUXURY VINYL FLOOR



Get to Know Engage®

- Engage® features revolutionary Uniclic® Technology. Installation requires only a few simple hand tools, and is fast, easy, quiet and clean.
- Engage® is intended for interior use only and is suitable for above-grade, on-grade and below-grade applications. However, Engage® should not be installed in locations where the substrate beneath the building structure is exposed to the elements.
- Engage® is a floating floor and should be allowed to expand and contract freely. It must not be glued, nailed, or fastened to the substrate in any way. Install permanent cabinets, vanities, island counters and similar items first, then cut in Engage® around them, leaving a ¼-inch space for expansion and contraction. Fill expansion spaces around potentially wet areas such as refrigerators, tubs, toilet flanges and appliances with premium waterproof 100% silicone caulk. Always remove standing water, pet urine and other liquids promptly.
- Rooms larger than 40' x 40' require the use of coordinating T-molding transitions. Doorways and archways less than 4 feet wide require the use of T-molding transitions.
- Acclimate and install Engage® in climate-controlled structures consistently maintained at temperatures no lower than 65°F and no higher than 85°F before, during and after installation. Ambient relative humidity should be maintained between 35% and 85%.
- Direct sunlight may cause Engage® to fade or the joint to separate. Protect Engage® from direct sunlight using window treatments or UV tinting on windows. Engage® is not recommended for use in sunrooms.
- Engage® with Uniclic® is a waterproof floating floor, but it should not be used to seal an existing floor from moisture. Engage® with Uniclic® cannot inhibit the growth of mold or prevent structural problems associated with, or caused by flooding, excessive moisture, alkalis in the subfloor, or conditions arising from hydrostatic pressure. Regardless of location, always remove standing water, urine and other liquids promptly. *Moisture issues should be addressed and corrected at the job site prior to installation.*



PRE-INSTALLATION ESSENTIALS

Your job will be smooth, fast and easy when you follow the essentials every time you install Engage®.

EVALUATE THE JOB SITE

Exterior

Damage caused by water and high humidity should be addressed prior to installing Engage®.

- Examine the driveway and landscaping surrounding the building. Be sure that they slope and direct water away from the foundation.
- Inspect gutters, down spouts and drains for blockage. Remove clogs caused by leaves, dirt and debris, allowing runoff to flow freely away from the foundation.
- Check crawl spaces for cross-ventilation air vents equaling at least 1.5% per 100 square feet of floor space. Crawl spaces should measure a minimum of 18 inches high and should be insulated according to the latest building code requirements. The ground should be covered with a minimum 6-mil vapor barrier.

Interior

Moisture issues should be addressed and corrected at the job site prior to installation.

- Examine the installation site for leaky plumbing, including leaks from water heaters, dishwashers, washing machines, or any other water-bearing fixtures or pipes.
- Inspect substrates for level. They must be sturdy, sound, and flat within 3/16 of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction.
- Metroflor® Corp. recommends testing concrete substrates for relative humidity, moisture and pH before installing Engage® with Uniclic®. Test results should not exceed 85% relative humidity (RH). The Calcium Chloride Test for moisture should be no more than 8lbs per one-thousand square feet in 24 hours MVER, (Moisture Vapor Emission Rating) and pH tests for alkalinity levels should register between 7 and 9.
- Metroflor® Corp. recommends checking wood substrates for moisture. Obvious signs of moisture issues include warping, peaking, degradation of the integrity of the substrate, rusted fasteners, and rusted floor registers. Even if obvious signs are not present, the material should be tested using an invasive moisture meter and moisture levels should not exceed 14%.

ATTENTION: Mold and mildew grow only in the presence of moisture. Moisture issues should be addressed and corrected at the job site prior to installation. Please visit www.epa.gov/mold for information about safely preventing and removing mold, mildew and other biological pollutants.

IDENTIFY YOUR SUBSTRATE

Approved Substrates

Engage® is suitable for use over a wide variety of substrates.

Concrete

Engage® with Uniclic® is waterproof, but moisture issues should be corrected at the jobsite before installation begins to prevent serious damage to the subfloor and surrounding structure, and to discourage the growth of mold and mildew. Concrete substrates should be prepared in accordance to the most current version of ASTM F710 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring). Concrete substrates must be sturdy, sound, and flat within 3/16 of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction. Moisture and Alkalinity tests should be performed on all concrete substrates regardless of grade level or age of slab. Perform either ASTM F2170 In-Situ Relative Humidity (RH) test or ASTM F1869 Calcium Chloride Moisture Test (MVER: Moisture Vapor Emission Rating). Perform pH test per ASTM F710 to determine alkalinity of the slab. RH Test results should not exceed 85% relative humidity. The Calcium Chloride Test for moisture should measure no more than 8lbs per one-thousand square feet in 24 hours MVER, and pH tests for alkalinity levels should register between 7 and 9. Electronic meter testing is not considered a replacement for a Calcium Chloride Test or Relative Humidity Test. All moisture tests should be conducted several days prior to installation to be sure that moisture is at recommended levels. Follow current ASTM F710 guidelines. Metroflor® Corp. highly recommends that substrate moisture and pH testing is conducted by an ICRI (International Concrete Repair Institute) tier 2 certified third party.

NOTE: Gypsum toppings must be primed prior to installation using Prevail® 1000 Primer and Sealer. Call Technical Services at 888-235-6672 for details.

Radiant Heat

Radiant heating systems must be cast 1/2-inch below the surface of the concrete slab, and should be operating at least 2 weeks before installing Engage®. Set the temperature of the radiant heating system to 68°F 48 hours before, during, and 72 hours after installation. The temperature of the radiant heat floor may be increased gradually 72 hours after installation, but the surface temperature should never exceed 85°F. Contact the manufacturer of your radiant heating system for further recommendations.

Plywood, OSB, Particleboard & Chipboard

Wood substrates must be A.P.A. approved with a minimum grade of "BB" or "CC". They must be sturdy, sound, and flat within $\frac{3}{16}$ of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction. Metroflor® Corp. recommends performing moisture tests prior to installation to prevent serious damage to the subfloor and surrounding structure, and to discourage the growth of mold and mildew. Moisture readings should never exceed 14% for plywood, OSB, particleboard and chipboard substrates. If moisture readings exceed 14%, it is advisable to correct moisture issues at the jobsite before installing Engage® with Uniclic®.

Tile, Terrazzo, Asbestos Tile, Resilient Tile, Non-Cushion Sheet Vinyl, & Metal

Existing floors must be firmly attached to the structural floor. They must be sturdy, sound, and flat within $\frac{3}{16}$ of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction. Fill in grout lines on ceramic tiles, terrazzo, quarry tiles and similar floors with cementitious leveling and patching compound.

UNACCEPTABLE SUBSTRATES

Remove the floors noted below and remove old adhesive before installing Engage®. Encapsulate adhesive and cutback residue using Prevail® 1000 Primer-Sealer.

- Parquet
- Hardwood
- Cushion Back Sheet Vinyl
- Engineered Hardwood Over Concrete
- Carpeting/Carpet Pad
- Floating Floors
- Sleeper Substrates

NOTE: Various Federal, State and Local government agencies have regulations governing the removal of in-place asbestos-containing material. If you contemplate the removal of a resilient floor covering structure that contains (or is presumed to contain) asbestos, you must review and comply with all applicable regulations. Do not sand, dry sweep, dry scrape, drill, saw, bead blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphalt "cut-back" adhesive, or other adhesive. These products may contain asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of bodily harm. Unless

positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content. The RFCI's Recommended Work Practices for Removal of Resilient Floor Covering are a defined set of instructions addressed to the task of removing all resilient floor covering structures. For further information, visit the Resilient Floor Covering Institute website at www.rfci.com.

ATTENTION: Mold and mildew grow only in the presence of moisture. Moisture issues must be addressed and corrected at the job site prior to installation. Please visit www.epa.gov/mold for information about safely preventing and removing mold, mildew and other biological pollutants.

PREPARE THE JOB SITE

Careful preparation is the key to outstanding results. All Trades Must Finish Before Installing Engage®.

- **Install Permanent Exterior Doors and Windows**
- **Turn on HVAC at Least One Week Prior to Installation** Room temperature should be maintained between 65°F and 85°F at least 48 hours prior to installation.
- **Allow all other Trades to Finish**
- **Perform Recommended Moisture and pH Tests** See the "Identify Your Substrate" section of this manual for further information about suggested tests.
- **Level Uneven Surfaces** Fill large cracks and voids with cementitious leveling and patching compound. Substrates must be sturdy, sound, and flat within $\frac{3}{16}$ of an inch within a 10-foot radius. The substrate should not slope more than 1 inch per 6 feet in any direction.
- **Remove Floor Moldings** Quarter round and wall base should be carefully removed before installation begins. It will be used to conceal the $\frac{1}{4}$ -inch expansion space once the job is finished.
- **Fill Grout Lines** Skim coat grout lines on ceramic tile, terrazzo, quarry tile and similar surfaces using cementitious leveling and patching compound.
- **Remove Unapproved Substrates**
- **Remove or Encapsulate Old Adhesive** Old carpet and vinyl adhesives should be scraped up, skim coated or encapsulated using Prevail® 1000 Primer-Sealer.

- **Undercut Wood Door Casings** Wood door casings should be undercut so that Engage® will fit neatly beneath them, concealing the ¼-inch expansion space. Position a plank on the substrate against the door casing. Lay the handsaw flat against the scrap plank and carefully cut the door casing to the height of the plank (See Image A). If installing over Prevail® Floating Floor Underlayment, place a piece of the underlayment beneath a 6-inch piece of plank before undercutting the door casing to the proper height (See Image B).
- **Cut Around Metal Door Casings** Do not cut metal door casings. Cut Engage® around them, leaving a ¼-inch expansion space. After installation, fill the space with a coordinating premium waterproof 100% silicone caulk.
- **Clean Up the Job Site** Remove all debris, sweep and vacuum the floor. Smooth, non-porous floors should be damp-mopped after vacuuming and allowed to dry thoroughly before installing Engage®. All dust must be removed prior to installation.

CHECK RUN NUMBERS AND MANUFACTURE DATE

Locate the run number on the short end of each carton and verify that all of the material for your job is from the same run. Minor shade variations within the same run number contribute to the natural look of Engage®. To avoid noticeable shade variations, do not install material from different runs across large expanses.

To determine manufacture date, locate the run number on the short end of the carton. It is the eight-digit number separated by decimal points beginning with the two-digit day, then the two-digit month, and finally the four-digit year.

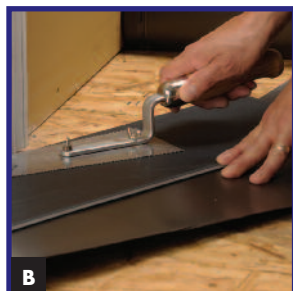
Run Number/Manufacture Date
29.10.2013
DAY.MONTH.YEAR

ACCLIMATE THE PRODUCT

Correct acclimation prevents Engage® from expanding and contracting excessively after installation.

- Move Engage® to the job site and allow to acclimate at least 48 hours prior to installation.
- Spread **unopened** cartons no more than 3 cartons high and at least 4 inches apart. Cartons should be stacked away from heating and cooling ducts and direct sunlight.
- Maintain a constant room temperature between 65°F and 85°F before, during and after installation.
- Maintain ambient relative humidity between 35% and 85% at all times.

ATTENTION: *Only installation techniques described in this installation guide are warranted. Metroflor® Corp. does not warrant Engage® installations involving custom cutting, such as 45-degree mitered corners and serpentine edges. Please refer to the Engage® with Uniclic® warranty for complete warranty details and exclusions.*



INSTALLATION

Always start with a clean job site. All trades must finish before installing Engage®. Carefully inspect each plank for defects prior to installation, and do not install damaged planks. Be sure to check run numbers/manufacture dates prior to installing, as noted in the Pre-Installation Essentials section of this manual.

Run Number/Manufacture Date
29.10.2013
DAY.MONTH.YEAR

STEP 1: Identify the Starting Wall

Select your starting wall. For instance, choose the longest wall in the room, or a wall running towards a window or natural source of light. Facing the starting wall, installation will move from left to right beginning in the left corner. The groove side of the first row of planks should face the open field (See Image 1).



TIP: If using Prevail® Floating Floor Underlayment, unroll from left to right, and position prior to installing the first row of planks. Install each length of underlayment row-by-row as the installation of the planks progresses.

STEP 2: Begin the First Row

Position the first plank at least one foot away from the starting wall. This will allow you enough space to actually work on top of the floor as you install the first few rows (See Image 2).

TIP: When starting a new row with a full plank, always remove the tongue edge from the short side only.

STEP 3: Position the First Plank

Create an even ¼-inch expansion space between the perimeter planks and the wall using spacers (See Image 3). Position the first plank one foot from the left hand corner of the starting wall against the spacers.

TIP: Position the spacers along the starting wall as you go, and at the beginning and end of each row. Leave the spacers in place until installation is complete, and **never install the material tight to the wall.**

STEP 4: Install the First Row

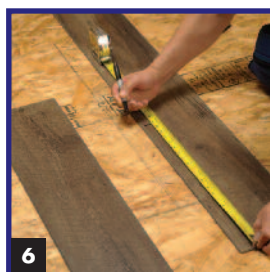
Secure the planks in the first row by angling and interlocking the short ends. Insert the tongue into the groove, making sure the edges are perfectly aligned. Hold the plank in position and guide the edge into place for a tight, gap-free fit. The long groove edge must be perfectly aligned from plank to plank (See Image 4).

TIP: If a joint is not tight and free from gaps, it may be carefully tapped into place using the Prevail® Tapping Block.

STEP 5: Measure the Last Plank of the First Row

Place a ¼-inch spacer against the wall at the end of the first row. Measure the distance from the spacer to the decorative edge of the last full plank on the first row. Make note of this measurement (See Image 5). Transfer the measurement onto a new plank starting from the short tongue edge side and mark using a marker or pencil (See Image 6). Use a straight edge and utility knife to score across the plank (See Image 7). Snap the plank, using your knee as leverage (See Image 8).

TIP: Mark and score the plank away from the newly installed floor to prevent accidental damage.



STEP 6: Install the Last Plank of the First Row

After measuring and cutting the last plank, position and install it, following the same procedure used for the previously installed planks on the first row (See Image 9). Be sure that the long edges of the first row are perfectly aligned before proceeding.

TIP: If the last plank measures 6 inches or less in length, it must be reinforced using Prevail® 30-GS Adhesive. Apply a scant bead of adhesive in the groove of the previously installed plank. Immediately position and install as noted above. Remove excess adhesive and residue using Prevail® Remove-All. Apply to a soft, lint-free cloth and wipe the affected surface until clean.

STEP 7: Begin the Second Row

Maintain a minimum 6-inch end-joint stagger from row-to-row throughout the entire installation (See Image C). Do not stair-step the end joints (See Image D). If the leftover piece from the end of the first row measures 6 inches or more, it may be used as-is to begin the second row. Otherwise, select a new plank. Position it with the groove edge facing you, then measure 1/3 the length of the plank from the right-hand short edge. Mark, score, and snap. Attach the partial plank to a new, full-length plank along the short edge, making sure the long tongue edge aligns perfectly (See Image 10).



Position a spacer against the wall to maintain a 1/4-inch expansion space. Place the cut edge against the spacer and insert the tongue edge of the two attached pieces at the same time into the groove edge of the first row (See Image 11). Make sure the long edges are perfectly aligned and all joints are tight and gap-free. Gently tap along the groove using the Prevail® Tapping Block until the rows are completely locked and tight (See Image 12).

TIP: To reduce waste, partial planks measuring over 6 inches may be used to begin and finish each row. The stagger pattern should never be less than 6 inches.

STEP 8: Install the Second Row

Before installing the third plank in the second row, place a full carton of Engage® perpendicular to the top of the first plank on the second and consecutive rows to prevent them from separating as you work (See Image 13). Select a full plank and insert the short tongue side at an angle into the short groove of the second plank in the second row (See Image 14). Maintain pressure on the short side of both planks and place the rest of the plank on the substrate. Make sure the short joint stays tight and gap-free. Put your right hand on the long groove edge of the third plank and your left hand on the tongue side. Lift the plank slightly with your right hand, and in a quick, sudden motion, insert the long tongue into the groove of the previous row (See Image 15). Move to the opposite end of the plank, continuing the process until the planks are fully engaged (See Image 16). The planks should fit together tightly along the short and long sides and all edges should be even, with no separation or gapping. Immediately use the Prevail® Tapping Block and tap each joint into place to lock tightly as you go. Follow the same procedure along the entire row.

TIP: If a plank is positioned incorrectly and the joints are not tight, it should be carefully separated and repositioned prior to tapping. Always check for gaps before installing the next row.



STEP 9: Install the Remaining Rows

Slide the entire 3-row assembly into place against the starting wall, using spacers to maintain a ¼-inch expansion space (See Image 17). Follow the steps noted for the second row and repeat for the entire installation. Carefully observe the recommended spacing and stagger pattern throughout the job. Consistently tap the joints tight using the Prevail® Tapping Block. Tap each joint into place to lock tightly as you go.

TIP: Avoid “stair stepping” or lining up joints from one row to the next.

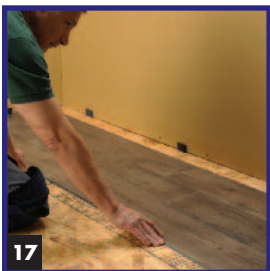
NOTE: If using Prevail® Floating Floor Underlayment, continue to unroll one length at a time as you go.

STEP 10: Install the Last Row

The final row of planks will be cut to fit along the wall. Assemble each plank intended for the final row directly on top of, and aligned with, the previously installed row (See Image 18). The tongue and groove of the final row **must** face the same direction as the planks in the previously installed row. Observe the correct recommended staggering method and maintain ¼-inch spacing on the short ends. You will not need spacers along the long wall for the final row. Create a measuring plank by cutting an 8-inch length of plank with the tongue and groove intact. Position the measuring plank against the wall and on top of the final row (See Image 19). Keep moving the measuring plank down the wall and mark as you go. Score (See Image 20) and snap (See Image 21) the last row along the marked line. Put the assembled final row of planks into place, and use a pull bar to lock the joint tightly together (See Image 22).

TIP: Cover the expansion space with wall base, making sure not to trap or pin down the floor in any way.

When installation is complete, remove the spacers. You may fill the ¼-inch expansion space around high-moisture areas like tubs, showers and appliances using premium waterproof 100% silicone caulk.



GENERAL CARE & MAINTENANCE

ROUTINE CARE & MAINTENANCE

- Sweep, dust mop or vacuum daily. Do not use vacuums with any type of beater bar assembly.
- Lightly damp mop with Prevail® Neutral Cleaner. Remove excess soil by carefully scrubbing with a soft nylon brush or magic eraser sponge and Prevail® Neutral Cleaner.
- Remove scuffs using Prevail® Black Scuff and Adhesive Remover and a soft nylon brush or magic eraser sponge.
- Heavily soiled floors may require an occasional deep cleaning using Prevail® Neutral Cleaner and a low-speed buffer not exceeding 300 RPM. Fit the buffer with a red or white scrubbing pad and work the solution over the floor. Remove the dirty residue by damp mopping with clear water.
- Remove standing water, pet urine and other liquids promptly. Follow with Prevail® 1-Step Neutral Cleaner or Prevail® Ready to Use Neutral Cleaner.

PREVENTIVE CARE

- Use walk-off mats at all outside entrances.
- Use flat glides at least 2" in diameter under furniture legs to prevent indentations and scratches.
- Use broad surface non-staining casters at least 2" in diameter on rolling furniture.
- Do not use vinegar, polishes, waxes, oil soaps, abrasive cleaners, harsh detergents, "mop and shine" products or solvents.
- Do not use rubber-backed mats.
- Do not expose to direct sunlight for prolonged periods.
- Do not use steam cleaners.
- Do not flood floor or subject to standing liquids including pet urine.

WARRANTY REGISTRATION

To register and activate your product warranty, please visit www.metroflorusa.com and click on the Warranty/Maintenance tab. The registration information you provide will be used only to register your purchase and for no other purpose.



For further information, please call Metroflor Customer Service at **(888) 235-6672**, or visit our website at metroflorusa.com.