

Revised 08/31/2018

Note: This document supersedes all printed and electronic Installation and Technical Guides previously distributed for Engage Inception™.

METROFLOR®

ENGAGE INCEPTION™

Solid Core Flooring Technology ■ ■ ■



Installation Manual

DROPLock
100

100% WATERPROOF
FLOATING LUXURY VINYL FLOOR



Get To Know Engage Inception™

- Engage Inception is intended for interior use only and is suitable for above-grade, on-grade and below-grade applications. However, Engage Inception should not be installed in locations where the substrate beneath the building structure is exposed to the elements.
- Engage Inception is a floating floor and should be allowed to expand and contract freely. It must not be nailed, or fastened through the flooring and into the subfloor. Fill expansion spaces around potentially wet areas with premium waterproof 100% silicone caulk. Always remove standing water, pet urine and other liquids promptly.
- Direct sunlight may cause Engage Inception to fade or the joints to separate. Protect Engage Inception from direct sunlight using window treatments or UV tinting on windows. Engage Inception is not recommended for use in sunrooms.
- Engage Inception is a waterproof floating floor, but it should not be used to seal an existing floor from moisture. Engage Inception 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 Inception.

EVALUATE THE JOB SITE

Exterior

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

- 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.

Three-Season Rooms (Residential Applications Only)

Engage Inception is permitted in residential "three-season rooms" when installed in strict compliance with the instructions listed below.

- Maximum room size of 500 Sq. Ft. (46.5 Sq. M.)
- Room must be completely enclosed (roof, floor, walls and windows) and not exposed to any outside elements.
- Installation must occur at room temperature between 50°F and 100°F (10°C and 38°C).
- Allow 3/8" (10mm) expansion space around perimeter and all fixed objects

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" in a 10 foot radius without any abrupt height differences. The substrate should not slope more than 1 inch per 6 feet in any direction.
- All concrete substrates must be tested for relative humidity, moisture and pH before installing Engage Inception. 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.

- All wood floors must be checked 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 a wood moisture meter; 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 Inception is suitable for use over a wide variety of substrates.

Concrete

Engage Inception 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" in a 10 foot radius without any abrupt height differences. 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 prior to installation to ensure that moisture is at recommended levels. Follow current ASTM F710 guidelines. Metroflor Corp. highly recommends that substrate moisture and pH testing be conducted by an ICRI (International Concrete Repair Institute) tier 2 certified technician.

Radiant Heat

Radiant heating systems must be cast ½-inch below the surface of the concrete slab, and should be operating at least 2 weeks before installing Engage Inception. 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 of the subfloor 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 ⅜" in a 10 foot radius without any abrupt height differences. 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 Inception.

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

Existing floors must be firmly attached to the structural floor. They must be sturdy, sound, and flat within ⅛ of an inch within ⅜" in a 10 foot radius without any abrupt height differences. The substrate should not slope more than 1 inch per 6 feet in any direction. When installing Engage Inception in commercial settings, fill in grout lines on ceramic tiles, terrazzo, quarry tiles and similar floors with cementitious leveling and patching compound.

Glue Down Semi Wet-Set Installation Method (Residential Only)

- Prevail® 3500 Hard-Set Adhesive must be used in a semi wet-set application. Other adhesives such as a Pressure Sensitive Adhesive in a Dry-to-Touch Application are not recommended. It may be difficult to reposition the material if the lock is not fully engaged when set into the adhesive.
- Absorbent (porous) substrates: flooring can be immediately set into the adhesive.
- Non-absorbent (non-porous) substrates: After applying the adhesive allow the 'valleys' to begin turning clear. Install Engage Inception before the adhesive becomes dry to touch.
- In addition to the flatness tolerance as listed on page 6 there is ZERO tolerance for abrupt height variations. All abrupt height variations must be addressed by sanding or grinding and leveling the floor perfectly flat.

- Engage Inception cannot be both glued down and floated within the same room or connected areas. A T-molding is required to separate adjoining rooms or areas using different installation methods.

Installation:

Prevail 3500 Hard Set Adhesive:

⅜" x ⅜" x ⅜" V-notch trowel = 165-200 sq.ft./gallon

Determine starting wall and create work zones that are no wider than the installers comfortable arm reach and in multiples of the plank or tile width. Measure and snap chalk lines parallel to the starting wall and spread adhesive within the work zone. Install Engage Inception using Prevail 3500 per the instructions above. Roll with a 100lb. roller when complete. Continue installation by repeating the process until the room is complete.

NON-APPROVED SUBSTRATES

Remove the floors noted below and remove old adhesive before installing Engage Inception. Encapsulate adhesive and cutback residue.

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

NOTE: Various Federal, State and Local government agencies have established 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, contact the Resilient Floor Covering Institute website at www.rfci.com

PREPARE THE JOB SITE

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

- **Install Permanent Exterior Doors and Windows**
- **Turn on HVAC at Least One Week Prior to Installation** Room temperature should be maintained between 50°F – 100°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 (pages 3-4) 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 3/16" in a 10 foot radius without any abrupt height differences. 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 expansion space once the job is finished.
- **Fill Grout Lines** Refer to chart on page 6.
- **Remove Non-approved Substrates**
- **Remove or Encapsulate Old Adhesive** Old adhesives must be scraped up and left so that no ridges or puddles are evident and all that remains is a thin, smooth film. Then, encapsulate residue.
- **Undercut Wood Door Casings** Wood door casings should be undercut so that Engage Inception will fit neatly beneath them, concealing the expansion space. Position the 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).
- **Cut Around Metal Door Casings** Do not cut metal door casings. Cut Engage Inception around them, leaving the appropriate expansion space. After installation, fill the space with a coordinating premium waterproof 100% silicone sealant.
- **Clean Up the Job Site** Remove all debris, sweep and vacuum the subfloor. Smooth, non-porous floors should be damp-mopped after vacuuming and allowed to dry thoroughly before installing Engage Inception. All dust must be removed prior to installation.

Installing Cabinets On Top Of Engage Inception (Residential Only)

In residential applications only, Engage Inception may be installed and cabinets set on top so long as the application complies with the instructions listed below.

- In addition to the flatness tolerance as listed on page 6 there is ZERO tolerance for abrupt height variations. All abrupt height variations must be addressed by sanding or grinding and leveling the floor perfectly flat.
- Cabinets or similar fixtures cannot be secured or fixed (via screws, nails, etc.) to the substrate through the Engage Inception flooring.
- Adequate expansion space (1/4") must be left around pipes and other objects “within” cabinets or similar fixtures.

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 Inception. 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



KEY INSTALLATION CONSIDERATIONS

RESIDENTIAL

COMMERCIAL

Subfloor Flatness Tolerances	3/16" in a 10 foot radius without any abrupt height differences. Slope no more than 1" in 6'	3/16" in a 10 foot radius without any abrupt height differences. Slope no more than 1" in 6'
Vapor Barrier (6 mil polyfilm)	Not Required	Not Required
Is Underlayment (Pad) Required	No – Engage Inception includes an integral pre-attached pad	No – Engage Inception includes an integral pre-attached pad
Acclimation Requirements	Not Required*	48 hours
Transition Requirements (T-Mold) for Large Spaces	Not Required	Required in rooms greater than 100' in any direction
Transition Requirements (T-Mold) Doorways/Thresholds	Not Required	Required
Installation Over Existing Ceramic Tile Floor	Filling Grout Lines Not Required (Follow Subfloor Flatness Tolerances) Required for Glue Down applications	Filling Grout Lines Required
Glue Down Installation	Not Required / see page Page 4, Section Glue Down Option	Not Required/Not Recommended
Subfloor RH/MVER Recommendations	85% RH/8 lbs MVER	85% RH/8 lbs MVER
Radiant Heat	Approved – Substrate surface temperature not to exceed 85° F	Approved – Substrate surface temperature not to exceed 85° F
3-Season/Non-Climate Controlled Environments	Not to Exceed 500 sq. ft.	Not Recommended
Perimeter Expansion Requirements	1/4" around perimeter walls & heavy fixed objects such as cabinetry	3/8" around perimeter walls & heavy fixed objects such as cabinetry**
Optimal Interior Environmental Conditions	50°F – 100°F / 40% – 60% RH 65°F – 85°F during Glue Down installation	50°F – 100°F / 40% – 60% RH
Definition of "Waterproof"	Structural integrity of flooring will not degrade due to contact with moisture/water***	Structural integrity of flooring will not degrade due to contact with moisture/water***

*Engage Inception flooring is more dimensionally stable than typical floating wood or vinyl based flooring products. Acclimation of Engage Inception flooring for residential applications is generally not required. However, Engage Inception flooring subjected to extreme hot or cold conditions can cause the material to become too flexible or rigid, making the material difficult to install and potentially causing damage to the locking system. Optimum material temperature range for installation is 50°F – 100°F.

**If installing Engage Inception in an environment that has a length greater than 100', a T-Molding should be utilized to separate the floor into separate sections no larger than 100 lineal feet in any direction.

***While Engage Inception is Waterproof, it is not intended for use as a moisture mitigation system.

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

Installation for Engage Inception with **DROPLOCK 100™** Locking Profile

Groove Tongue

Installation will move from left to right beginning in the left corner with tongue side of long edge facing the wall.



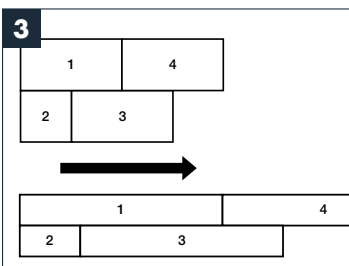
SET SPACERS

Create the required expansion space between the perimeter planks and the wall using spacers. Place spacers equaling the thickness for required expansion between plank and wall on short and long ends of plank. Do not remove them until the installation is complete. For glue down application refer to Prevail 3500 adhesive instructions.



INSTALL FIRST PLANK

Position the first plank against a spacer a few inches from the starting wall.



ESTABLISH PROPER STAGGERING

Maintain a minimum 6-inch end-joint stagger from row-to-row throughout the entire installation. Tile products should be staggered in a bricklaid pattern with stagger equal to 1/2 of a tile. Installation alternates back and forth between rows one and two, for the first two rows only.



FIRST PLANK SECOND ROW

Cut the first plank in the second row to one-third its length before installing it. Insert the long tongue edge of the plank into the long groove edge of the first plank. Make sure there are no gaps. Tap along the long groove edge using the Prevail Tapping Block.



SECOND PLANK SECOND ROW

Insert the long side, then slide the plank until the short tongue touches the short groove edge on the first plank of the second row. Tap long joint tight using the prevail tapping block, before tapping the short joint down using the soft faced hammer (photo 6).



SECOND PLANK FIRST ROW

Select a full plank and position the long groove edge into the tongue of the second plank in the second row. Tap long joint tight using the prevail tapping block, before tapping the short joint down using the soft faced hammer. Repeat the same installation pattern until you reach the opposite wall and cannot install another full plank.



INSTALL THE LAST PIECES OF ROWS 1 AND 2

Cut to fit, maintaining the expansion gap. Install as before. Move the entire assembly against the spacers on the starting wall.



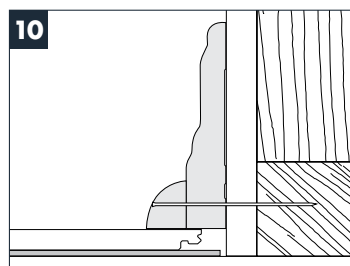
INSTALL REMAINING ROWS

Install the remaining material, one row after the other. Always tap the long joint tight using the prevail tapping block, before tapping the short joint down using the soft faced hammer. Maintain the required stagger throughout the install.



INSTALL THE LAST ROW

Cut the final row of planks to fit along the wall. Use a pull bar to lock the long edges together. Do not use the pull bar on the short edges.



FINISH THE JOB

Remove spacers. Cover expansion space with quarter round or other trim, being sure not to trap or pin down the floor.

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 Neutral Cleaner 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 175 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 non-staining 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 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 metroflorusa.com. 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.