

ELEMENTAL

LVT MULTILAYER FLOORING

BY ASPECTA

MULTILAYER LVT 0.55
FEATURING ISOCORE TECHNOLOGY™

INSTALLATION GUIDE



SQUARED
TILES

THIS DOCUMENT SUPERSEDES ALL PRINTED AND ELECTRONIC INSTALLATION AND TECHNICAL GUIDES
PREVIOUSLY DISTRIBUTED FOR ELEMENTAL MULTILAYER.

GET TO KNOW ELEMENTAL MULTILAYER FEATURING ISOCORE TECHNOLOGY™

- General information: When installing Elemental multilayer flooring, always use best practices and follow the applicable standards for the installation of floorcoverings, such as BS 8203 in the UK and VOB, Part C, DIN 18365 in Germany and all other relevant European, national and local standards.
- Elemental multilayer is intended for interior commercial use only and is suitable for above-grade (suspended) on-grade (in contact with ground) and below grade (basement) applications. However, Elemental multilayer should not be installed in locations where the substrate beneath the building structure is exposed to the elements.
- Elemental multilayer is to be installed as a floating floor system and must be free to move as a monolithic unit in response to changes in temperature. It must not be glued, nailed, or fastened to the substrate, walls or fixed to any part of the building structure. Permanent fixtures such as walls, partitions, shelving, cabinets, displays, counters, tracks for transition profiles and similar items should be installed first, then fit Elemental multilayer around them, leaving a space for expansion and contraction. Fill expansion spaces around potentially wet areas with premium waterproof 100% silicone sealant. Always remove standing water, pet urine and other liquids promptly.
- Direct sunlight may cause Elemental multilayer to fade or to expand causing the floor to warp or to separate. Protect Elemental multilayer from direct sunlight using window treatments or UV protection film on windows.
- Elemental multilayer is a waterproof floating floor, but it should not be used to seal an existing floor from moisture. Elemental multilayer cannot inhibit the growth of mould 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. Jobsite moisture issues must be addressed and corrected prior to installation.

PRE-INSTALLATION ESSENTIALS

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

EVALUATE THE JOB SITE

EXTERIOR

Damage caused by water and high humidity should be addressed prior to installing Elemental multilayer.

- Examine the driveway, parking area's 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. Crawl spaces should be insulated according to the latest building code requirements.

INTERIOR

Jobsite moisture issues must be addressed and corrected prior to installation.

- Examine the installation site for leaky plumbing, including leaks from sprinkler heads, toilets, water heaters, water fountains, radiators or any other water-bearing fixtures or pipes.
- Inspect substrates for levelness. They must be sturdy, sound, and flat within 3mm in a 1,8 meter radius, or 5mm within a 3 meter radius. The substrate should not slope more than 25mm per 1,8 meters in any direction.
- ASPECTA™ requires testing of concrete substrates for moisture and pH before installing Elemental multilayer. Test results should not exceed 85% relative humidity (RH). PH tests for alkalinity levels should register between 7 and 9.
- ASPECTA™ requires testing of 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 a professional moisture meter and moisture levels should not exceed 14%.

ATTENTION: Mould and mildew grow only in the presence of moisture. Jobsite moisture issues must be addressed and corrected prior to installation.

IDENTIFY YOUR SUBSTRATE

APPROVED SUBSTRATES

Elemental multilayer is suitable for use over a wide variety of substrates.

CONCRETE

All subfloors should be tested and prepared according to the applicable standards for the installation of floorcoverings, such as BS 8203 in the UK and VOB, Part C, DIN 18365 in Germany and all other relevant European, national and local standards.

Elemental multilayer is waterproof, but jobsite moisture issues must be corrected before installation begins to prevent serious damage to the subfloor and surrounding structure, and to discourage the growth of mould and mildew. Concrete substrates must be sturdy, sound, and flat within 3mm within a 1,8 meter, or 5mm within a 3 meter radius. The substrate should not slope more than 25mm per 1,8 meters in any direction. Moisture and alkalinity tests should be performed on all concrete substrates regardless of grade level or age of slab. Test results should not exceed 85% relative humidity. PH tests for alkalinity levels should register between 7 and 9. All moisture tests should be conducted several days prior to installation to be sure that the substrate is in compliance.

UNDERFLOOR HEATING

Installations where underfloor heating is used, follow current DIN 18365 and EN 1264 Standards. The maximum working temperature on the surface of the substrate is 30°C. Installation over electrical systems is not allowed.

TIMBER, PARTICLEBOARD & CHIPBOARD

Wooden substrates must be sturdy, sound, and flat within 3mm within a 1,8 meter radius, or 5mm within a 3 meter radius. The substrate should not slope more than 25mm in 1,8 meters in any direction. ASPECTA™ recommends performing moisture tests prior to installation to prevent serious damage to the subfloor and surrounding structure, and to discourage the growth of mould and mildew. Moisture readings should never exceed 14% for plywood, particleboard and chipboard substrates. If moisture readings exceed 14%, it is advisable to correct moisture issues at the jobsite before installing Elemental multilayer.

TILE, TERRAZZO, ASBESTOS TILE, RESILIENT TILE, NON-CUSHION SHEET VINYL, & METAL

Existing floors must be firmly attached to the structural floor. In order to prevent vertical deflection (movement) and potential damage to the integrity of the Elemental multilayer flooring, all substrates must be sturdy, sound, and flat within 3mm within a 1,8 meter radius, or 5mm within a 3 meter radius. The substrate should not slope more than 25mm per 1,8 meters in any direction. Fill in grout lines on ceramic tiles, terrazzo, quarry tiles and similar floors with cementitious levelling and patching compound.

ATTENTION: Read the specific guidelines for installation of Elemental multilayer flooring over existing ceramic tile flooring, in the “Key Installation Considerations” on page 7 of this manual!

UNACCEPTABLE SUBSTRATES

Remove the floors noted below and remove old adhesive before installing Elemental multilayer. Encapsulate adhesive and cutback residue by covering with a suitable smoothing compound to create a barrier.

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

PREPARE THE JOB SITE

Careful preparation is the key to outstanding results. All Trades Must Finish Before Installing Elemental multilayer.

- Building constructions should be fully enclosed with windows and exterior doors permanently installed.
- Turn on Central Heating Ventilation and/or Air-Conditioning at least one Week Prior to Installation- Room temperature should be maintained between 18°C and 29°C at least 48 hours prior to installation and continuously between 12°C - 35°C for the life of the floor.
- Elemental multilayer flooring is more dimensionally stable than typical floating wood or vinyl based flooring products, however 48 hour acclimation is required. Elemental multilayer 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 and building temperature range for installation is 18°C - 29°C.
- Allow all other construction work 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 Substrates- All subfloors must meet all minimum standard building codes. Fill large cracks and voids with cementitious levelling and patching compound. In order to prevent vertical deflection (movement) and potential damage to the integrity of the Elemental multilayer flooring, all substrates must be sturdy, sound, and flat within 3mm within a 1,8 meter radius, or 5mm within a 3 meter radius. The substrate should not slope more than 25mm per 1,8 meters in any direction.
- Remove Skirting Mouldings- Remove wall skirtings prior to installation. Leave appropriate expansion space between the edge of the flooring and walls or vertical surfaces.
- Fill Grout Lines - When installing over existing ceramic tile or stone floors fill the grout joints to obtain a smooth surface. Follow floor flatness requirements. Refer to chart "Key Installation Considerations" on page 6.
- Remove Unapproved Substrates
- Remove or Encapsulate old Adhesive- old adhesives must be scraped up and left so that no ridges or puddles are evident and what remains is a thin, smooth film. Then encapsulate residue to prevent the new flooring from attaching itself to the substrate.
- Undercut Wood Door Casings- Wood door casings should be undercut so that Elemental multilayer will fit neatly beneath them, concealing the expansion space.
- Cut Around Metal Door Casings- Do not cut metal door casings. Cut Elemental multilayer 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 Elemental multilayer. All dust must be removed prior to installation.

CHECK BATCH NUMBERS AND MANUFACTURE DATE

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

To determine manufacture date, locate the batch 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.

BATCH NUMBERS / MANUFACTURE DATE

29.10.2013

DAY.MONTH.YEAR

KEY INSTALLATION CONSIDERATIONS

Subfloor Flatness Tolerances	5 mm in 3 meters or 3 mm in 1,8 meters Slope no more than 25mm in 1,8 meters
Damp Proof Membrane - 0,20mm	Not Required
Is underlayment (underlay) required	No - Elemental multilayer includes an integral pre-attached underlayment
Acclimation Requirements	48 hours* (Optimum material and building temperature before installation is 18°C - 29°C.)
Maximum Installation area without expansion joints in the middle of the floor	Can be installed in areas/rooms up to a maximum of 1000 m2 (33m x 33m) without the need of expansion joints in the middle of the floor! T-Mold Transition requirements for larger areas/rooms: Are required in rooms greater than 33 meters in either direction! NOTE: always respect that expansion joints of 10mm are required around perimeter walls, pipes and heavy fixed objects.**
Transition Requirements (T-Mould) Doorways/Thresholds	Required
Glue Down Installation	Not Required/Not Recommended
Internal Subfloor Relative Humidity (RH) Recommendations	Maximum 85% RH when tested with a hygrometer, in accordance with BS 8203: 2001. Appendix A
Underfloor/Subfloor Heating	Approved: Substrate surface temperature must not exceed 30°C! Installation over electrical systems is not allowed
Installation over existing ceramic-, stone-, terazzo-and resilient tiles	Can be installed on top of existing ceramic or stone tile floors, respecting a maximum grout-line-width of 4 mm and a maximum grout-line-depth of 2 mm! The maximum accepted height difference between adjacent tiles is 1 mm. NOTE: In all other situations then explained; Fill in grout lines with cementitious levelling and patching compound and follow instructions as described in "Identify your Substrate" in this manual!
4-Season/Non-Climate Controlled Environments	Installation on floors is not recommended in living rooms or other areas, including closed areas without windows, that cannot be ventilated (in which no ventilation or air conditioning can take place) all year round.
Expansion Requirements	10 mm around perimeter walls, pipes and heavy fixed objects such as kitchens and cabinetry.
Optimal Interior Environmental Conditions	During installation: between 18°C and 29°C During life of flooring: between 12°C - 35°C and 40% - 60% RH (Relative humidity)
Definition of "Waterproof"	Structural integrity of flooring will not degrade due to contact with moisture/water***
Installation in Glass houses and Winter garden	Can be installed in Glasshouses / Winter gardens taking into consideration the following important criteria; (1) Room/building temperature before or during installation must be between 18°C and 29°C. (2) Normal room temperature after installation (when floor is in use) must be between >12°C and 35°C. (3) Maximum floor surface temperature allowed (caused by direct sunlight) is 60°C. (4) Room air ventilation is required in both winter and summer season! NOTE: Direct Sunlight may cause fading of your floor! Always protect your floor from direct sunlight using window treatments or UV protection foil on windows!

*Elemental multilayer flooring is more dimensionally stable than typical floating wood or vinyl based flooring products, however acclimation is required. Elemental multilayer 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 and building temperature range for installation is 18°C - 29°C.

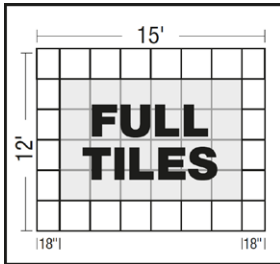
**If installing Elemental multilayer in an environment that has a length or width greater than 33 meters, a T-Moulding should be utilized to separate the floor into two (2) separate sections.

***While Elemental multilayer is waterproof, it is not intended for use as a moisture mitigation system.

ATTENTION: Only installation techniques described in this installation guide are warranted. ASPECTA™ BV does not warrant Elemental multilayer installations involving custom cutting, such as 45-degree mitered corners and serpentine edges. Please refer to the Elemental multilayer warranty for complete warranty details and exclusions.

Elemental multilayer with ISOCORE Technology™ is patent pending in the US application number 14/846,407 and in Europe application number EP15193421.3.

INSTALLATION FOR ELEMENTAL Multilayer DL400 Tiles WITH **DROPLOCK400** PROFILE

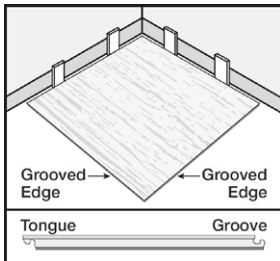


ROOM LAYOUT

First, lay a row of loose tiles (i.e. without securing them to each other) in order to determine if you need to adjust the width of the first tile to avoid having to place a piece of tile less than 8" (203.2mm) wide on the opposite wall from where you started. Alternatively, measure the length of the room and divide by the length of 1 tile, 23.82" (608.6mm). If the remainder is less than 8" (203,2 mm), calculate ½ the remainder and trim this amount off the first tile.

Then, lay a row of loose tiles in the opposite direction. Follow the same instructions as above in order to determine whether you also need to adjust the length of your first tile in addition to its width.

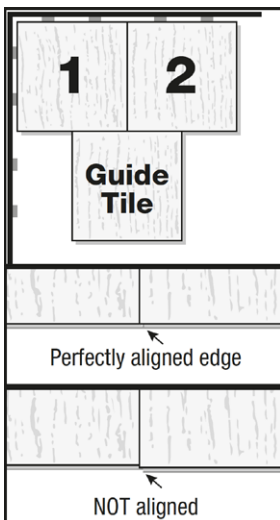
Note: To cut a tile, simply measure and mark the tile. Then, use a straight edge and utility knife to score and snap. You will also need to back-cut the under pad on the bottom of the plank. If you have difficulty using this method, you can use a jig saw, circular saw or miter saw.

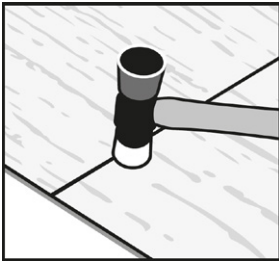


INSTALLATION USING THE 4 CORNER METHOD

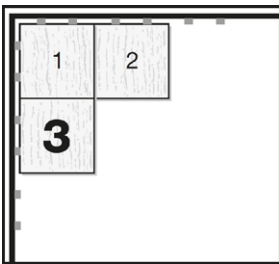
1. Find your starting wall and set 10mm (0.39") spacers. Start in the left hand corner and work from left to right with the "groove" edge facing to the right and away from the starting wall. Image shown is a full tile installation. Your installation may require cutting tiles in your first row (see instructions above).

2. Install a second tile to the right of the first tile. Lay the tongue of tile #2 on top of the groove of tile #1. Use another tile or a straight edge as your guide to line up tiles 1 and 2 perfectly adjacent to each other. This is essential for proper installation.

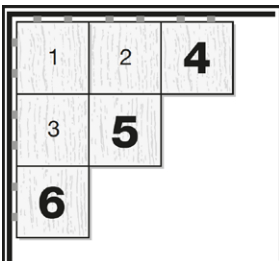




3. Using a soft-faced hammer, tap down on tile #2 to lock into place. Tap from one end to the other. Run your hand over the top of the tile to make sure tiles are flush with each other. Tap down any high spots.



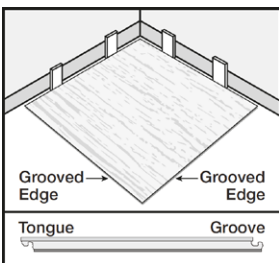
4. Install tile #3 in the second row. Using the same method described in Step 2. Make sure the tile is aligned perfectly before tapping and locking it in place and sliding it up to the short end of the first tile. Check that the long joints of the tiles are properly engaged and then press the short joint into place with your fingers.



5. Install tile #4 in the first row, then tile #5 in second row, then tile #6 in third row. This method of installation is called the “four corner method”. This ensures the 4 corners align perfectly.

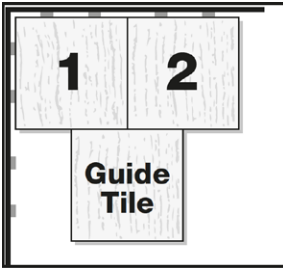
6. Install the remainder of rows. Continue to follow the four corner method for the remainder of the installation.

Note: If you need to remove a tile for whatever reason during installation. Slowly and gently tap down on the tile with the groove while lifting the tile with the tongue at the same time, being careful not to damage the tongue or groove.



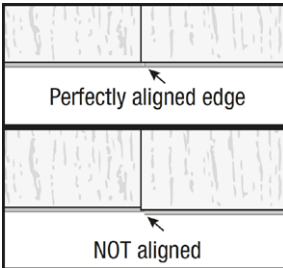
INSTALLATION USING THE BRICK METHOD

1. Installation should start in a corner (left hand) and proceed from the wall with the tongue facing the wall. Allow a minimum gap of 10mm (0.39”) for subfloor movement or product expansion. This gap should later be covered by molding. Set 10mm (0.39”) spacers to create the required expansion space.



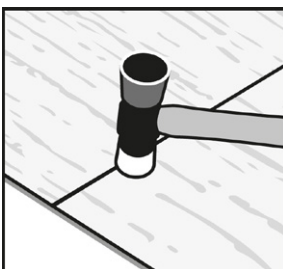
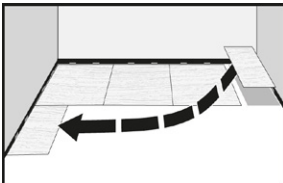
2. Lay the first row in a straight line along the wall and interlock the joints by inserting each tongue into the groove of the adjoining tile. Install each sequential tile on the joint and be sure to line up the tiles evenly. Use a soft faced hammer to tap down on the joints of the tiles to ensure a tight fit. This is a crucial step for good installation.

Note: Stagger the rows so that the joints are not aligned in a straight, uniform manner.

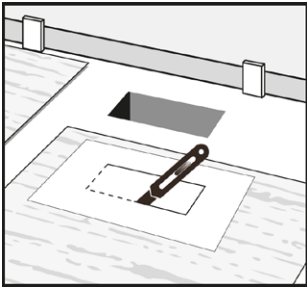


3. Start the second row with the tile cut half the length, or for desired pattern; measure and mark the tile. Then, use a straight edge and utility knife or shears to score and snap the tile.

When cutting a tile to start a row, you will need to cut off the end with the tongue. The remaining piece can then be used on the opposite side of the room, at the end of that row (if layout permits).



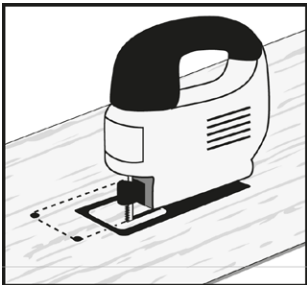
4. Attach the first tile of Row 2 by connecting the tongue to the groove side of your first full tile in that row. FITTING AROUND IRREGULARLY SHAPED



FITTING AROUND IRREGULARLY SHAPED OBJECTS

Make a template to fit around pipes or other irregular shaped objects in the floor. Place the pattern upon the tile and trace with a pencil. Cut along the trace lines using a utility knife or jig saw, and lay tile. Alternatively, a hole saw can be used when cutting tiles that are to fit around pipes.

Note: Be sure to leave a minimum of 10mm (0.39") expansion space around all fixed objects, cabinetry, and metal door jambs.



FINISHING THE JOB

Remove spacers. Cover expansion spaces with quarter round or other trim, being sure not to trap or pin down the floor. Nails should go into wall, not the floor. Fill any expansion spaces around potentially wet areas (such as refrigerators, tubs, etc.) with premium, waterproof 100% silicone caulk.

Remember, the use of coordinating T-Molds is required when installing Life-Proof™ in a room or area that is larger than 100 lineal feet (30.5m) in any direction, so that the floor is separated into sections that are no larger than 1000 m² (33 m x 33 m) per section.

Save and protect any leftover tiles. Do not discard, as they are color-matched (by dye-lot) to your floor. They can be used as spares in the event you need to replace a tile in the future.

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 a neutral PH cleaner. Remove excess soil by carefully scrubbing with a soft nylon brush, micro fibre mop or sponge with a neutral PH cleaner.
- Remove scuffs using a neutral PH cleaner and a soft nylon brush or sponge.
- Heavily soiled floors may require an occasional deep cleaning using a neutral PH cleaner, spray bottle and a low-speed buffer not exceeding 300 RPM. Fit the buffer with a red or white scrubbing pad, spray the cleaner solution onto a manageable area of the floor and scrub. Remove the dirty residue by damp mopping with clear water. Caution: Do not flood the floor.
- Remove standing water, urine and other liquids promptly. Follow with a neutral PH cleaner.

PREVENTIVE CARE

- Use walk-off mats at all outside entrances.
- Use only flat felt or soft plastic glides at least 50mm in diameter under furniture legs or freestanding displays and fixtures to prevent indentations and scratches.
- Use broad surface non-staining casters at least 50mm in diameter on rolling fixtures or furniture.
- Do not use vinegar, polishes, waxes, oil soaps, abrasive cleaners, harsh detergents or solvents.
- Use non-staining 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 urine.

For further information and inquiries and troubleshooting please contact:

ASPECTA™ BV

Argon 37a | 4751XC Oud Gastel | The Netherlands
Tel: +31 (0) 88 1662500 | info@aspectaflooring.com

APAC Office:

ASPECTA APAC P/L | Asia Pacific Office | Unit 9, 337 Bay Rd.
3192 Cheltenham, Victoria | Australia | Tel: +61 (0) 41 2368067