

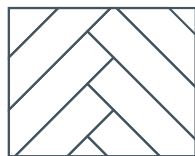
ELEMENTAL

LVT MULTILAYER FLOORING

BY ASPECTA

MULTILAYER LVT 0.55
FEATURING ISOCORE TECHNOLOGY™

INSTALLATION GUIDE



HERRINGBONE

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.

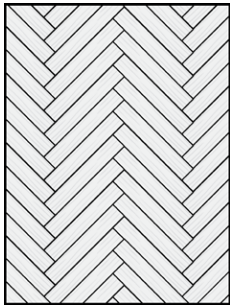
**If installing Elemental multilayer in an environment that has a length or width greater than 33 meters, a T-Moulding should be utilized to separate the floor into two (2) separate sections.

***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.

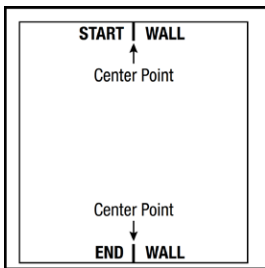
Elemental multilayer with ISOCORE Technology™ is patent pending in the US application number 14/846,407 and in Europe application number EP15193421.3.

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



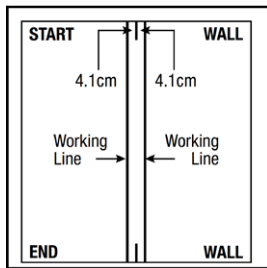
ROOM LAYOUT

This installation demonstrates how to install ELEMENTAL Multilayer DL400 Herringbone in a single herringbone pattern.

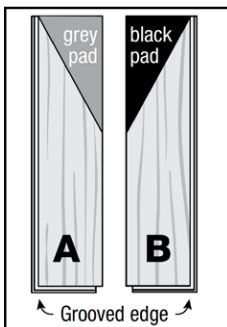


DETERMINE ROOM LAYOUT

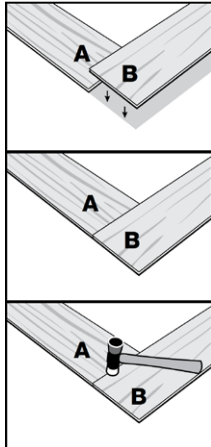
1. Measure across both ends of the room to find the center and mark.



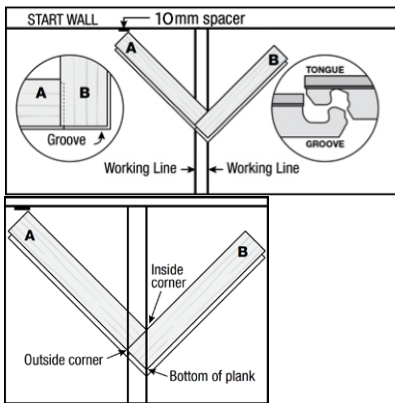
2. Measure 4.1cm from the left and right of the center mark. Snap chalk lines down the entire length of the room.



3. Separate "A" and "B" planks from the carton. If possible, install planks from 3 to 4 cartons at one time to ensure a mix of pattern and shade for best results. "A" planks have a pre-attached grey padding and "B" planks have a pre-attached black padding. Notice the groove edges are on the opposite long sides of the planks.

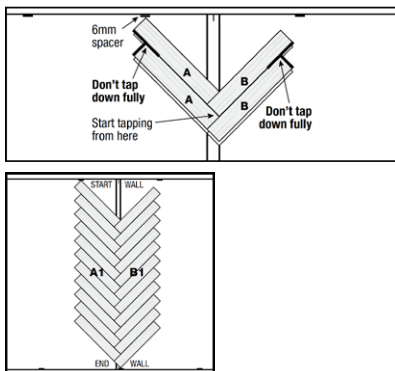


4. Position the long side of plank “B” over the short end of plank “A”. Align the edge using the tongue of a spare plank. Tap the top of plank “B” using a soft-faced hammer to fully lock planks together. This step is crucial for a good installation.



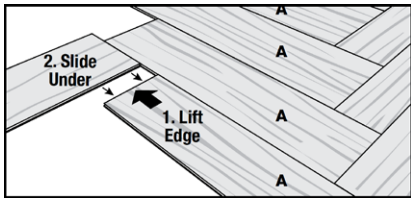
5. You have now created your „starting V“. Slide the „starting V“ against the wall. The working lines should meet up with the plank as shown on the right. Plank “A” should be placed closest to the wall, touching the 10mm spacer. Plank “B” will be offset, this is normal. The proper alignment of the „starting V“ is critical for installation.

Note: Top decor edges should be exposed with no high spots (run your hands over the plank seam, tap down as necessary.)

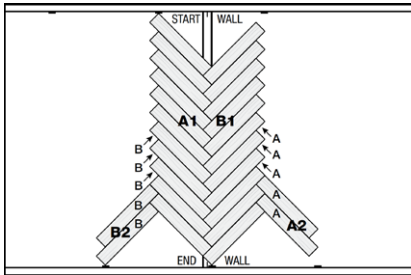


6. Continue to install column „A1“ and „B1“ as shown on the right. You should not tap down the last 51mm of the seam (in bold on the right). This space will be tapped and locked as the planks of the next column are added.

Continue to ensure that your „starting V“ is aligned properly (as described in Step 5) throughout the formation of column „A1“ and „B1“.

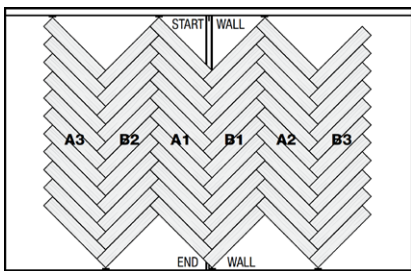


CONNECTING THE PLANKS TO THE LEFT AND RIGHT OF THE CENTER COLUMNS



7. Starting with the last full plank at the end wall, continue installing sequential columns (Column „A2“ and „B2“). Lift the untapped edge and slide the new plank under, as pictured on the right.

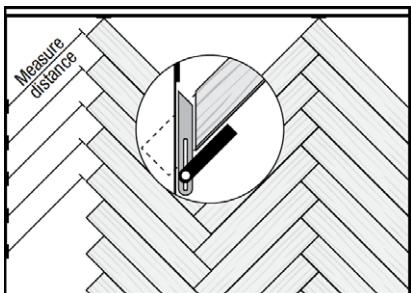
Position the tongue and groove of the first plank in column „A2“ into place with the last plank in column „B1“. Tap seams to completely lock planks.



8. Continue forming columns until you have reached the opposite end of the room. Remember to not tap down the last 51mm of the seam. These will be tapped and locked as the planks of the next column are added.

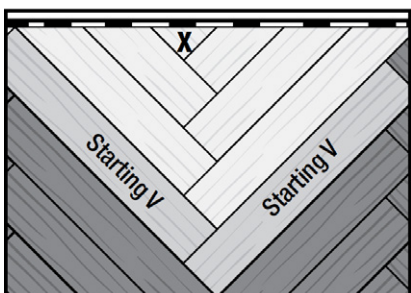
Check your working lines as you install additional planks to keep the pattern straight. Adjust if necessary.

NOTE: If you need to remove a plank for whatever reason, slowly push down on the plank with the groove while lifting the plank with the tongue. Be careful not to damage the tongue or groove. Tap down lightly on the plank with the groove if necessary



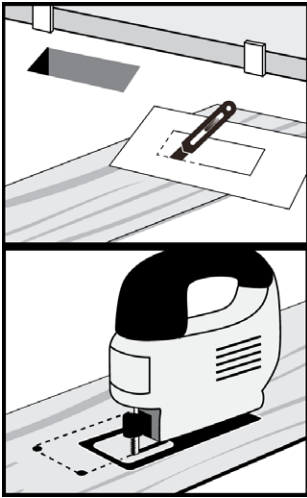
9. Measure, mark and cut planks that extend to the walls. Allow for 10mm spacers. A T-Bevel (angle finder) can be used to find the correct angle. Always measure twice before cutting. This is the last column of your installation, so all seams can be tapped to fully lock together at this time.

NOTE: When cutting planks with a utility knife, use the edge of a table or counter for leverage to snap these smaller angled pieces off.



Do not discard planks cut on angles. Save all scrap pieces until the installation process is complete. They can be used in other areas of the installation if layout permits. Stack in accordance of „A“ and „B“ planks.

When finishing the floor with small triangular shaped pieces (see plank X), use a small bead of “instant glue” (cyanoacrylate adhesive) in the groove before tapping in the plank. Remove any excess adhesive as soon as possible using mineral spirits.



FITTING AROUND IRREGULARLY SHAPED OBJECTS

10.

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

NOTE: Be sure to leave a minimum of 10mm expansion space around all fixed objects, cabinetry, and metal door jambs.

FINISHING THE JOB

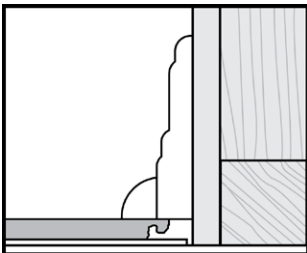
11.

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.

Save and protect any leftover planks. Do not discard, as they are colour-matched (by dye-lot) to your floor. They can be used for replacement in the event you need to replace a plank in the future.

Remember, the use of coordinating T-Molds is required when installing ELEMENTAL Multilayer DL400 Herringbone in a room or area that is larger than 33m in both directions, so that the floor is separated into sections that are no larger than 33m x 33m per section.



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

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