



## CRETE TILE 600 mm x 600 mm WITH DROPLOCK400® (DL400)

Featuring  **ISOCORE Technology™**

# INSTALLATION GUIDE CARE AND MAINTENANCE

### Product Description

8 mm thick x 600 mm x 600 mm

### Grade Levels

Above Grade / On Grade  
/ Below Grade

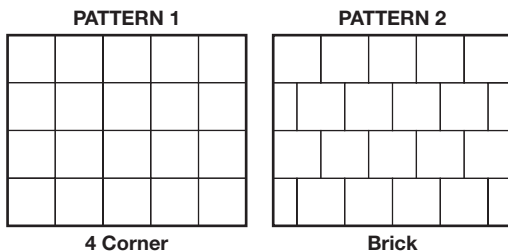
### Installation Methods

Floating - 2-Sided Drop and Lock  
Glue down - See glue down instructions

## GET TO KNOW CRETE TILE 600 mm x 600 mm DL400 MULTILAYER FLOORING

### FEATURING ISOCORE TECHNOLOGY® AND 2 SIDED DROP AND LOCK DROPLOCK 400 SYSTEM

LVT **TILE DL400** MULTILAYER FLOORING is a patterned flooring which can be installed using 2 different methods. It can be installed using a **4 Corner** (Point To Point) method, or, using the **Brick** (Stair Step) method.



LVT **TILE DL400** MULTILAYER FLOORING is featured with the revolutionary patented Droplock 400 system. This special vertical locking system featuring a fold-down locking system on both the long side and the short side.

General information: When installing LVT **TILE DL400** MULTILAYER FLOORING, always use best practices and follow the applicable standards for the installation of floor coverings, such as BS 8203 in the UK and VOB, Part C, DIN 18365 in Germany and all other relevant European, national and local standards.

LVT **TILE DL400** MULTILAYER FLOORING is intended for interior commercial use only and is suitable for above-grade (suspended) on-grade (incontact with ground) and below grade (basement) applications. However, LVT **TILE DL400** MULTILAYER FLOORING should not be installed in locations where the substrate beneath the building structure is exposed to the elements.

LVT **TILE DL400** MULTILAYER FLOORING 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 LVT **TILE DL400** MULTILAYER FLOORING 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 LVT **TILE DL400** MULTILAYER FLOORING to fade or to expand causing the floor to warp or to separate. Protect LVT **TILE DL400** MULTILAYER FLOORING from direct sunlight using window treatments or UV tinting on windows.

LVT **TILE DL400** MULTILAYER FLOORING is a waterproof floating floor, but it should not be used to seal an existing floor from moisture. LVT **TILE DL400** MULTILAYER FLOORING 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 LVT **TILE DL400** MULTILAYER FLOORING.

### EVALUATE THE JOB SITE

#### Exterior

*Damage caused by water and high humidity should be addressed prior to installing LVT **TILE DL400** MULTILAYER FLOORING.*

- Examine the driveway, parking areas 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 3 mm in a 1.8 metre radius, or 5 mm within a 3 metre radius. The substrate should not slope more than 25 mm per 1.8 metres in any direction.
- It is required to test concrete substrate for moisture and pH before installing LVT **TILE DL400** MULTILAYER FLOORING. Test results should not exceed 85 % relative humidity (RH). pH tests for alkalinity levels should register between 7 and 9.
- It is required to test 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

LVT **TILE DL400** MULTILAYER FLOORING 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 floor coverings, such as BS 8203 in the UK and VOB, Part C, DIN 18365 in Germany and all other relevant European, national and local standards.

LVT **TILE DL400** MULTILAYER FLOORING 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 3 mm within a 1.8 metre, or 5 mm within a 3 metre radius. The substrate should not slope more than 25 mm

per 1.8 metres 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 3 mm within a 1.8 metre radius, or 5 mm within a 3 metre radius. The substrate should not slope more than 25 mm in 1.8 metres in any direction. It is recommended to perform 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 LVT **TILE DL400** MULTILAYER FLOORING.

#### Tile, Terrazzo, Asbestos Tile, Resilient Tile, Noncushion 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 LVT **TILE DL400** MULTILAYER FLOORING, all substrates must be sturdy, sound, and flat within 3 mm within a 1.8 metre radius, or 5 mm within a 3 metre radius. The substrate should not slope more than 25 mm per 1.8 metres 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 LVT **TILE DL400** MULTILAYER FLOORING. 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 LVT **TILE DL400** MULTILAYER FLOORING.*

- **Building envelope 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.

## PRE-INSTALLATION ESSENTIALS cont.

- **LVT TILE DL400 MULTILAYER FLOORING** flooring is more dimensionally stable than typical floating wood or vinyl based flooring products, however 48 hour acclimation is required. **LVT TILE DL400 MULTILAYER FLOORING** 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 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 substrates:** All subfloors must meet all minimum standard building codes. Fill large cracks and voids with cementitious leveling and patching compound. In order to prevent vertical deflection (movement) and potential damage to the integrity of the **LVT TILE DL400 MULTILAYER FLOORING** flooring, all substrates must be sturdy, sound, and flat within 3 mm within a 1.8 metre radius, or 5 mm within a 3 metre radius. The substrate should not slope more than 25 mm per 1.8 metres 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 on this page.
- **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 **LVT TILE DL400 MULTILAYER FLOORING** will fit neatly beneath them, concealing the expansion space.
- **Cut around metal door casings:** Do not cut metal door casings. Cut **LVT TILE DL400 MULTILAYER FLOORING** 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 **LVT TILE DL400 MULTILAYER FLOORING**. 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 **LVT TILE DL400 MULTILAYER FLOORING**. 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, followed by the two-digit month, and finally the four-digit year.

**Batch Number/Manufacture Date**  
**29.10.2013**  
**DAY.MONTH.YEAR**

## KEY INSTALLATION CONSIDERATIONS

Subfloor Flatness Tolerances	5 mm in 3 metres or 3 mm in 1.8 metres Slope no more than 25 mm in 1.8 metres
Damp Proof Membrane – 0.20 mm	Not Required
Is underlayment (underlay) required	No – <b>LVT MULTILAYER FLOORING</b> includes an integral pre-attached underlayment
Acclimation Requirements	Residential not required Light commercial 48 hours*
Transition Requirements (T-Mould) for Large Spaces	Required in rooms greater than 30,5 metres in either direction
Transition Requirements (T-Mould) Doorways/ Thresholds	Required
Installation over existing ceramic tile floor	Filling grout lines required, follow subfloor flatness requirements
Glue Down Installation	Recommended in large areas or where exposure to direct sunlight/high heat is probable - See additional glue down installation instructions.
Internal Subfloor Relative Humidity (RH) Recommendations	Maximum 85 % RH when tested with a hygrometer, in accordance with BS 8203: 2001. Appendix A
Underfloor Heating	Approved – Substrate surface temp. not to exceed 30 °C Installation over electrical systems is not allowed
3-Season/Non-Climate Controlled Environments	Not Recommended
Expansion Requirements	6 mm around perimeter walls, pipes, & heavy fixed objects such as cabinetry**
Optimal Interior Environmental Conditions	During Installation: 18 °C During life of flooring: 12 °C – 35 °C / 40 % – 60 % RH
Definition of Waterproof	Structural integrity of flooring will not degrade due to contact with moisture/water***

\***LVT TILE DL400 MULTILAYER FLOORING** flooring is more dimensionally stable than typical floating wood or vinyl based flooring products, however acclimation is required subjecting. **LVT TILE DL400 MULTILAYER FLOORING** flooring 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 **LVT TILE DL400 MULTILAYER FLOORING** in an environment that has a length or width greater than 30,5 metres, a T-Moulding is required to separate the floor into two (2) separate sections.

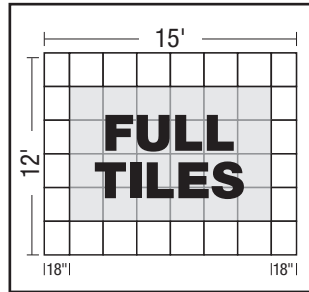
\*\*\*While **LVT TILE DL400 MULTILAYER FLOORING** is waterproof, it is not intended for use as a moisture mitigation system.

**ATTENTION:** Only installation techniques described in this installation guide are warranted. Installations involving custom cutting are not warranted. Please refer to the **LVT TILE DL400 MULTILAYER FLOORING** warranty for complete warranty details and exclusions.

## INSTALLATION

### ROOM LAYOUT

First, lay a row of loose tiles (i.e. without securing them to each other) to determine if you need to adjust the width of the first tile to avoid a piece less than 8" 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", calculate 1/2 the remainder and trim this amount off the first tile.

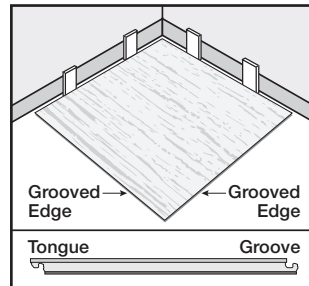


Then, lay a row of loose tiles in the opposite direction. Follow the same instructions to determine if you need to also adjust the length of your first tile.

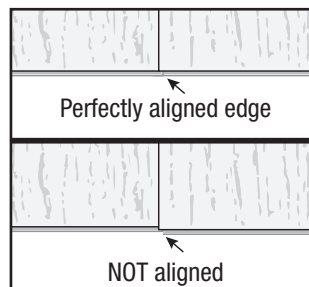
**Note:** To cut a tile, simply measure and mark the tile. Then, use a straight edge and utility knife to score and snap. You will also need to back-cut the under pad on the bottom of the plank. If you have difficulty using this method, you can use a jig saw, circular saw or miter saw.

### INSTALLATION USING THE 4 CORNER METHOD

**1** Find your starting wall and set 1/4" (6 mm) spacers. Start in the left hand corner and work 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.

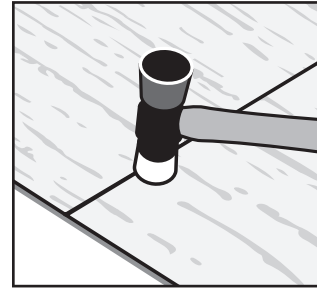


**2** Install second tile to the right of the first tile. Lay the tongue of tile #2 on top of the groove of tile #1. Use another tile or a straight edge as your guide to line up tiles 1 and 2 perfectly. This is essential for proper installation.

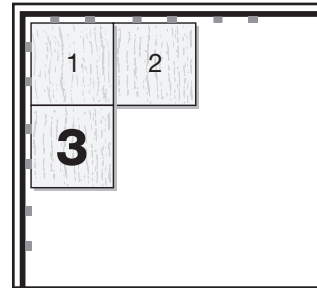


### INSTALLATION USING 4 CORNER METHOD (cont.)

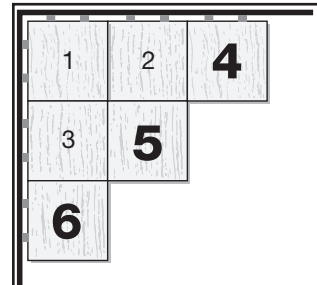
**3** Using a soft-faced hammer, tap down on tile #2 to lock into place. Tap from one end to the other. Run your hand over the top of the tile to make sure tiles are flush with each other. Tap down any high spots.



**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 tile 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.



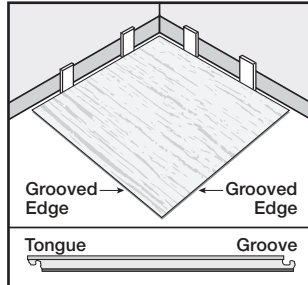
**6** Install the remainder of rows. Continue to follow the four corner method for the remainder of the installation.

**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.

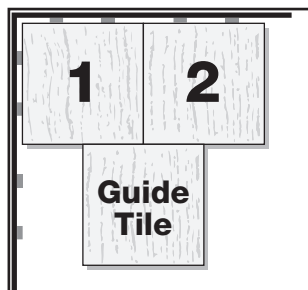
## INSTALLATION cont.

### INSTALLATION USING THE BRICK METHOD

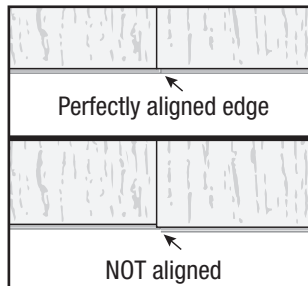
**1** Installation should start in a corner (left hand) and proceed from the wall with the tongue facing the wall. Allow a minimum gap of ¼" (6 mm) for subfloor movement or product expansion, which should be covered by molding. Set ¼" spacers to create the required expansion space.



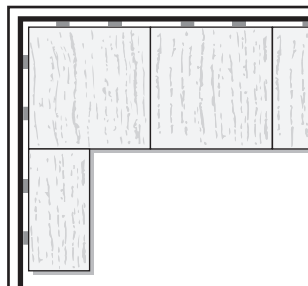
**2** Lay the first row in a straight line and interlock the joints by inserting each tongue into the groove of the adjoining tile. Install each sequential tile on the joint and be sure to line up evenly. Use a soft faced hammer to tap down on the joints of the tiles to ensure a tight fit. This is crucial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



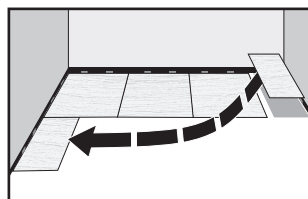
**Note:** Stagger the rows so that the joints are not aligned in a straight, uniform manner.



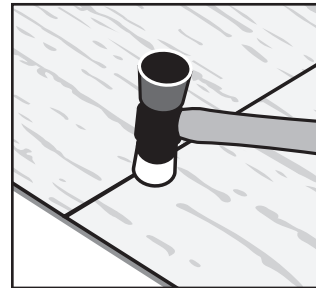
**3** Start the second row with the tile cut half the length, or for desired pattern; measure and mark the tile. Then, use a straight edge and utility knife or shears to score and snap the tile.



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).

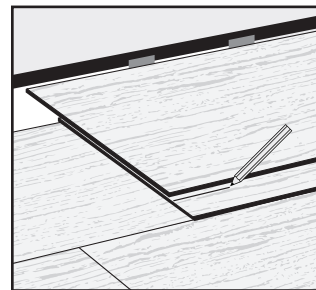


**4** Attach the first tile of Row 2 by connecting the tongue to the groove side of the first row. Maintain your ¼" expansion gap. Then, attach the second tile by connecting it to the joints of the first tile. Then, drop and lock. To ensure a tight fit, use a tapping block and soft faced hammer on the joints, then, tap down on top of the tile at the joints.



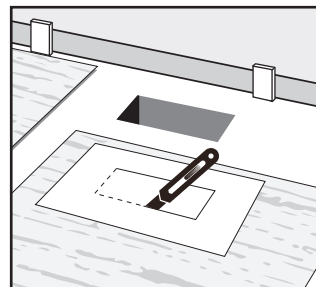
### INSTALLING THE LAST ROW (used for both methods)

Most often the entire length of the last row will need to be cut so that it is narrow enough to fit the remaining space. Cut the first tile of the last row to length (if necessary). Place directly on top of the previously installed row. Then, take another tile and place it against the wall on top of the tile to be cut for width. Mark the tile (length-wise), cut to size. Remember to allow for the ¼" (6mm) expansion gap against fixed objects.



### FITTING AROUND IRREGULARLY SHAPED OBJECTS

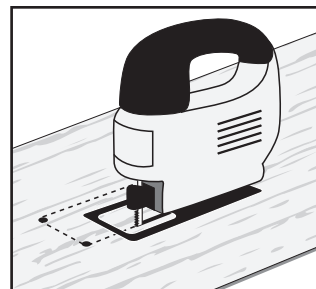
Make a template to fit around pipes or irregular shaped objects. Place the pattern upon the tile and trace. Cut along the trace lines using a utility knife or jig saw, and lay tile. Alternatively, a hole saw can be used when cutting tiles that are to fit around pipes.



**Note:** Be sure to leave a minimum of ¼" (6mm) expansion space around all fixed objects, cabinetry, and metal door jams.

### 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 LifeProof™ in a room or area that is larger than 100 lineal feet (30.5 meters) in any direction, so that the floor is separated into sections that are no larger than 100ft. x 100ft. (30.5 meters x 30.5 meters) 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 for replacement 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 and 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 50 mm in diameter under furniture legs or free standing displays and fixtures to prevent indentations and scratches.

Use broad surface non-staining casters at least 50 mm 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.