INSTALLATION & MAINTENANCE

PLEASE READ BEFORE INSTALLATION!

FOR BEST VISUAL REPRESENTATION OF YOUR FLOOR
This flooring replicates the look of a natural product which has natural variations in color and texture. For best visual effect, shuffle planks from several cartons and do not install similar boards next to one another.

SUBFLOOR PREPARATION
Subfloor should be dry and level to 3/16" per 10 ft. radius for best installation results.
Vinyl flooring should only be used indoors.

FLOORING MATERIAL SHOULD BE INSPECTED PRIOR TO INSTALLATION

Responsibility for the suitability of Manufacturer flooring and accompanying products for each individual installation cannot be assumed by Manufacturer, since Manufacturer has no control over the installer's proper application. Should an individual plank or tile be doubtful as to appearance or dimension the installer should not use this piece.

NOTE: Manufacturer flooring with attached underlayment **CANNOT** be installed with a glue-down method.

READ BEFORE INSTALLING

While flooring is waterproof, it's not a moisture barrier. It's still a good idea to make sure concrete is cured and tested for moisture and that a moisture barrier is installed in the crawl space and even under a floor over a concrete subfloor. Please refer below for further guidance.

Please check for defects, squeaky noises, subfloor issue or finish issues by installing 100 sq. ft. of flooring.

Moisture won't damage flooring, but it can get in the walls and structure of the home. A couple of extra dollars and a few minutes is a small investment for the added protection and peace of mind. Because houses and buildings, as well as adjacent hardwood or laminate floors, expand and contract, Manufacturer recommends leaving a ¼" expansion gap between the perimeter walls and any adjacent hardwood floor. Do not install floors where it will be exposed to temperatures greater than 140° F. Use good common-sense installation practices, and you'll have a successful installation that results in a beautiful floor.

Check that all BATCH NUMBERS AND ITEM NUMBERS are the same and that you have purchased sufficient packs to complete the job.

KEYS TO SUCCESSFUL LOCKING INSTALLATION

All tiles and planks should be checked before and during installation for faults which are clearly visible; this will reduce problems when assembling and identify any color differences. The inspection should be performed in daylight, or under good artificial lighting, in the room in which the Products are to be installed. If flooring is not acceptable, contact your supplier immediately and arrange for replacement. Manufacturer cannot accept responsibility for flooring installed with visible defects. Prior to installation of any flooring, the installer must ensure that the jobsite and subfloor meet the requirements of these instructions. Manufacturer is not responsible for flooring failure resulting from unsatisfactory jobsite and/or subfloor conditions.

Flooring should be one of the last items installed in any new construction or remodel project.

Crawl spaces must be a minimum of 18" (46 cm) from the ground to the underside of the joists. A ground cover of 6–20 mil black polyethylene film is essential as a vapor barrier with joints lapped 6" (15 cm) and sealed with moisture resistant tape. The crawl space should have perimeter venting equal to a minimum of 1.5% of the crawl space square footage. These vents should be properly located to foster cross ventilation. Local regulations prevail where necessary.

Room temperature and humidity of installation area should be consistent with normal, year-round living conditions for at least one week before installation of flooring. Maintaining an optimum room temperature of 70° F and a humidity range of 30-50% is recommended.

Most installations will need approximately a 10% cutting and waste allowance added to the square footage of the room.

Proper conditioning of the job site is necessary. Flooring planks should not be exposed to sudden changes in temperature. Store, transport and handle the flooring planks in a manner to prevent any distortions. Distortions will not disappear over time. Store cartons flat, never on edge. Insure that the flooring planks are lying flat at time of installation.

Installations of carpet, tiles, metal strips and other transition moldings should not push fully into the flooring and should allow for some slight movement wherever practical.

For rooms, wider or longer than 55', the use of T-moldings is required to account for the normal movement or seasonal expansion/contraction of the floor. If the homeowner does experience gapping then we would suggest the contractor tap the planks back together since they may come apart for longer run lengths.

Protect the floor from heavy-rolling loads, other trades, and movement of appliances by using sheets of plywood or similar.

SUITABLE SUBSTRATES

All substrates listed below must be properly prepared and meet certain requirements. There may be other exceptions and special conditions (as noted below) for these substrates to be suitable for the locking installation system.

- Concrete – dry and smooth on all grade levels
- Suspended wood subfloors with approved wood underlayments – must have minimum of 18″ well-ventilated crawl space underneath
- Suspended hardwood flooring that is fully adhered, smooth and square edge without texture
- Single-layer, fully-adhered, existing resilient floors – must not be foam-backed or cushion backed
- Ceramic tile, Terrazzo, Marble
- Polymeric Poured (seamless) Floors
- Use Ply-Wood/OSB-3/4″
- Particleboard 40lb. density or wafer board

DO NOT INSTALL OVER

- Existing resilient tile floors that are below grade
- Existing cushion-backed vinyl flooring
- Carpet
- Hardwood flooring that has been installed directly over concrete
- On stairs or in rooms with sloping floors or floor drains

SUCCESSFUL WAYS TO AVOID MOVEMENT OR NOISE

Squeaking and clicking noises can be a result of many causes putting stress on the locking system;

- Locking system not engaged completely on both short and long joints. (To avoid this make sure to use a rubber mallet to engage each plank together and test each row).
- Do NOT use improper underlayment. (Please contact manufacturer to confirm underlayment).
- Joist/subfloors moving which cause squeaky noises.
- Do NOT use any end joint that are broken (during transit or installation).
- Provide a minimum .25" on each wall space for expansion. (Lack of proper expansion space can cause peaking/tenting on the end joints).
- Confirming that floor is flat before installation. (Subfloor deflection is not within manufacturer tolerance and the floor is not flat).
- Do NOT install floors in an extreme environment.

Sometimes, it is impossible to eliminate the noise completely. Minor squeaking or clicking noises are to be accepted as normal flooring phenomenon.

PRE-INSTALLATION SUBFLOOR REQUIREMENTS

All Subfloors must be:
- Dry
- Structurally sound
- Clean: Thoroughly swept and free of all debris
- Level: Flat to 4.7mm (3/16") per 3.3 meters (10-foot) radius

Wood subfloors must be dry and well secured. Nail or screw every 6" along joists to avoid squeaking. If not level, sand down high spots and fill low spots with a Portland Based leveling patch.

Concrete subfloors must be fully cured, at least 60 days old, and should have minimum 6-mil poly-film between concrete and ground. Subfloor should be flat and level within 3/16" per 10' radius. If necessary grind high spots down and level low spots with a Portland leveling compound.

Ceramic Tile, resilient tile and sheet vinyl must be well-bonded to sub-floor, in good condition, clean and level. Do not sand existing vinyl floors, as they may contain asbestos.

Resilient flooring should only be installed in temperature-controlled environments. It is necessary to maintain a constant temperature before, during and after the installation. Therefore, the permanent or temporary HVAC system must be in operation before the installation of resilient flooring. Portable heaters are not recommended as they may not heat the room and subfloor sufficiently. Kerosene heaters should never be used.

All substrates must be structurally sound, dry, clean, flat, and smooth with minimal deflection. Substrates must be free from excessive moisture or alkali. Remove dirt, paint, varnish, wax, oils, solvents, other foreign matter and contaminates.

High spots on the substrate should be leveled and low areas filled with appropriate underlayments.

Do not use products containing petroleum, solvents or citrus oils to prepare substrates as they can cause staining and expansion of the new flooring.

For renovation or remodel work, remove any existing adhesive residue so that 100% of the overall area of the original substrate is exposed.

Embossed existing resilient floors, ceramic tile floors, ceramic and marble grout joints, and irregularities in concrete should be filled.

The area to receive resilient flooring materials and adhesives should be maintained between 65°F (18°C) and 85°F (29°C) for 48 hours before installation, during installation, and 48 hours after completion. Maintain temperatures between 55°F (13°C) and 85°F (29°C) thereafter.

For concrete substrates, conduct moisture testing (moisture vapor emission rate {MVER}) not to exceed 5lbs and/or percent relative humidity 85% (in-situ probe). Bond tests must also be conducted for compatibility with the substrate.

Please refer to Subfloors and Underlayments

- Radiant heated substrates must not exceed a maximum surface temperature of 81°F (27 °C).
- The subfloor panels must have a smooth, sanded face and show no swelling of edges or surface due to exposure to weather conditions or construction traffic.
- There are numerous products available for use as floor fills, patches, self-leveling underlayments, and trowelable underlayments. They include proprietary blends of compounds such as Portland cement, calcium aluminates, and gypsum based products. These are recommended for smoothing rough or uneven subfloors, enhancing acoustical and fire characteristics of structures or as substrates to receive floor covering for otherwise unsuitable subfloor conditions.

INSTALLATION TOOLS

For all installation methods:
- Tape measure
- Tapping block (trimmed piece of flooring)
- Pencil
- Leveler
- Rubber Mallet
- 1/4” Spacers
- Pry bar or pull bar
- Chalk line
- 3M Scotch-Blue™ 2080 Tape
- Crosscut power saw

Acceptable subfloor types:
- CDX Underlayment Grade Plywood (at least ½" thick)
- Underlayment grade particleboard
- OSB (at least ¾" thick)
- Concrete slab
- Existing wood floor
- Ceramic tile, Resilient tile & sheet vinyl

STARTING YOUR INSTALLATION

Work from several open boxes of flooring and “dry lay” the floor before permanently laying the floor. This will allow you to select the varying grains & colors and to arrange them in a harmonious pattern. Remember, it is the installer’s responsibility to determine the expectations of what the finished floor will look like with the end user first and then to cull out pieces that do not meet those expectations.

Begin installation next to an outside wall. This is usually the straightest and best reference for establishing a straight working line. Establish this line by measuring an equal distance from the wall at both ends and snapping a chalk line. The distance you measure from the wall should be the width of a plank. You may need to scribe cut the first row of planks to match the wall in order to make a straight working line if the wall is out of straight.

You may want to position a few rows before starting installation to confirm your layout decision and working line. When laying flooring, stagger end joints from row to row by at least 8". When cutting the last plank in a row to fit, you can use the cut-off end to begin the next row. If cut-off end is 8" in length or less, discard it and instead cut a new plank at a random length and use it to start the next row. Always begin each row from the same side of the room. When near a wall, you can use a pry bar to pry close the side and end joints.

INSTALLATION METHOD

LVT/ SPC/ WPC panels

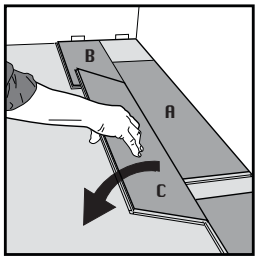


Fig 1.

First row.

Place a panel (A) as support for long side alignment of panel (B) and (C) while you install panel (B) and panel (C). Place a 10mm spacer between panel (B) and the wall. After that the complete first row is installed, remove panel (A) and slide the first row up against the wall with 10mm spacers placed between the panels and the wall.

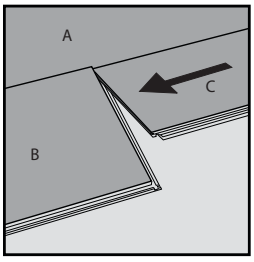


Fig 2.

Second plank, first row.

Place this plank (C) gently close to the short end of the first one (B).

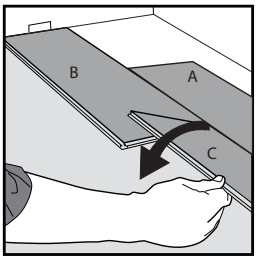


Fig 3.

Fold it down with a single action movement.

During the fold down, make sure the panels are close to each other.

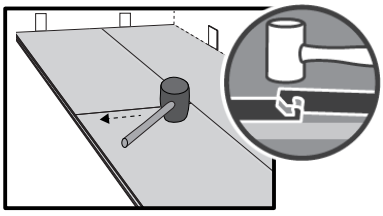


Fig 4.

Afterwards use a rubber mallet along both short end joints. Please be careful not to damage the profile or edges during engaging the planks. Test each end joint to make sure it is completely engaged.

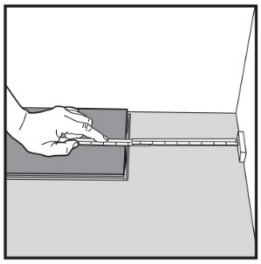


Fig 5.

At the end of the first row, put a spacer to the wall and measure the length of the last plank to fit. Cut the extra material and complete the row.

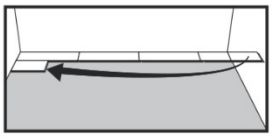


Fig 6.

Second row

First plank min length 500 mm. Put a 10mm spacer against the left wall.

Fig 7.

Staggered joint distance i.e. minimum distance between short ends of planks in parallel rows should **NOT be less than the given width of the plank.**

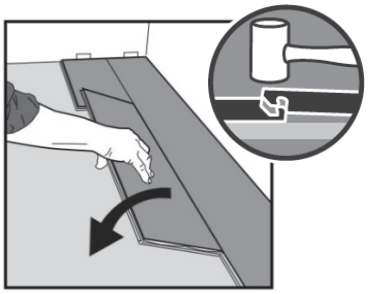


Fig 8.

Second plank second row.

Place the panel **gently and close** to the short end of the previous panel and fold it down in a single action movement reinforced with a rubber mallet as in step 4.

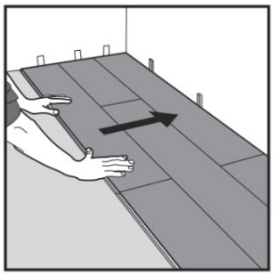


Fig 9.

After 2-3 rows.

Adjust the distance to the front wall by placing 10mm spacers.

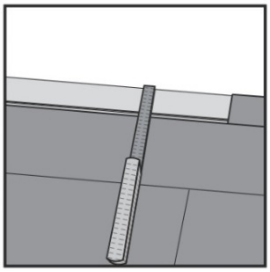


Fig 10.

Last row (and perhaps also first row).

Minimum width 50 mm.

Horizontal installation

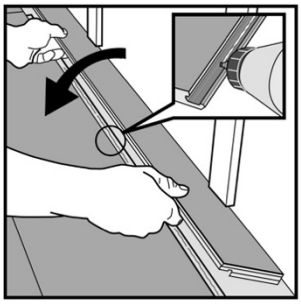


Fig 11 and fig 12.

Cut off the vertical locking part of the strip with a chisel, put applicable glue on the strip and push the planks horizontally together. If necessary place some spacers between last board and the wall during the hardening.

Radiator Pipes

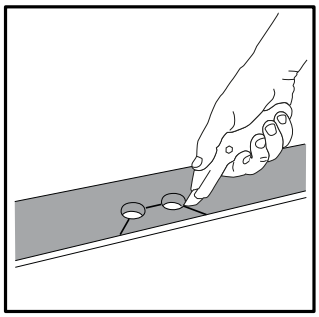
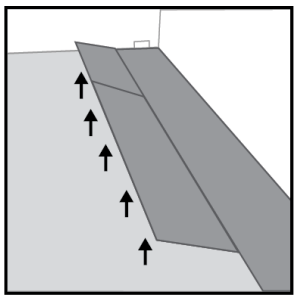


Fig 13 and 14. Installation at radiators. Drill the holes 2 x spacer thickness larger, than the diameter of the pipes.

Disassembling Panels Near Walls

Fig 15.

Separate the whole row by carefully lifting up and release the whole row.



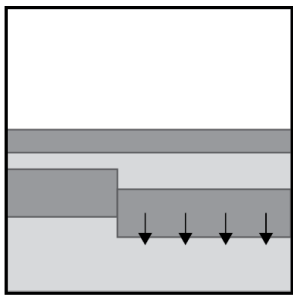
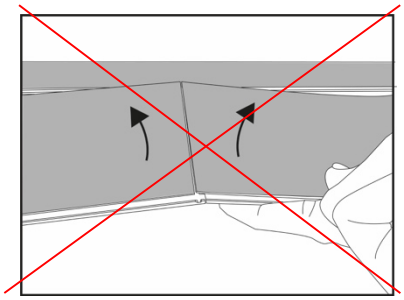


Fig 16 & Fig 17

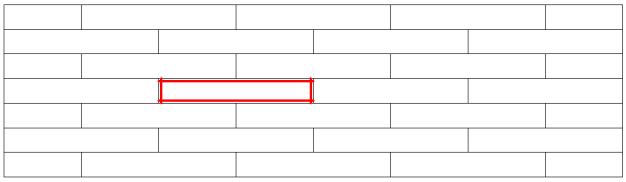
Disassemble the panels by **lifting the short ends upward and then slide. Do never fold up a panel, as this damage the profile.**

HOW NOT TO DISASSEMBLING PANELS!



Replacement of a Panel in the Middle of the Room.

Please cut the panel along the red lines as indicated below.



Remove the groove on both sides as indicated in the below pictures.

Put the panel back in by gluing it down on existing underfloor.

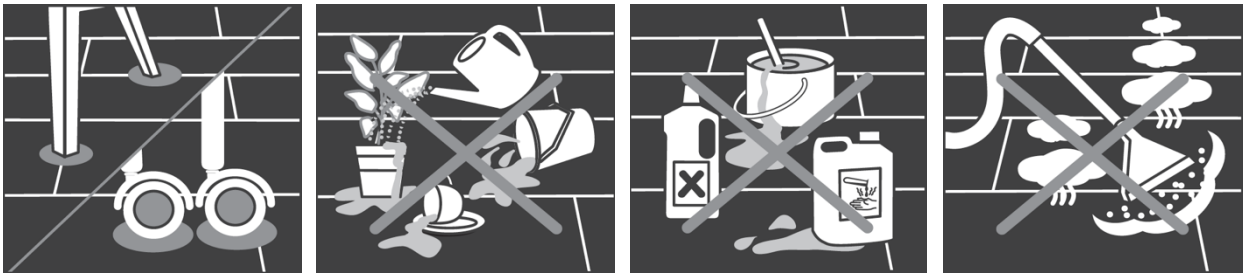
AFTER INSTALLATION

- Flooring should be one of the last items installed in a project. In order to protect the floors while other trades are finishing their work prior to final cleanup and turnover to the owner, use rosin paper and only use 3M Scotch-Blue™ 2080 Tape to hold the rosin paper to the floor (other blue tapes may damage the finish). Clean the floor thoroughly before laying the rosin paper to ensure that no debris is trapped underneath.DO NOT USE plastic film or other non-breathing coverings as this can cause the floor to become damaged from humidity buildups.
- Dust mop or vacuum your floor to remove any dirt or debris.
- It is suggested that you buff the floor with lamb's wool pads in order to remove any loose splinters, residues, foot prints, etc.
- Install any transition pieces that may be needed (reducers, T-moldings, nosing. etc.).

PROTECTION AND MAINTENANCE OF YOUR FLOOR

- If the floor experiences expansion/peaking we recommend adhering the planks with an adhesive using fine notch trowel.
- Squeaking noises from the floor are typically caused by lack of expansion around the perimeter or improper subfloor deflection. The lack of expansion will cause the planks to peak on the short ends, therefore, creating tension. The improper subfloor deflection will create movement/tension on the locking system.
- Lasting beauty can be achieved through purchasing a quality floor covering and providing proper on-going maintenance.
- Furniture should be moved onto the newly installed floor using an appliance hand truck over hardboard runways.
- Avoid exposure to long periods of direct sunlight. The floor should not be exposed to direct sunlight for prolonged periods or temperature change to prevent the planks from peaking/bowing. Close blinds or drapes during peak sunlight hours. Floor covering subjected to excessive heat and light is subject to thermal degradation. Use appropriate precautions to minimize potential effects on the floor covering.
- Do not expose floors to temperature exceeding 170° F up to 6 hours.
- Oil or petroleum-based products can result in surface staining. Do not track asphalt-driveway sealer or automobile-oil drips onto the vinyl floor covering.
- Use non-staining mats. Rubber may discolor the floor.
- Caster wheeled chairs should have wide, rubber casters. Protective mats are required under office chairs.
- Frequently moved furniture should be equipped with felt pads to avoid scratching the floor. Heavy furniture and appliances should be equipped with non-staining large surface floor protectors. Furniture with castors or wheels must be easy swiveling, large surface non-staining and suitable for resilient floors. Do NOT use ball type castors as they can damage the floor.
- Use floor protectors under furniture.
- Use walk off mats at entrances to prevent dirt and grit from being tracked on to the floor.
- Sweep or vacuum the floor regularly to remove loose dirt. Do NOT use vacuums that use a beater bar or turn beater bar off.
- Do NOT use electric brooms with hard plastic bottoms with no padding.
- Clean up spills immediately.
- Damp mop as needed using clean water and a diluted floor cleaner. Do NOT use harsh cleaners or chemicals on the floor. DO NOT use abrasive scrubbing tools. Do NOT use detergents, abrasive cleaners or "mop and shine" products.
- Vinyl Flooring, like other types of smooth floors, may become slippery when wet. Allow time for floor to dry after washing.
- Immediately wipe up wet areas from spills, foreign substances or wet feet

Use protective pads under furniture or equipment to reduce risk of surface damage. Please do not use rugs with rubber backing or carpets with vinyl floors



RESIDENTIAL MAINTENANCE GUIDELINES

NEWLY INSTALLED FLOOR CARE

- Always use plywood or other boards when moving heavy objects across the floor.
- Sweep, dust mop or vacuum the floor to remove all loose dirt and grit.
- Lightly damp mop with well wrung mop.

INITIAL & ROUTINE MAINTENANCE (DAILY OR AS NEEDED)

- Sweep, dust mop or vacuum the floor to remove all loose dirt and grit. Do not use treated dust mops.
- Clean the floor using a properly diluted Neutral pH cleaner in cool water or ready to use spray cleaner that will not leave a residue such as Bona Professional Series Stone, Tile, and Laminate Cleaner in a pre-mixed spray bottle. Follow label instructions.

OVER TIME FLOOR CARE

Over time floors may begin to lose their luster and may require an application of floor polish. When and where you apply the floor, polish will depend on the traffic the floor receives. A good quality floor polish like “Hilway Direct” can provide up to a year of protection in a high traffic area.

FLOOR POLISH APPLICATION DIRECTIONS:

1. Vacuum or dry sweep then damp mop floor to remove loose dirt and soil from floor. Thoroughly scrub and clean floor with Neutral pH cleaner to remove all soil. Follow label Instructions.
2. Apply floor polish undiluted in a thin, even coat using a microfiber applicator mop. Do not use treated dust mops. Follow label instructions.
3. Apply 2-3 coats. Allow each coat to air dry completely (generally 30-60 minutes) before applying next coat.
4. Allow floor surface to dry overnight before heavy traffic use.

PREVENTION

The single greatest cause of damage to any flooring or floor finish is abrasion from dirt and grit. Wherever possible, use walk off mats at entrances and doorways. Use non-staining floor protectors under heavy furniture, chairs, and tables.

COMMERCIAL MAINTENANCE GUIDELINES

SAFETY PRECAUTIONS

- When performing any wet maintenance, always put out wet floor signs and caution tape.
- When wet maintenance is finished and the floor is dry, remove all caution signs & tape.
- Carefully read and follow each product’s label instructions for proper use.
- Refer to each product’s MSDS for use of personal protective equipment.

NEWLY INSTALLED FLOOR CARE

- Always use plywood or other boards when moving heavy objects across the floor.
- Follow the Initial & Routine Maintenance instructions below.

INITIAL & ROUTINE MAINTENANCE (DAILY OR AS NEEDED)

- Sweep, dust mop or vacuum the floor to remove all loose dirt and grit. Do not use treated dust mops.
- Clean the floor using a properly diluted Neutral pH cleaner (Hilway Direct – Neutral Cleaner) in cool water. Follow label instructions.
- Mop or machine clean using 175-rpm “Swing-arm” machine or auto scrubber with a 3M 5100 Red pad (or equal). If the flooring has painted bevel using a buffing machine can remove the painted bevel.

- Rinse the floor thoroughly with clean water and allow it to dry. Fans or air movers can speed up the drying time.

DAILY CLEANING DIRECTIONS:

- Sweep floor to remove loose dirt & soil.
- Using Mop & Bucket (2-bucket system) or Auto-Scrub Machine, dilute Hilway Direct Neutral Cleaner as directed on product label. Mop floor with the cleaning solution.
- Trail mop excess soil and wet areas with a clean, tightly wrung out mop.
- No rinsing required.
- Allow floor to air dry completely.

Caution: Eye irritant. Avoid contact with skin and eyes. Do not taste or swallow. In case of contact with eyes or skin, flush with plenty of water. If irritation develops, seek medical attention. In case of ingestion, flush mouth with water, drink large quantities of water and seek immediate medical attention, DO NOT induce vomiting.

KEEP OUT OF REACH OF CHILDREN.

Note: Avoid solution contact with sensitive surfaces such as wood, metal, furnishings. When applying finish, avoid strong sunlight and drafts. Turn off under floor heat prior to application. Read full MSDS (available for download: www.hilway.com) and product label prior to use.
Handling and Storage: Protect from freezing. Recommended storage temperature: 68°F (20°C). Avoid storing in direct sunlight and high temperatures. Do not store near food.

PERIODIC DEEP CLEANING

- Sweep, dust mop or vacuum the floor to remove loose dirt and grit. Do not use treated dust mops.
- Machine scrub the floor using a properly diluted Neutral pH cleaner (Hilway Direct – Neutral Cleaner or mild Alkaline cleaner (Call 1-877-356-6748 for recommended cleaner) solution in cool water. Use a 3M 5300 Blue pad (or equal). Let solution stand for 5-10 minutes. Do not use a black or brown pad.
- Completely remove the cleaning solution with a wet-dry vacuum or auto scrubber and do not allow the solution to dry on the floor.
- Rinse the floor thoroughly with clean water and allow floor to dry. Fans or air movers can speed up the drying time.

HILWAY DIRECT FLOOR FINISH – MATTE APPLICATION DIRECTIONS:

- Dry sweep then damp mop floor to remove loose dirt and soil from floor. Thoroughly clean floor with Hilway Direct Neutral Cleaner or Allsafe Stripper.
- Remove any old site-applied acrylic coating. This usually can be done with Hilway Direct Allsafe Stripper diluted 1:5 or 1:10 with clean water, in an auto scrubber or low rpm swing machine with a red or blue pad or equivalent. Always rinse and neutralize floor with clean water after removing old coating. Do not let stripper solution dry on floor.
- Shake Hilway Direct Floor Finish - Matte vigorously for 30 seconds then let it settle for 5 minutes. Apply undiluted in a thin, even coat using a microfiber applicator mop. Do not use treated dust mops.
- Apply 2-3 coats. Allow each coat to air dry completely (generally 30-60 minutes) before applying next coat.
- Allow floor surface to dry overnight before heavy traffic use.

Application Coverage: Undiluted, single coat: 1500 – 2000 square feet/ 1.33 gallons. Coverage may vary depending on porosity of flooring material.

Where to Buy?
For complete maintenance guidelines for your floor contact your local supplier.