

Construction Guide

How to choose pattern

Select appropriate thickness by estimating how much people walk.

No.	Pedestrian volume	Construction place	Box thickness (mm)
1	Very high volume	Entrance of department store, theater, school facilities, large stores, and large restaurants	0.75 ~ 1.00
2	High volume	Stores in the department stores, school facilities, general hospitals, large stores, karaoke, PC room, etc	0.50 ~ 0.75
3	Normal	Regular stores, office, karaoke, PC room, residential space, and regular restaurants with chairs	Normal ~ 0.5

How to construct

1. Distribute all the devices needed for the construction including adhesives, cutter, ruler, straight ruler, application knife, compass, scrapper, and edge cutter in advance.
2. Make sure that the colors, surface emboss, and glossing conditions are equal if it is not the same lot after checking whether the tiles to be constructed are the identical lots before disassembling the box
3. Make sure to draw the central weight and length line at the place for construction according to the drawing method and have the reference point ready
4. Indicate the starting point to make the areas of products contacting with four sides consistent to keep the balance of the entire areas at the place to be constructed
5. Make sure to draw according to the 45 degree line in case of diagonal direction and adjust the starting point to make the consistent figures on four sides
6. Make sure to read the notes of attention if distributing the adhesives
7. Make sure to apply the adhesive thinly and evenly with regulated knife (0.8 x 6 x 2.0mm)
Attach the tile after 20 to 30 minutes after applying
Period of construction slightly differs depending on indoor temperature and humidity as well as types of adhesives
8. Make sure to construct in the interval of 2mm on the wall
9. Make sure not to smoke cigarette or have the fire near the construction area as the urethane adhesive or epoxy adhesive are flammable
10. Make sure to immediately remove the adhesive on the tile surface before it is hardened
Acryl adhesive shall be cleaned by squeezing it with soap water on a piece of clean cloth, and urethane adhesive shall be cleaned with alcohol.

Conditions of construction

1. Construction period
Construction of the floor shall be proceeded at the last after completing internal construction (paint, wall paper, windows, and varnish)
2. Construction materials
Check on every construction material
Tile - color, size, same lot, gloss, quantity
Adhesive - types, maker, consumed amount
Floor patch - types, maker, consumed amount
3. Construction place and temperature
Tiles and adhesives shall be maintained in the consistent indoor temperature between 21 and 30 degree about 48 hours of the initial construction
4. Humidity of the floor
Floor shall not have moisture or condensation when checking with the RMA humidity tester.
Make sure to attach the vinyl close to the cement floor with temporary tester and check the humidity and condensation conditions after 24 hours
5. Indoor air circulation
Make sure to circulate air in indoor space to evenly provide consistent temperature between 21 and 37 degree from the ceiling to left corner and right corner.
6. Construction equipment
Construction equipment shall be managed by each type and set.
7. Construction conditions
Make sure to supplement after negotiating with contract party in case of conflicts in construction conditions

Places where cannot be constructed

1. Areas with plastic tiles or floor materials
2. Areas applied with asphalt adhesives or asphalt surface
3. Floors with gypsum ingredients
4. Wooden or concrete floor with paint
5. Not perfectly completed cement bar
6. Floor with cement or sand powder
7. Concrete floor with less than 1600kg/m³ of the density
8. Wooden floor with gap
9. Particle board, lauan plywood, chip board, or flake board
10. Plywood processed to be inflammable or antiseptic-applied
11. Unstable wooden floor when walking
12. Water leaking floor
13. Place with uneven floor by DJ-TM-0203 and 0204
14. Areas that other constructions are not yet completed

How to choose cement floor

1. Make sure to remove various foreign substances including plaster, mortar, oil, grease, various hardening agents, dust, paint, and concrete leftover and clean with vacuum cleaner or dust remover
2. Make sure to solve an issue by negotiating with contractor for the concrete surface with poor conditions or weak areas
3. Floors with oil are not well applied with adhesives. Therefore, it is required to negotiate with contractor or floor constructor
4. Corrective adhesive shall be wiped with soap water. However, make sure not to construct before the floor is cleanly dried
5. Make sure to fill out all the holes or gap to keep the height consistent
6. In general, floor evenness shall be up to 6.4mm a time while restarting to coat after drying for more than 24 hours.
7. Make sure to apply primer before applying the LATEX patching on the highly absorptive concrete
8. Make sure to apply primer on the area where adhesive is not well permeated such as the cement floor where is constructed with machine or ceramic and terrazzo . At this time, make sure to remove thinner, paint, varnish, wax, or oil on the terrazzo surface or ceramic in advance
9. Make sure not to apply LATEX patching application in the temperature lower than 10 degree. If drying the applied LATEX patching, make sure to the direct sunlight
10. Make sure to check the mixing liquid or drying ingredients by inquiring the maker in terms of the floor patching ingredients
11. Make sure to neutralize before constructing for the floor-evenness if there are leftovers of strong acid or alkali on the surface

How to even out wooden floor

1. Check whether it is possible to construct as the floor surface of plywood to be constructed is not even without shaking
2. Make sure to even out the floor with plywood applied with sand on the surface for more than APA grade sturd-1-floor in principles on the wooden floor that is difficult to be constructed
3. Floor surface on the ground (1st floor) shall be well-ventilated with air by installing it on the height of 46cm or higher.
4. Make sure to construct with thickness of plywood of 6.4mm or higher in APA grade in the place where is easy to be contacted with water such as restroom, kitchen, rest area, or other areas
5. Wood might be changed in terms of measurement depending on the changes of air humidity. Therefore, it is required to well-finalize in consideration of conditions of changes on the last coupling.
6. Joint shall not be consistent with the floor joint. In addition, joint shall be closely attached towards the middle of plywood.
7. Panel shall be constructed to be vertical with long sides on the crossbeam. Therefore, it is parallel with the shorter sides on the crossbeam
8. In order to prevent adhesive from being absorbed, make sure to apply the varnish slightly on the surface of plywood.

Notes of attention when applying adhesives

1. Make sure to check if floor is conforming with construction conditions
2. Make sure to remove all the foreign substances on the floor surface and maintain it as an even and clean status
3. Make sure to estimate the content of water with RMA moisture estimator
Make sure to estimate the central area and the area 1.5m away from the wall at the place to be constructed to keep them less than 1.36kg/93m²/24 hours.
4. Make sure to check whether adhesive has been preserved in the pre-determined temperature
5. Make sure to use the designated cutter for application and use the new one if initiating the work.
If the cutter is too abraded, or there is a foreign substance on them, it is recommended to replace to a new one. Make sure to reduce duplicated application as much as possible. If the cutter is too wide, the area being applied becomes too wide that the amount of application becomes inconsistent, and furrow might occur on the surface of tile in the end.
6. Make sure to keep that cutter is abraded fast when constructing on the concrete floor instead of wooden floor such as plywood in mind.

7. Adhesive shall be applied towards the tiles that have recently been constructed from the floor to be constructed. Tiles are attached in the same direction.
8. Make sure to evenly roll the entire sides of three-sided roller after constructing tiles (50kg). After about two hours, make sure to roll again.
However, make sure not to roll if using epoxy adhesive
9. When placing tiles, make sure not to push to keep them consistent but place them.
10. Adhesive coming out of the gap shall be removed before it is hardened.
Acryl adhesive shall be wiped with clothes squeezed without water, and urethane adhesive shall be wiped with alcohol types.
11. Acryl adhesive shall be checked in advance as it becomes not adhesive when being frozen.

How to protect floor with heavy objects

No.	Items	What to be avoided	Good examples
1	Heel	There might be devastated damage on the floors with shoes with sharp spike or heel	Not influenced by shoes with wider areas of contact
2	Texture of foothold	Rubber texture support might be contaminant that is not removed.	Recommended to place the support with solid and even plastic features
3	Roller surface area	Roller with small diameter might make furrow.	Use wide nylon wheel caster
3	Area of foothold	Metal support with small and narrow dome shape shall be removed.	Make sure to attach sliding plate attached with pelt or make the wide floor support that is not contaminated

1. Crushed tile floor in the furniture or indoor facilities might be permanently damaged.
Therefore, make sure to consider them when placing the furniture or chair to take an action
2. For moving chair or furniture, easily sliding roller shall be used due to the even contacting area and large diameter
3. Rubber texture roller might become contaminant on the floor. Therefore, nylon texture is recommended. Metal roller might damage on the floor.
4. Make sure to attach the even and soft pelt for fixture cabinets, table, or chair. Small bearing or metal dome is not appropriate as they make deep groove.

Follow-up management of the construction

Management immediately after the construction

1. Make sure not to walk within 24 hours until tiles are well attached or place furniture.
In addition, make sure not to clean with water for 3 days. After 3 days, make sure to squeeze well the mop so that water is not infiltrated into the gap.
If the surface of adhesive is hardened, make sure to slightly wipe it with nylon sponge.
2. If the surface is completely clean, make sure to apply a small amount of wax on the floor or clean mop and apply it in a consistent interval and direction.
At this time, make sure not to step on the floor applied with wax.
3. Once wax is applied, make sure to wait until it is completely dried. Drying hours are different for each product, so make sure to check them.
4. Make sure to apply in the vertical direction from the application

Regular management (how to clean on a daily schedule)

1. When contaminants or sands are on the floor, there might be scratch or damage on the floor. Therefore, make sure to clean on a routinely basis.
2. When liquid is spilled, make sure to clean it with clean cloth and apply neutral detergent to wipe it out. Oily stains are removed by alkali detergent.
3. Make sure to apply the neutral detergent on the mop and clean every day.
4. It is available to spray clean the coated tiles with 3M red pad and un-coated tiles with 3M blue pad.
5. Available to gloss the coated tile floors with tan pad for pedestrian purpose.

Regular management (wax coating)

Make sure to wax coat once per six months with low pedestrian volume and once per two to three months with high pedestrian volume.

1. Make sure to remove dust, sand, and substances attached to the floor.
2. Make sure to dilute water-based cleaner by 5 to 8 times of water. Make sure to only soak the mop with diluted solution to clean the floor.
At this time, make sure not to use strong cleaner or wire brush that is abraded or rough pad.
3. Scratch that is not removed by cleaner shall be removed by slightly wiping with the pad that is used for removing the oil on the fry pan.
4. When removing the coated wax, make sure to apply wax remover (stripper) when removing the coated wax on the floor and use bar pin.
Operation of bar pin shall be done by well-trained person with appropriate RPM.
5. When bar pin is completed, make sure to collect dirty water with sponge scrapper before it is dried out on the floor and suck it up by vacuum cleaner.
6. Make sure to clean again with clean mop and wax coat for 2 to 3 times.