

# Construction Guide of Nabel Products

## Construction Attentions

1. Before installation, please read “User Instruction” indicated on the product packing container, and install as per “User Instruction” and this manual.
2. During installation, colorless or transparent plastic film should be used to protect the surface of tiles; there should be nothing placed on tiles; be careful of the damage to tile surface caused by cement, sand, rubber, etc., and protect tiles from paint, coating, etc.; avoid heavy colliding and striking.
3. To minimize the negative effects caused by cement contraction, deformation of wall, and heat-expansion and cold-contraction, please leave appropriate space between tiles when they are paved. For tiles rectified, leave space of 2~4mm (0.08 " ~0.16 " ); for tiles not rectified, leave more space. Plastic “cross” tool which corresponds to the space is better to be used during installation.
4. To get best effects, please pave tiles as per tile design pattern; when the design pattern is not distinct enough, follow the logo’s direction indicted on the back of tiles.(for more detail refer to “User Instruction”)
5. For tiles with low absorption (Porcelain Tiles, Stoneware Porcelain Tiles. E.g. YG, YS, VS, CN, etc), qualified professional adhesives are recommended.
6. For cutting-processing tiles, please pave them with principle of “cutting side to cutting side, original side to original side”; in addition, “T” paving method is not recommended.
7. For tiles used in places with special conditions, e.g. swimming pool, floor heating, plaster tablet, please consult professionals and technical.
8. For tiles with coating on the surface, we recommend to uncover them after installation and cleaning.
9. For stone-imitated tile (e.g. VS series), hues and veins fluctuate considerably. Therefore, it is better to prepave it.

# Construction Procedure

## Step 1: Checking

- \* Before installing the tiles, check the tile's spec, shade, bulk lot, etc. indicated on the carton box, and tiles of different bulk lots should be installed separately.

## Step 2: Base treatment

- \* The surface of base should be flat, and free from dust and dirt. Base structure should be solid and stable
- \* Newly-built floors and walls should be qualified before installing.
- \* Wall surface-treatment can effectively prevent ceramic tile from detaching and air-cavity.
- \* Paving methods include dry process and the wet process. For dry process, using dry cement sand (1:3) for leveling, the thickness should be around 25mm(1 " ), then using cement mortar to pave tiles. For wet process, the surface of base should be flat, then paving tiles directly.

## Step 3: Pre-paving

- \* In order to get the full effect, we can prepave tiles.

## Step 4: Material Selection

- \* Floor tiles or tiles with high absorption, we recommend cement.
  - 32.5 Mpa Portland Cement;
  - Medium coarse sand ( sediment concentration < 3% )
  - Cement paste ( cement: sand=1:1 ~ 1:3)
- \* Tiles with low absorption or tiles used on special place. We recommend professional adhesive

## Step 5: Positioning

- \* In order to position tiles and decrease construction loss, it is better to snap the line by ink box

## Step 6: Paving

- \* Back Treatment: Before installation, clean the back of tile properly and thoroughly by scrub brush, be free of dust and dirt.
- \* Soaking: Except the Vetrified Tiles (Polished Tiles, Porcelain Tiles (e.g. VS, YG,YS etc.)), other tiles should be soaking in the water for at least 1 hour, then install them after there is no water on the surface.

- \* **Joint:** When installing the wall and floor tiles, we suggest to leave spaces of 2~4 mm (0.08 " ~0.16 " ) for rectified tiles or 3~6mm (0.12 " ~0.24 " ) for non-rectified between the adjacent tiles respectively. Plastic “cross” tool which corresponds to the space is better to be used during installation.
- \* **Paving direction:** For better Pattern, install the tiles as per the matched design pattern, otherwise follow the logo’s direction on keyback.
- \* **Paving method:** Method one is usually applied to Cement, Adhesive can adopt either method one or method two.

Method one:

1. Spread cement paste (or adhesive) on the back of tile evenly.
2. Pave tiles on the base level evenly and press tile by hands.
3. Use rubber hammer covered by clean cloth to knock the tile lightly, making a full contact between tile back and grout.

Method two:

1. Spread Adhesive on the Base evenly.
2. Use jugged scraper to blade coating.
3. Affix.

(For large sized tiles, adhesive is recommended to spread on both tiles and base)

### **Step 7: Joint filling**

- \* It is better to use sand-free joint mixture
- \* Light-color joint mixture is fit to Light-color tiles; Deep-color joint mixture is fit to deep-color tiles.
- \* Before filling seams, the seams should be clean and free of water and dust.
- \* Squeeze joint mixture into joints by rubber spatula and joint-pressing knife, etc.

### **Step 8: Cleaning**

- \* Wipe off extra joint mixture by wet sponge after joint mixture lightly solidifies. (Generally 10~20Mins)
- \* Use soft cloth to clean tile after the joint mixture is fully dry. (Generally 10~20Mins)

### **Step 9: Checking**

- \* After 24 hour, use a small hammer to check whether there is air-cavity existing by knocking tile.
- \* Repave the tile if air-cavity exists.

## For Tile Maintenance

- \* Use household detergent, soap with little ammonia or linseed oil and turpentine mixture, etc. for daily cleaning. If some strong colorant like ink sprays on the surface of the ceramic tiles, please clean at once. Periodical waxing at intervals of every 2~3 months can assure better proof against stain.
- \* For cure of tiny scratches on the tiles, first spread some toothpaste, then wipe repeatedly with soft dry cloth.
- \* All the contamination should be immediately removed or cleaned according to the following tips of maintenance.

<b>Kinds of Stain</b>	<b>Maintenance</b>
Tea, Juice, Coffee, Ice cream, Iron Or Rubber marks	Acidic Detergent Or Diluted Hydrochloric Lotion
Paint, Crease, etc.	Oil of Bananas(Caution Flammable)
Wet Cardboard or Other colorant	Bleacher
Ink	Sodium Hypochlorite Lotion or Alcoholic, Detergent
Chalk marks or Gentian Violet	Chlorylene or Acetone
Wax	Alkaline Lotion
Cement or Sand Slurry	Diluted Hydrochloric Acid or Acidic Lotion etc.
Metal Scratches or Pen marks	Sodium Hypochlorite Lotion or Detergent

Remark: Use chemical detergent with care due to possible corrosion against marble, granite, natural stone, metal, etc., applied for decoration, inserts, etc.

## FAQ and Disposal Method

<b>FAQ</b>	<b>Possible Causes</b>	<b>Solution</b>
<b>Poor Connection among Tiles</b>	Tiles may be from different batches or sizes	Check the carton box
	Joints are uneven	Use "Cross" tool
	Deviations still exist under normal situation	Measure tiles by rule
<b>Poor Flatness</b>	Construction Problems	Not paving as per the same direction; Four corners are not aligned
	Floor is not flat	Check the floor
	Tiles paved may be cut from big tiles	Check whether they are from the same big tiles

<b>Chromatism</b>	From different batches	Check the carton box
	Not following the logo's direction on keyback	Some tiles have light chromatism, so it is better to follow the logo's direction on keyback if the design pattern is not distinct
	Caused by special productive technology	Check whether it is what you need before purchasing
	There is anti-fouling agent or silicon oil on tile surface	Clean them by alkaline solution or household cleanser
<b>Stain repellent</b>	Stain repellent of Vetrified tiles	There is no glazed on the surface of vetrified tiles, so it is hard to protect them from dirt. Therefore, daily cleaning is important. If some strong colorant like ink sprays on the surface of the ceramic tiles, please clean at once. Periodical waxing at intervals of every 2~3 months can assure better proof against stain
	Stain repellent of Glazed tiles.	Tile with broken glaze leads to stain attack. We do not recommend to pave glazed tiles on areas with a high flow of people.
<b>Crazing</b>	Deformation of wall	We cannot pave tiles on the wall immediately which has been remolded recently
	Too little space between tiles	Leave appropriate space between tiles
	Cracks are regular	Caused by land subsidence
	Tiles are cut before	There is hidden crack caused by cutting. It is better to cut tiles by professional water cutter
<b>Tiles cannot be paved</b>	Cement is not qualified	We recommend qualified cement (32.5Mpa; cement:sand=1:1~1:3)
	The back of tile is not clean	Wipe off dirt and dust by professional tools