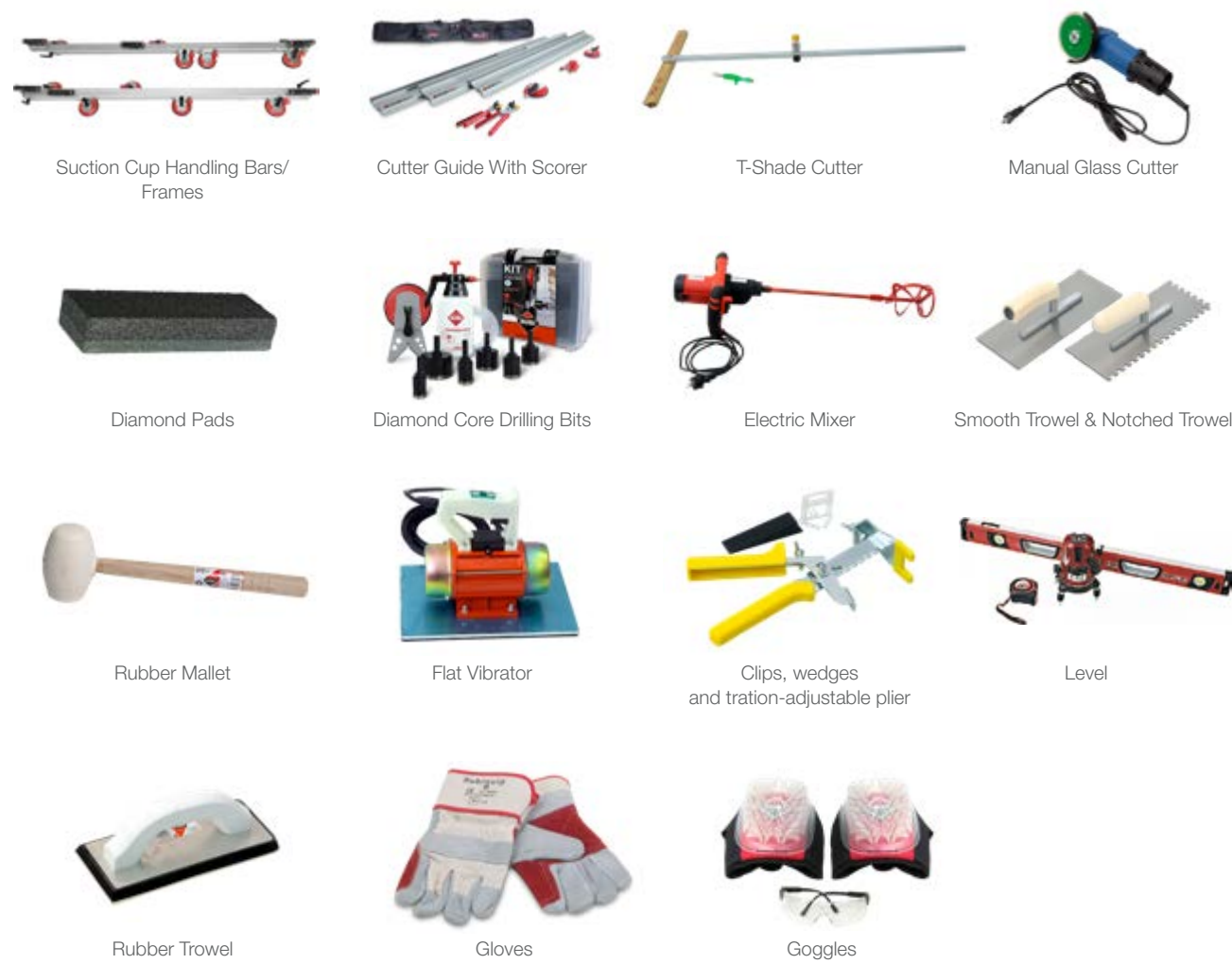


# INSTALLATION TOOLS



# THIN-SET METHOD

## 1. PREPARE THE SUBSTRATE

The surface of the substrate should be clean and free of any substance that may prevent, reduce or affect adhesion or performance. Before installation, wash the substrate and make sure it is clear of any residue larger than 10 mm in diameter. Wait till there is no water on the substrate to start installation. Divide the substrate according to the design needs and mark standard point of the surface to control the size out of the wall and the vertical flatness. (FIGURE 1&3)



FIGURE 1



FIGURE 3

## 2. MIX THE ADHESIVE

Pour some water in a bucket and add the powdered adhesive. Mix it with a low-speed electric mixer until it is the same consistency as toothpaste. (Figure 4-5)



FIGURE 4



FIGURE 5

## 3. APPLY THE ADHESIVE

Use the flat side of the notched trowel to apply a flat layer of adhesive on the substrate, then run the notched side at a 45- to 60- degree angle through the adhesive and comb it into continuous and erect ridges. Apply the adhesive in the same way on the back of each porcelain panel. (Figure 6-7)



FIGURE 6



FIGURE 7

## 4. PREPARE THE SUBSTRATE

Lay the back-buttered porcelain panel one by one on the combed substrate. For safety and proper installing, use the suction cup handling bars to move the panels. (Figure 8-9)



FIGURE 8



FIGURE 9

## 5. LEVEL AND BED THE PANELS

Tap in the whole porcelain panel with a rubber mallet to ensure solid bond strength of the adhesive between the panel and the substrate. (Figure 10-11)



FIGURE 10



## 6. ADJUST THE FLATNESS AND EVENNESS

For perfect level and efficient installation of porcelain panel, levelers should be used. (Figure 12)



FIGURE 12

## 7. CLEAN AND GROUT THE PANELS

After laying the panels, insert the clips underneath them and along the 4 sides. Then insert the wedges in the clips slot and adjust them with the special traction-adjustable-pliers to adjust the joints and make ensure the evenness between panels.  
( Figure 13-14 )

## 8. REMOVE THE CLIPS

Once the adhesive is fully set, remove the protruding part of the clips with a rubber mallet.  
( Figure 15 )

## 9. CLEAN AND GROUT THE PANELS

After the porcelain panels are installed, remove excess adhesive on the surface to protect the panels from any stains or marks. Then apply grout, clean up after grouting and maintain as needed.  
( Figure 16-17 )

# CUTTING INSTRUCTION

## 1. CUTTING AND DRILLING

You can easily cut a 5.5Mm porcelain panel with a diamond-tipped cutter or glass cutter available in the market.

1. Score the surface from one edge to another, with the cutting point always touching and moving along the cutting line at a vertical angle. Run the cutting point through the whole line once with continuous and even pressure.  
( Figure 1 )

2. After completing the score line, apply firm and even pressure to snap the panel cleanly along the score with one hand on the center of each side of the score or with both hands on the center of one side of the score.  
( Figure 2 )



FIGURE 13



FIGURE 14



FIGURE 15



FIGURE 16



FIGURE 17



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4

3. A slightly curved cut can be made using a manual glass cutter and is ideal for fitting in borders.  
( Figure 3&4 )

4. Manually or electrically smooth the cut edge with a diamond pad for best edge treatment and to avoid a sharp edge.  
( Figure 5.1&5.2 )

Note: 8.5-20.5Mm porcelain panels should be cut with a cutting workbench and tools specialized for stone or traditional ceramic tiles. Alternatively a hand-held marble cutter may be used for small projects.

## 2. SHAPED CUTTING

2-1. Arc line cutting: make a mould of the intended shape, and draw out cutting lines on the panel along the mould. Use a high-speed hand-held wheel cutter to slowly press across the lines.  
( Figure 7&8 )

2-2. Square cutting: plan the square by marking and linking 4 relief holes, drill the holes to an appropriate size and cut along the lines with a hand-held cutter.  
( Figure 9&10 )

## 3. DRILLING

3-1. Mark where the hole will be drilled, and drill it with an electric drill fitted with round/cup diamond core drilling bits with continuous teeth and in good condition. Different cutters are selected according to the sizes of the holes. Drilled or cut porcelain panels should be handled and stored with care. ( Figure 11 )



FIGURE 5.1



FIGURE 5.2



FIGURE 6



FIGURE 7



FIGURE 8



FIGURE 9



FIGURE 10



FIGURE 11