

## CERAMICSTEEL PANELS

# Interior Panel Processing Manual



Polyvision Interior CeramicSteel Solutions products are a unique approach to today's market demand for sustainable, hygienic surfaces in public and corporate spaces. As spaces flex to accommodate varying volumes of people, design elements that provide form and function while protecting the hygienic conditions of the space are becoming the gold star of smart design. This manual guides you through the processing of CeramicSteel panels and installation.

# Handling

Before starting the installation of CeramicSteel panels:

1. Verify that the required equipment is available and the material provided is accurate.
2. Follow all safety instructions regarding personal protection when processing the panels.
3. Provide adequate protection for finished floor surfaces.
4. Prevent dirt from settling on and between panels to avoid surface damage, scratches, or defects.
5. Protect panel surface against sawdust and sparks (metal particles).
6. Make sure panels are well supported and clamped on a table or on trestles.

# Equipment and Instructions

## Sawing Equipment

To saw panels, usage of a panel saw (Fig. 1) or circular saw (Fig. 2), for onsite cutting is required.



Fig. 1



Fig. 2

Both machines require a specific blade type:

- Multi Material Blade (eg Bosch)
- Widia blade
- Teeth: between 60-80
- Angle: neg.  $-3^{\circ}/-5^{\circ}$  (Fig. 3)
- Teeth shape: teeth angle and shape every other tooth (Fig. 4)

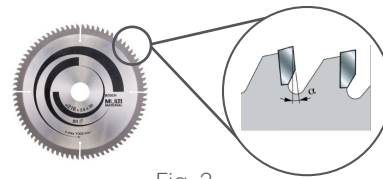


Fig. 3

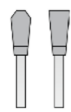


Fig. 4

## Before sawing or cutting:

Make an accurate measurement of the area you want to cover with the panels, mark the height and width on the panel.

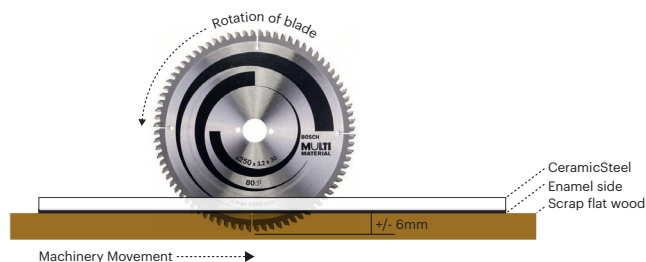
Protect the area where the cutting will be done by covering it with paper tape, cardboard or plastic. This is to prevent surface damage from chips coming off the board.

## Saw instructions:

1. Put the panel on scrap flat board at least 12 mm thick.
2. Place the CeramicSteel surface facing down on top of the wooden panel.
3. Cut the panel with the help of guiding rail (Fig. 5).  $\pm 6$  mm through bottom wooden panel.
4. This will prevent large chipping off.
5. After cutting, it is recommended to grind the edges with a grinder grade P120 – P180. (Instruction: see topic Edge Treatment)



Fig. 5



### Drilling Equipment

To drill pilot holes for pendulum saw, cable holes, light switches, electrical sockets. Required equipment: Drilling machine, center punch (Fig. 6) and drill. Depending on the type of hole, use a metal drill (Fig. 7), conical metal drill (Fig. 8) or hole saw cutter (Fig. 9).



Fig. 6



Fig. 7



Fig. 8



Fig. 9



### Cutting Equipment

To cut out squares for light switches and electrical outlets use a pendulum saw. Type of saw: cutting blade for stainless steel



#### Cutout Instructions:

1. Place the finished side up.
2. Apply masking tape to the entire area to cut. Be sure to apply enough to protect the surface from the base plate of the saw.
3. Drilling a hole
  - A. Punch with center punch to break the surface
  - B. Drill the hole with the right equipment
    - Metal Drill (small hole)
    - Conical drill for holes up to diameter 32 mm
    - Metal hole saw cutter (bigger holes). To start: insert in an angle to cut through the enamel steel surface.

Cutting squares (using a pendulum saw)

- A. Draw the area to cut
- B. Punch with center punch
- C. Drill the hole with a metal drill diameter 10mm, 5mm from the edge to cut
- D. Cut area with pendulum saw

Note: CeramicSteel can chip off approximately 1 mm when cut or drilled with power tools. Always check the state of cutting tools and that the panel is adequately supported and clamped to prevent it from vibrating.

4. Burrs left after cutting can be removed with a grinder (sand paper grade P120-P180).

### Grinding Equipment

To remove the burrs after sawing and/or cutting.  
Type of grind paper: medium to fine grains P120 - P180

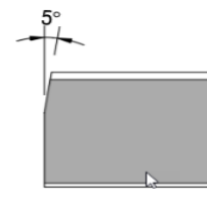


## Edge Treatment

After cutting the CeramicSteel panel, it is recommended to grind the edges. Use a grinding machine with sand paper between P120-P180.

Keep the grinding machine under an angle.

*Caution: Protect the nearby panels against metal sparks*



## Panel Installation

### Gluing CeramicSteel Panels to the Wall

- Recommendation: using Hi -tack glue and 3M VHB tape (prevent the panels coming off the wall in the first few hours). This glue can take 4-5 mm tolerance wall imperfections.
- Use suction cups to install the panels.
- When mounting multiple panels, the usage of tile clips (Fig. 10) or space tape can help with the alignment. Especially recommended for 6mm thick panels, due to the flexibility.
- Recommended to choose waterjet cuts (standard edges) for multiple seamless joints.
- To finish inner corners a silicon gel can be used.

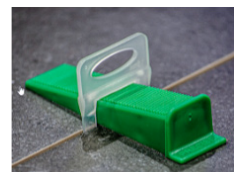


Fig. 10

## Minimum Required Wall Construction (for wall mounting/ gluing)

A standard gypsum wall or cement board wall is sufficient.  
The wall has to be flat and strong enough to hold panels.

## General Advice

The above are recommendations only.



For more information and orders, please contact  
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