## GRANDEX®

# Peculiarities of manufacturing items out of GRANDEX slabs with spangles

#### Manual

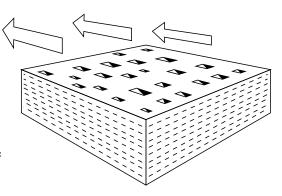


# Peculiarities of manufacturing items out of GRANDEX slabs with spangles

GRANDEX acrylic stone collections contain colors with metallic spangles (e.g., S-202, S-203, S-212, E-616, E-617, E-618, A-420 and others). Sometimes specialists handling stone face challenges when manufacturing items out of such slabs.

The main difficulty consists in the light being reflected differently by spangles when the item is made from several parts.

Sparkling particles are thin mirror-like scales, oriented in a certain pattern inside the acrylic polymer. Depending on the angle at which the light hits the surface, they reflect it to a greater or lesser extent. Spangles are usually not visible on the ends of acrylic sheets.



In our recommendations, you can find out how to work with GRANDEX acrylic slabs with spangles to minimize the effect of different reflections of light in various parts of the glued surface.

#### Important!

Illustrations should not be used as a complete guide for proper manufacturing. All inner angles must be rounded.

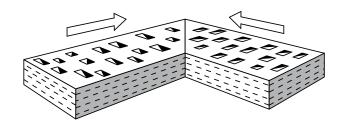
#### **GLUING THE WORKING SURFACE**

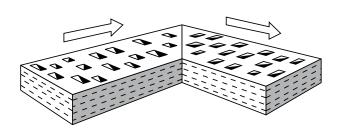
During the manufacture of L-shaped and U-shaped countertops out of GRANDEX sheets with spangles, slight color differences between separate parts may be observed, which appears when you look at the countertop from different angles. This peculiarity is not a defect, yet it is worth warning the customer of such a possibility before starting the manufacturing process.

#### 1. Diagonal adhesion

Using diagonal seams in the manufacture of L-shaped and U-shaped countertops made of GRANDEX sheets with spangles creates a subtle, visually pleasant change in the direction of light reflection.

Parts of the countertop should be cut so that the inscriptions on the sheet reverse are "running" towards each other (as shown in the image).



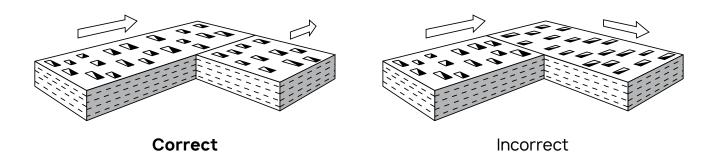


**Correct** Incorrect

#### 2. Adhesion on the ends

If the bend of the L-shaped or U-shaped countertop does not exceed 1500 mm, adhesion on the ends may be used.

To minimize the differences in color, inscriptions on the sheet reverse of the additional countertop should be running in parallel and in the same direction, as on the main part.



#### 3. Adhesion on the ends of kitchen islands and half-islands

When manufacturing a kitchen island or half-island with a width of more than 760 mm, inscriptions on the reverse should run in parallel and in the same direction.

If the cut part has no inscription, paint an arrow on the sheet reverse showing the direction of the inscription.

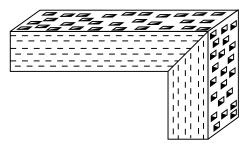
#### **EDGE HANDLING**

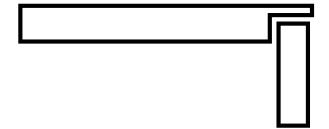
Scales on the ends of the sheet do not reflect light well. This lack of reflection is especially noticeable on thick end edges. The following options of end edge finish are possible.

#### 1. V-shaped slot on the side

The V-shaped seam looks better, as spangles are clearly visible on the entire surface.

We recommend using a small milling profile for the V-shaped seam.





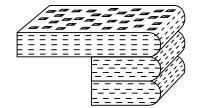
#### 2. Adhesion by the quarter

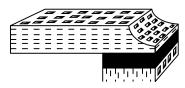
Adhesion of the quarter of the end component is quite simple in technical terms. Because of the small area of the side edge, especially during corner rounding or chamfering, the color difference is not visible.

#### 3. Stack (layered) side

Long profile cutters show more spangles and may improve the appearance of the layered edge.

Additional stripe in another color (sandwich) breaks up the side and draws attention from the disappearing spangles.

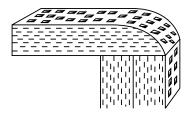


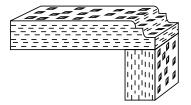


#### 4. Vertical edges

Vertical edges created by adding a vertical stripe, require large or detailed profiles to reveal spangles.

For a uniform spangle display, stripes should be connected at a 45-degree angle at the corners.



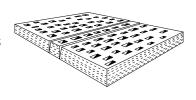


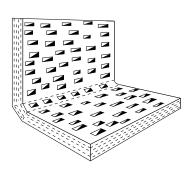
#### **REAR BOARD**

A standard rear board looks well when made of GRANDEX sheets with spangles.

### 1. V-shaped cutout for the rear board

The rear board looks best when it is made using a V-shaped cutout, as spangles are clearly visible on the entire surface.

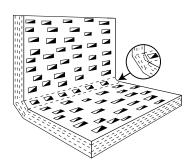




#### 2. Imitation of the V-shaped cutout for a rear board

If the machine for manufacturing V-shaped cutouts is not available, this board can be imitated using a manual milling machine with a 22.5-degree cutter or a panel saw with a saw blade angle of 22.5 degrees. On the cutout reverse, stick adhesive tape, fold parts of the board and fixate them.





#### 3. Radius rear board

A radius board will look well if the below rules are followed. For inner rounding, use the milling machine or cutter.

- Spangles on the front of the stripe must be oriented in the same direction as the spangles on the rear board.
- 2. Cut a part of the rear board so that it can fit in the groove on the rear part of the countertop.
- 3. Make a 3 x 13 mm groove at the bottom of the front part of the board.
- 4. Cut the 13 x13 mm strip to the length of the board.
- 5. Glue all board parts together.
- 6. After the adhesive polymerizes, cut the excess material at the bottom of the rear board.



#### **IMPORTANT!**

The structure of GRANDEX A-420 color has a very small size of spangles, which gives this color incredible shine. However, color differences in separate parts may appear even when you connect parts IN ONE DIRECTION!

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