## **HI·MACS**





The new HIMACS shape generation - from 2018- has a different formulation and causes an improved material and quality performance in accordance to EN 13310 with more than 1000 cycles of thermal shock resistance. Cast shapes of ours are covered under the 15year- Limited Installed Warranty Program.

## ■ 1. Shape Installation

HIMACS cast sinks and bowls, HIMACS Thermoformed sinks and bowls can be fitted with or without a rebate. Using the rebate method **is mandatory** when sheet and shape have the same color to be covered by the 15-year Limited Installed Warranty Program. (Fig.1)

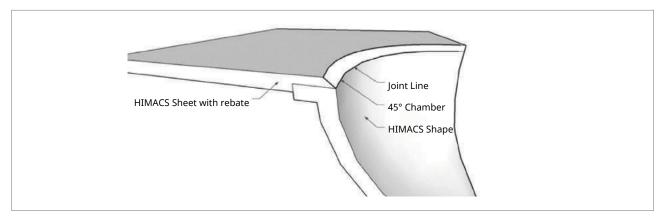


Fig.1

When the color of the sheet and shape is different an easy butt seam under-mount technique can be done. Ensure the surface where you bond is smoothening. (Fig.2)

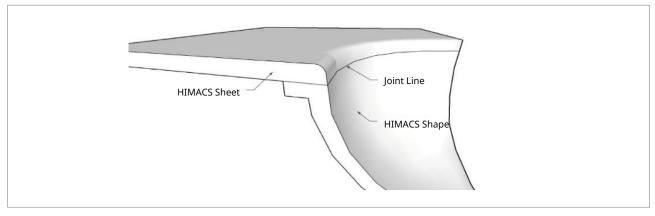
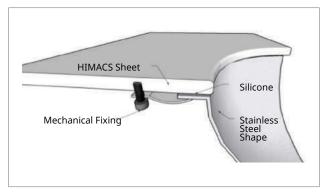


Fig.2



Other shapes like stainless-steel or ceramic shapes can be installed as shown in Fig. 3 under-mount and Fig. 4 top-mount.



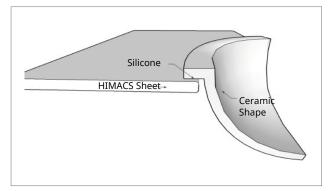


Fig.3 Fig.4

## 2. Shape Installation with Rebate

Use a pre-made cut-out template made out of MDF or any other wooden material. Calculate the cutout so, that the whole of the final cutout in the sheet is smaller than the inside diameter of the shape. An overhang (oversize) of 2 to 3mm is fine. Bring the "cutout template" in position and fix it properly with clamps. Ensure the work-piece is in a straight position

and properly supported. Rout the cutout (clockwise) by using a hand router with a min. of 1.8KW power and which is able to take a 12mm shank, a 10mm single flute carbide router bit with a 12mm shank and a 30mm sleeve guide. (Fig. 5)

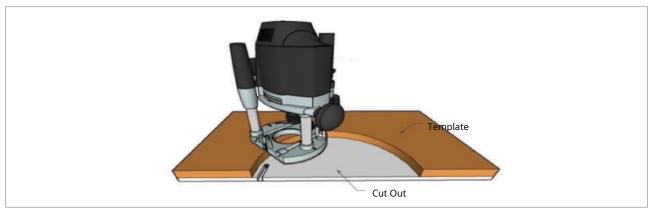


Fig.5



Remove the "cutout template" and position the "rebate template". Use a sharp 20mm double flute carbide router (side and ground cutter) with a 30mm sleeve guide. Install the depth of the router in a way that at least 4mm of material thickness of the HIMACS sheet will be left.

After finishing this step, take off the "rebate template" and proceed with the normal cleaning procedure, using denatured alcohol and a white clean cloth or a white industrial paper. (Fig.6)

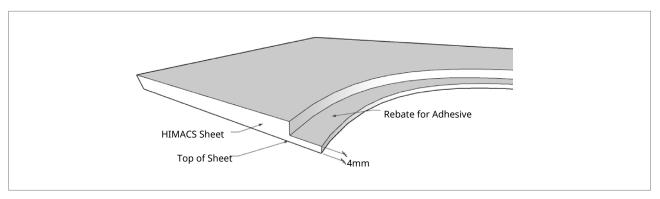


Fig.6

Clean the rebate and the edge of the shape which will be bounded to remove any dust, grease or pen marks – best with denatured alcohol and a white cloth. After cleaning do not touch with your fingers. If so, clean it again because dirt may show up in the glue line later.

Prepare HIMACS-Adhesive. Fill in the tube with the filler component of the tube with the hardener. Squeeze out some air and close the top of the tube with the plug. Put the tube in an orbital sander and mix it properly for at least 1.5 min. by moving the tube to the left and to the right direction.

Ensure the mixing of the adhesive is properly done. Put on the adhesive in a continuous line into the rebate or on the edge of the shape. (Fig. 7)

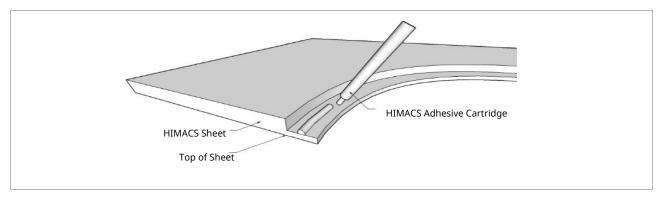


Fig.7



Turn over the shape and position it into the rebate. Ensure the drain whole is on the right place when turning the sheet later and that the shape is placed square.

When the shape is in the right position, clamp it down with clamps or with a thread through the drain whole protected by a thick sheet of wood and additional clamps in front if needed. Ensure not to over tighten the strip. (Fig.8)

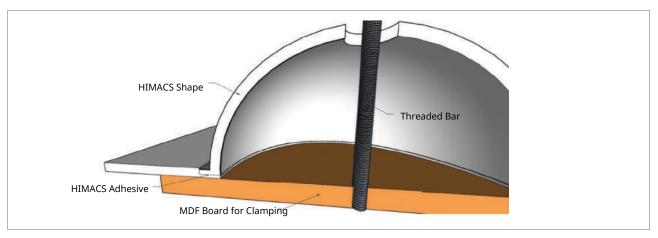


Fig.8

Leave the HIMACS-Adhesive cure for at least 35min. by min room temperature of +17°C. Take off the clamping systems and turn over the sheet. Trim the cutout with a tungsten carbide profile router bit with Nylon bearing and a shank of 12mm.

**Always use a profile of 45°** and start exactly at the glue line between shape and sheet. Do not use any radius it causes to see more of an eventual slight color difference between sheet and shape of the same color. (Fig. 9)

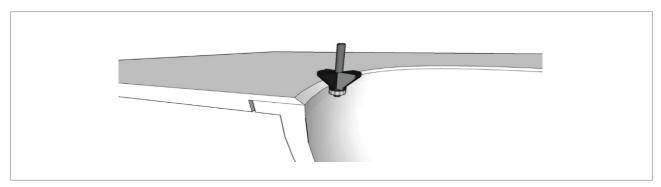


Fig.9

Sand and finish off to a standard "Semi-Gloss-Finish" as recommended.



## 3. Shape Installation Without Rebate (Butt Under-mounting)

Mark position of the shape from the back of the sheet. Ensure the position of the shape is correct when turning over the sheet later on. (Fig.10)

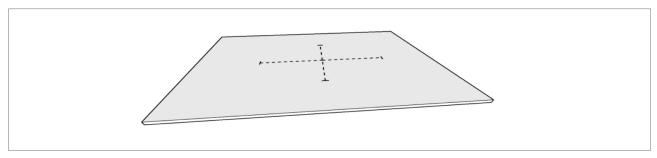


Fig.10

Bring the "cutout template" in position and clamp it down properly with clamps. Ensure the work piece is in a straight position and properly supported.

Cutout the hole with a hand router of at least 1.8 KW power and which is able to take a 12mm shank, a 10 mm single flute carbide router bit with a 12mm shank and a 30mm sleeve guide (\*). Ensure the work length of the router bit is well measured.

Sand a stripe of approx. 80 mm next to the cutout on the back of the HIMACS sheet smooth by using a random orbital sander with sandpaper of 100 and 60 micron (or 150/180 grit sandpaper).

Ensure all marks and scratches of the pre-sanded back of the sheet are removed. (Fig.11)

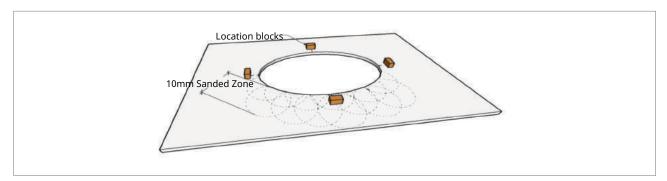


Fig.11

Bring the shape in the right position again and glue 3-4 position blocks (with a size of approximate  $2cm \times 2cm$  made of HIMACS or in wood) and fix them with hot-melt glue. (Remove them after finishing).



Clean parts, the sheet and the edge of the shape which will be bounded to remove any dust, grease or pen marks – best by using denatured alcohol (or Acetone) and a clean white cloth. After cleaning do not touch with your fingers. If so, clean it again because dirt may show up in the glue line later.

Prepare HIMACS-Adhesive. Take a 45ml or a 250ml cartridge with the right color as needed. (check your color sheet/adhesive list). Squeeze out some of the liquid without mixer tip to check if both: hardener and liquid are been moving out of the cartridge. Add the mixer tip and put the first 2cm of the adhesive on side and start bonding process.

Ensure the mixing of the adhesive is properly done.

- Put on the adhesive in a continuous line, best onto the edge of the shape.
- Turn over the shape and position it. Ensure the drain whole is on the right place when turning the sheet later and that the shape is placed square.
- When shape is in the right position, clamp it down with clamps or with a thread through the drain whole protected by a thick sheet of wood and additional clamps in front if needed. Ensure not to over tighten the strip.
- Leave the HIMACS -Adhesive cure for at least 35min. by min room temperature of +17°C.
- Do not clean off non cured adhesive with Acetone or denatured alcohol. This could cause weakness of the adhesive.
- Install additional mechanical fixings to a 4-corner cross-level.

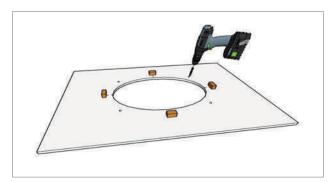




Fig.12

Fig.13

• Use Keil undercut-anchors best





Fig.14

Fig.15



- Take off the clamping systems and turn over the sheet.
- Trim cutout with a tungsten carbide profile router bit with Nylon bearing and a shank of 12mm (exp. Titman, XC201-12,7-12-25\*12).
- Sand and finish off to a standard "Semi-Gloss-Finish" as recommended.

#### Note:

Every kitchen sink requires additional support when the countertop is installed. While a HIMACS kitchen sink is not as heavy as cast iron, the overall dimension means that full of water, dishes, and cookware, the weight is substantial. Due to the variety of sink-and-cabinet combinations We do not recommend a specific product from the many resources available. However, the guideline for installing a cast iron sink indicates the type of support that must be provided.

#### Other shape installation:

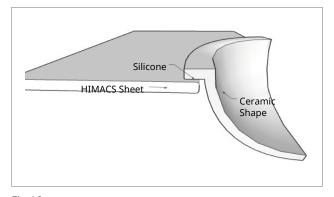
- With a separate template make a smaller cutout into the top, so that the shape fit in and the flange of the shape can properly fixed into the top whilst the edge of HIMACS-top meets the inside wall of the shape.
- Put a radius on both edges of the sheet (cutout) top and bottom.
- Sand edges best with 150/180 grit sandpaper (or 100/60 micron sandpaper) smooth.

#### For TOP-mount:

Install the sink from the top when insert into the cutout and fix it with permanent elastic adhesive (like silicone). Fig.16

#### For UNDER-mount:

Install the shape from underneath with a permanent elastic adhesive (like silicone) and additional mechanical fittings. Fig.17



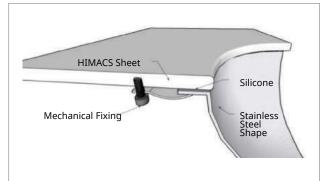


Fig.16 Fig.17



## **KEIL undercut anchor specifications:**

Undercut anchor KH AA						
				Ä	ETA DIBt	12345
6,0	4,0	1,5	M6x8,5	14		555 020 820
6,0	4,0	3,0	M6x10	14		555 020 742
8,0	5,5	0,0	M6x8,5	14		555 020 856
8,0	5,5	1,5	M6x10	14		555 020 724
8,0	5,5	3,0	M6x11,5	14		555 020 712
8,0	5,5	9,0	M6x17,5	14		555 020 846
9,5	7,0	0,0	M6x10	14	*	555 020 804
9,5	7,0	1,5	M6x11,5	14	*	555 020 780
9,5	7,0	3,0	M6x13	14	*	555 020 830
11,0	8,5	0,0	M6x11,5	14	*	555 020 823
11,0	8,5	1,5	M6x13	14		555 020 752
11,0	8,5	3,0	M6x14.5	14	•	555 020 777
13,0	10,0	0,0	M6x13	14	•	555 020 809
13,0	10,0	1,5	M6x14.5	14	*	555 020 734
13,0	10,0	3,0	M6x16	14	*	555 020 715
14,5	11,5	0,0	M6x14.5	14		555 020 700
16,0	13,0	1,5	M6x17,5	14		555 020 802
18,0	15,0	0,0	M6x17,5	14	*	555 020 815
18,0	15,0	1,5	M6x19	14		555 020 756
18,0	15,0	6,0	M6x23.5	14	*	555 020 826

Fig.18



## 4. Shape-Quick-Guide-Installation

### Step by Step

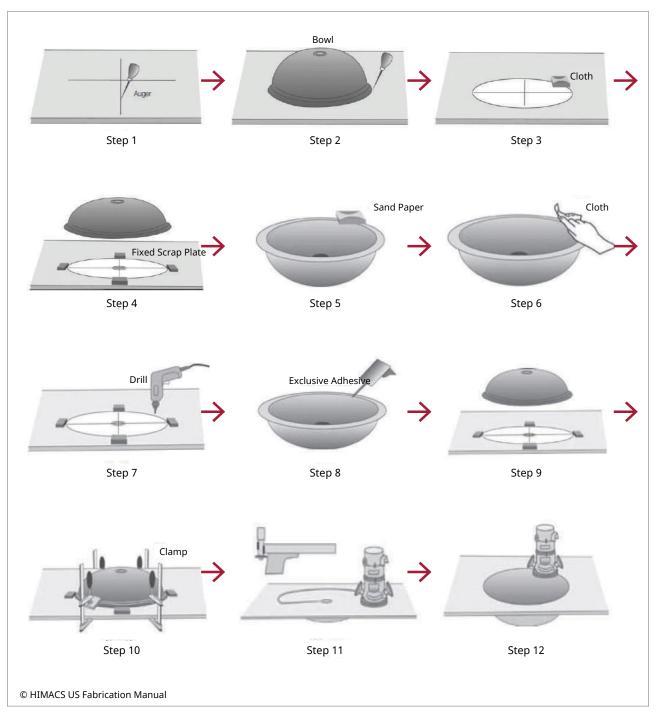


Fig.19

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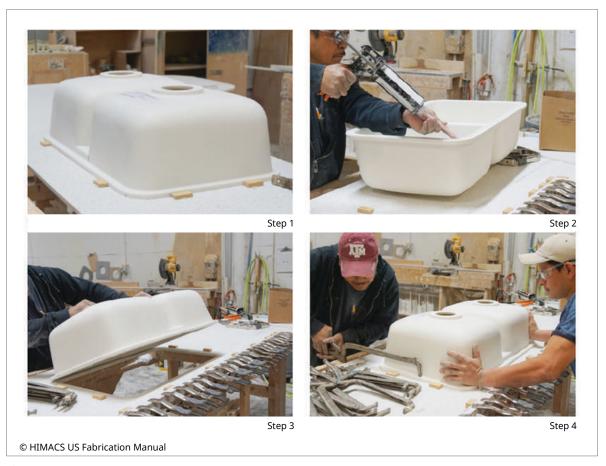


Fig.20

## 5. Technical Specifications of HIMACS Shape Offering

HIMACS shapes are delivered with a clear identification and easy readable label. The label looks as the sample shown below and provides the information's like following sample:

## Bar code of product

• Producer name: Company name HIMACS

• Product name: CB422 A / CS528 R

• Product code:

• Shape has overflow / has no overflow

• Colour code of the shape: S028 Alpine White



## **HI**·MACS



In case of complaint of shape please always provide this production-no as reference to be filled in a QC-Complaint Request Form.

- Further Information about shapes you can find in:

  - TDS "Product Shapes" TDS "Storage, Handling and Transportation"



## 6. Overflow Piece

Overflow piece is not fixed on the shape body. Overflow pieces are added to the box and need to be assembled from the fabrication shop before installation starts.

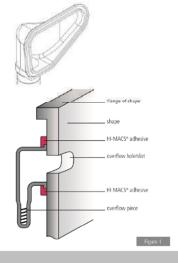
Each shape delivery includes the overflow piece and its installation instructions.



This shape has been running through a precise Quality Control check. If some outstanding defects have been missed, please do not fabricate this shape and report this via our claim portal "sugar-crm" and replace this item via your local Distributor. Fabricate goods only in good conditions.

Later complaints will be not covered under the LG Hausys 15-Year Warranty Program.

This is exclusively valued for Authorized HIMACS Fabricators of LG Hausys Quality Club members only.



The overflow and the sink/bowl that you received are not yet bonded together. Before installation, please proceed as follows:

- Place overflow piece into the right position behind the overflow hole on the back side of the sink/bowl.
- Use a WHITE HIMACS adhesive and place an adhesive bed around the plastic part as per figure 1.
- 3. Ensure that adhesive does not drop down.
- 4. Hold the overflow piece in position with a removable tape.
- Ensure that the positioning of the overflow piece is correct and not too much adhesive is squeezed out from inside of the plastic overflow piece as this may not look nice when looking at the shape after installation.
- 6. Keep overflow still and in place until adhesive is totally cured then remove tape.

NOTE: the overflow piece can be connected to the flexible part of the sets.

Fig.21



### Disclaimer

The information provided in this specific technical bulletin corresponds to our best knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relates only to specific material designated. These data may not be valid for such material in combination with other materials or in any process, unless expressly indicated otherwise. It is offered exclusively to provide possible suggestions for your own experiments and needs our approval for Warranty.

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