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**Description**      Detailed processing instructions on the coloured finishes from Steel Color

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The following instructions must be observed when processing the decorative sheets to ensure a long-lasting and attractive result.

### Flattening

The sheets can be easily and precisely flattened. However, a clean base or straightening machine is required.

### Stamping

The material is ideal for stamping. No further processing is necessary.

### Laser cutting

Laser cutting up to a sheet thickness of 3 mm can be performed precisely and burr-free. In exceptional cases, minor residues of the "burnt" laser protection film may adhere to the cut edges and may need to be carefully removed with a soft cloth and a suitable solvent.

### Markings with pulsed laser

Markings can be applied using a pulsed laser. The use of laser marking/etching should also be considered. Although this involves an additional processing step, the results are more consistent, precise and detailed.

### Sharp edge bending

When sharp-edged bending (standard radius R=sheet thickness) is performed, the surface becomes matt in the bending zone. As a result, any existing mirror finish is lost.



### Edge bending with radius

A bending radius of at least  $R = 6x$  the sheet thickness preserves the mirror finish on the outer surface.



Note! The edges of the product "Waves" cannot be bent. All other processing steps function as described in the factsheet.

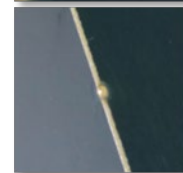
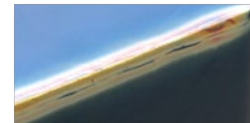
### Resistance-spot welding

The material is unsuitable for resistance-spot welding as this results in weld marks on both sides of the sheets. This problem is mitigated by using flat welding electrodes but cannot be entirely avoided.



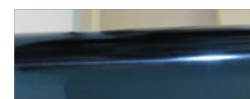
### Welding

During welding - whether partial or continuous - the surface around the weld discolours. The original colour disappears, revealing the annealing colour from the welding process. Subsequent cleaning or stripping of the weld seams results in additional colour loss.



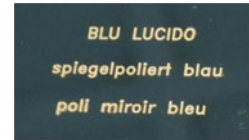
### Gluing/riveting

Since all processing steps involving the application of heat will alter the colour of the material, we recommend bonding the sheets for connections. Bonding Steel Color decorative sheets to each other, as well as to other suitable materials, is straightforward. Riveting is another option for joining the sheets.



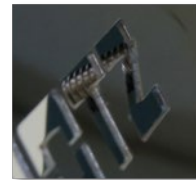
### Laser marking/etching

Laser etching on specially designed machines is ideal for processing colored decorative sheets. This method enables the targeted and controlled treatment of the coloured finish with the laser beam, resulting in a very precise etching. Lettering, logos, and images can be applied to the surface in this way.



### Stud welding

Attaching threaded bolts, sleeves, etc. causes undesirable deformations on the A side of the sheets. This can be counteracted by using sheets that are as thick as possible.



### Additional information on finishes with Anti-Fingerprint coating

All finishes with an anti-fingerprint coating can be processed as usual using the following techniques:

- Shearing
- Laser cutting (with both fibre and CO<sub>2</sub> lasers)
- Stamping (without oil)
- Bending

