GB-60™ Stainless Steel

GB-60 is Zahner's innovative stainless steel product featuring a non-directional, mechanically achieved finish with ambient reflectivity. Created through precision glass bead blasting, GB-60 produces a soft, satin-like appearance that shifts subtly with light. Its crystalline surface offers a modern alternative to highly reflective finishes, making it ideal for architectural applications that balance aesthetics and functionality.

MAIN FEATURES AND CHARACTERISTICS

- A contemporary, satin finish on stainless steel.
- A non-directional mechanical finish that evenly diffuses light.
- Availabililty in a wide variety of sheet thicknesses, sizes and order quantities to fit almost any project and budget.
- 100% metal construction means familiar and common fabrication techniques, a non-combustible surface, and easy recyclability at end-of-life.

AVAILABLE ALLOYS, THICKNESSES AND SIZES

GB-60 Stainless Steel is supplied in a variety of sheet thicknesses and sizes, and is available as either a single- or double-sided product. Refer to the table below for more detailed information regarding the standard thicknesses and sizes.

THICKNESS AND SIZE AVAILABILITY

Gauge [“]	Sheet Sizes					
	4’ x 8’	4’ x 10’	4’ x 12’	5’ x 8’	5’ x 10’	5’ x 12’
18 ga [0.050”]	available single-sided only					
16 ga [0.063”]	available single-sided or double-sided					
14 ga [0.078”]						
12 ga [0.109”]						
11 ga [0.125”]						
3/16” [0.188”]						

DIMENSIONS AND TOLERANCES

Dimensional tolerances for GB-60 Stainless Steel sheet are provided in the table below.

DIMENSIONAL TOLERANCES

Property	Unit	Value
Width	in	+1/8, -0
Length	in	+3/8, -0
Flatness[1]	in	0.4

[1] Maximum deviation from a horizontal, flat surface.

PATTERN AND COLOR

GB-60 is made to order by Zahner artisans, using a non-directional bead blasted finish that diffuses the natural reflectivity of metals, and introducing a fine satin glow.

MATERIAL HEALTH AND TRANSPARENCY

GB-60 Stainless Steel is qualified under the International Living Future Institute's Declare label program and is free of toxic ingredients as defined by the ILFI Red List.

MATERIAL AND PHYSICAL PROPERTIES

GB-60 is a cold-rolled stainless steel. Select material and physical properties are presented in the table below.

Select Material and Physical Properties

Property	Unit	Value
Density	lbs/ft^3	483
Coefficient of Thermal Expansion	in/in/°F	9.6×10^{-6}

FLAMMABILITY

GB-60 Stainless Steel is 100% monolithic stainless steel and is a non-combustible material.

OUTDOOR USE AND LIMITATIONS

GB-60 can be used in most exterior applications. Certain horizontal applications, such as exterior counters or seating, are discouraged due to the potential for water to pool and create spotting or other staining effects.

FABRICATION GUIDELINES

Please follow the guidelines for fabricating sheets of GB-60 Stainless Steel.

General notes for all fabrication

- Follow best-practices in regards to proper occupational health and safety measures, such as the wearing of eye protection, and the use of respirator devices when grinding or polishing.
- Prior to fabrication for your project, it is strongly recommended that any fabrication steps be tested on sample material or fall-off.

Cutting and Drilling

Use high-speed steel, heavy-duty drill bits at the proper speed when drilling holes in GB-60.

GB-60 Stainless Steel may be cut using a shear for simple linear cuts. The use of cardboard or other surface protection measures are recommended to protect the surface from oils and other debris.

For the cutting of simple curves and forms, the use of manual cutting methods appropriate for sheet steel, eg, a bandsaw, a cutting wheel, or a jigsaw with proper blade, etc. will suffice.

For the cutting of complex and/or detailed shapes, CNC methods, such a plasma or laser cutting machine capable of cutting steel, is recommended. For appropriate cutting parameters (speed, power, etc), please reference the manufacturer's recommended settings for stainless steel.

Use of a waterjet cutting machine is discouraged, as the water stream will alter the appearance of the GB-60 surface in regions near the cut path.

Bending

GB-60 Stainless Steel can be bent to a variety of forms using commonly practiced sheet-metal bending techniques. To maintain the appearance of the GB-60 surface, the following best-practices are recommended:

- DO use a brake-press with a properly sized punch and die.
- DO use Rhino Hide or an equivalent aid to protect the surface.
- DO NOT bend to a radius less than 2.5x the thickness of the sheet.

Welding and Soldering

GB-60 Stainless Steel is compatible with all stainless steel welding methods, including stud welding techniques.

Note that the GB-60 surface in the vicinity of the welds will need to be removed prior to welding. Therefore, it is recommended that designs that require welding take this into account and locate the welds where they will be hidden from view.

Gluing

GB-60 Stainless Steel is compatible with a variety of common adhesives designed for metals. Follow the manufacturer's recommended procedures for steel/metal when bonding GB-60 to other materials.

STORAGE AND HANDLING

GB-60 Stainless Steel should be stored in its original packaging in a dry, indoor location away from direct sunlight. Store the product on flat, level ground. Keep in a low-traffic location to help protect all edges from incidental damage. Any protective masking, if applied, should be removed within 6 months of the date of shipment.

- Do not store outside, in direct sunlight, or in wet environments.
- Do not stack objects on top of the products or packaging.

Handling

When handling GB-60 Stainless Steel, wear cotton, nitrile or latex gloves to prevent dirt and oils from contaminating the finish. When carrying or manually transporting GB-60, take all necessary precautions to prevent denting, scratching or other damage to the finish. If temporarily setting GB-60 on an edge, use wood blocking and/or shop towels between the sheet's edge and the ground in order to prevent denting or deforming of the edge.

CLEANING

Clean GB-60 Stainless Steel at least once per year to ensure the initial appearance is retained. Use warm soapy water and a clean, soft cotton cloth, followed by a thorough rinse using clean water. Wipe dry with a cloth.

If a more aggressive cleaning solution is required, Isopropyl Alcohol, Windex® Original Glass Cleaner, or Windex Vinegar Glass Cleaner can also be used. Clean and wipe dry with a clean, soft cotton cloth.

Commercially available cleaners for stainless steel, such as Sprayway® or ZEP® Stainless Steel Cleaner, can be used. However, note that these typically contain oils that will penetrate into the GB-60 finish and change its appearance. If these cleaners are used, cleaning of any adjacent sheets may also be required in order to maintain a consistent appearance between sheets.

Do not use cleaners that contain chlorides (such as bleaches) or abrasives, as these will damage the GB-60 finish and/or the underlying stainless steel.

Whenever cleaning GB-60 Stainless Steel for the first time, test in an inconspicuous area. If no damage to the finish occurs, proceed with cleaning. Clean the entire surface equally - clean all the way to any edged or joints - to avoid visible differences in appearance.

REFINISHING

Minor scuffs and scratches will initially appear bright, but will passivate/oxidize and blend in with the original finish over time.

Spot or 'touch-up' sanding is discouraged as it will create a region of finish that does not match the original.

If refinishing the sheet is required, use an orbital sander with a 3M Scotch-Brite™ 7447 Pro pad. Refinish the entire visible surface to avoid a mis-match between the sanded finish and the original.

END OF LIFE AND DISPOSAL

GB-60 Stainless Steel is 100% monolithic stainless steel and can be recycled at end of life using existing scrap and recycling streams for metals.