

# Fuscara™ Blackened Stainless Steel

Fuscara offers a modern blackened stainless steel patina with rich, deep charcoal tones that add depth and sophistication. It features a refined industrial character, blending sleekness with subtle rugged textures. The finish balances elegance and urban edge, creating a bold yet timeless look. Fuscara Blackened Stainless Steel is an ideal finish for designs seeking both strength and style.

## MAIN FEATURES AND CHARACTERISTICS

- A luxurious, enigmatic finish in a durable material.
- Produced using environmentally friendly manufacturing practices in our award-winning, EPA-compliant facility.
- Availability in a wide variety of sheet thicknesses, sizes and order quantities to fit almost any project and budget.
- 100% metal construction means a familiar and common fabrication techniques, a non-combustible surface, and easy recyclability at end-of-life.

## AVAILABLE ALLOYS, THICKNESSES AND SIZES

Fuscara Blackened Stainless Steel is available in 304 alloy and is supplied in 4' x 10' sheets in a variety of standard thicknesses, ranging from 11ga [0.125"] to 22ga [0.029"].

For information regarding the availability of alternative sheet sizes, please inquire with your Zahner sales representative.

## DIMENSIONS AND TOLERANCES

Dimensional tolerances for Fuscara Blackened 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 <sup>1</sup>	in	0.4

<sup>1</sup> Maximum deviation from a horizontal, flat surface.

## PATTERN AND COLOR

Fuscara is a single-sided product with a directional finish that runs parallel with the long (10') edge of the sheet.

Made by Zahner artisans, using an accelerated patination process that creates natural variations in color and pattern. No two sheets of Fuscara are identical.

If anticipating the need for additional sheets in the future, it is recommended to order these at the time of initial order to minimize batch-to-batch variation.

## MATERIAL AND PHYSICAL PROPERTIES

Select material and physical properties are presented in the table below.

### SELECT MATERIAL AND PHYSICAL PROPERTIES

Property	Unit	Value
Density	lbs/ft <sup>3</sup>	483
Coefficient of Thermal Expansion	in/in/°F	9.6 × 10 <sup>-6</sup>

## FLAMMABILITY

Fuscara Blackened Stainless Steel is 100% monolithic stainless steel and is a non-combustible material.

## OUTDOOR USE AND LIMITATIONS

Fuscara Blackened Stainless Steel can be used in most exterior applications. If considering Fuscara for outdoor use in coastal or marine environments, contact Zahner for recommendations as fitness-for-use in these environments is still being evaluated. 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 Fuscara 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, machine drill bits at the proper speed when drilling holes.

Fuscara Blackened 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, manual cutting methods appropriate for stainless steel, eg, a cutting wheel, or jigsaw with the proper blade, will suffice.

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

### Bending

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

- DO use a brake-press with a properly sized punch and die.
- DO use a urethane 'no mar' die liner or an equivalent aid to protect the surface.
- DO NOT bend to an outside radius less than 2.5x the thickness of the sheet.

### Welding and Soldering

Fuscara Blackened Stainless Steel is compatible with all stainless steel welding methods, including stud welding techniques.

Note that the surface of the welds will not match the Fuscara finish. 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

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

## STORAGE AND HANDLING

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

edge.

## CLEANING

Clean Fuscara Blackened 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 clean, soft cotton 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 Fuscara finish and darken 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 Fuscara finish and/or the underlying stainless steel.

Whenever cleaning Fuscara Blackened 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, cleaning all the way to any edges or joints, to avoid visible differences in appearance.

## END OF LIFE AND DISPOSAL

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