

# BACKYARD Technologies

Storm Protection

## Specifications Stainless Steel

Iron (Fe)	The base metal in the alloy
Chromium (Cr)	A minimum of 10.5% chromium is required for the steel to be classified as stainless. Chromium reacts with oxygen to form a thin, protective layer of chromium oxide on the surface, preventing rust
Nickel (Ni)	Often added to enhance corrosion resistance and provide a more polished, ductile material
Other Elements	<b>Molybdenum (Mo):</b> Improves resistance to pitting corrosion <b>Carbon (C):</b> Strengthens the steel and may enhance hardness <b>Manganese (Mn):</b> Improves toughness and wear resistance

## What is Stainless Steel?

Stainless steel is a corrosion-resistant alloy of iron, chromium, and often nickel, with additional elements such as molybdenum, manganese, or carbon included to enhance specific properties. It is known for its durability, resistance to rust, and aesthetic appeal.

## Advantages of Stainless Steel:

<b>Corrosion Resistance:</b>	Withstands exposure to moisture, chemicals, and other corrosive environments
<b>Strength and Durability:</b>	Offers a high strength-to-weight ratio
<b>Hygiene:</b>	Easy to clean, making it ideal for food and medical applications
<b>Aesthetic Appeal:</b>	Polished finish and resistance to tarnishing
<b>Recyclability:</b>	Fully recyclable and environmentally friendly