

STAINLESS STEEL CHARACTERISTICS

To be characterized as Stainless Steel, the alloy must contain at least 10 % chromium. There are varying grades of stainless steel, but the most common grade used for typical corrosion resistant applications is 304 Grade, which is also known as Type 18-8. This refers to the amount of chromium (18%) and nickel (8%) combined with iron and other elements that go into making up the alloy. If the stainless steel product will be exposed to particularly corrosive environments such as those in Industrial or Laboratory applications where exposure to harsh or acidic chemicals can occur, 316 Grade stainless steel is strongly recommended. It is also recommended for environments where there will be exposure to salt-water (i.e. boats or ocean front locations). The primary difference between 304 Grade and 316 Grade is the addition of more nickel being added to the alloy along with the element molybdenum. A less expensive grade (430 Grade) is sometimes used in simple "wash sink / laundry sink" type applications or used in conjunction with 304 Grade (i.e. 430 Grade sink skirts *with* 304 Grade sink bowls) as a means of providing a superior, longer lasting alternative to plastic composite products.

Gauges

The gauge of stainless steel is the thickness of the stainless steel. The lower the number, the thicker the stainless steel. Drop-in or under-mount stainless steel sinks for the average-use home application typically range anywhere from 18 gauge to as thin as 28 gauge or thinner. For most **Industrial** or **Commercial** or **Laboratory** applications a minimum of 16 gauge is recommended, especially for stainless steel table tops that will be weight bearing. Blue Steel, LLC does not recommend nor offer tabletops with less than a thickness of 16 gauge.

Finishes

The common grades of stainless steel that are available can be fabricated with a variety of different finishes. As an example, most appliance manufacturers specify a #4 brushed finish. There are six primary finishes ranging from #3 (roughest) to #8 (mirror finish). These refer to the roughness of the surface. Blue Steel, LLC works primarily with a #4 finish but can accommodate most client requests.

Care of Stainless Steel

There are some chemicals that can damage the surfaces of stainless steel. Acids or even foods that are acidic can stain or "etch" the surface of the stainless steel. Oftentimes when this occurs, the steel *may* have to be refinished to remove the stain. **Chlorine is extremely corrosive** and will cause the stainless steel to rust. Do not ever use stainless steel products to store chlorine or even pool supplies. If a chemical of any type comes in contact with the stainless steel, rinse it off with water immediately.

Never use an abrasive cleaner on stainless steel products. It will act similar to a polishing agent and it *will change the appearance* of the stainless steel in the area that was exposed to the chemical. As for finger prints, there are many products available on the market that can clean fingerprints from brushed finish stainless steel. These can be found at your larger home supply chains or local hardware stores.