CMT
CONTRARIAN MICRO TEXTURES
by Rigidized® Metals Corporation

# Stainless Steel
## Technical Data Overview

# #8 Mirror (formerly InvariGlass)

## Product Description
#8 Mirror is a high gloss, mirror finished stainless steel designed for use in architectural applications. Its high reflectivity lends itself to mirrors, wall panels, coping and trim. The superb consistency of this finish results in excellent panel-to-panel matching.

## Grade Availability
#8 Mirror is most readily available in Type 304. It can, however, be produced in other grades as the application may require. Highlights of chemistry and typical properties for Type 304 appear in Table I.

## Pounds Per Piece
Thickness (in.) x Width (in.) x Length (in.) x .292

## Available Sizes
Please refer to Table II. Coils and cut lengths up to 236" are available.

## Surface Quality
No visible defects, with the exception of occasional pinholes as outlined in Table III.

| Table I | | 304 |
|---|---|---|
| CHEMICAL ANALYSIS | | |
| Nickel | | 8% |
| Chromium | | 18% |
| Molybdenum | | |
| TYPICAL MECHANICAL PROPERTIES | | |
| Yield Strength (psi) | | 50,000 |
| Tensile Strength (psi) | | 96,000 |
| Elongation in 2 inches | | 50% |
| Hardness (Rockwell B) | | 85 |
| PHYSICAL PROPERTIES | | |
| Density (lb./cu. In.) | | .292 |
| Modulus of Elasticity in Tension (x $10^6$ lb./sq. in.) | | 28.0 |
| Mean Coefficient of Thermal Expansion per °F (x $10^{-6}$) | 32 - 212°F | 9.6 |
| | 32 - 600°F | 9.9 |
| | 32 - 1000°F | 10.2 |
| Melting Point Range °F | | 2550 - 2650 |

| Table II | Size Range (inches) | | | | |
|---|---|---|---|---|---|
| | WIDTH | | | | |
| THICKNESS | .75 – 18 | >18 <24 | 24 – 36 | >36 – 49 | >49 - 60 |
| .1251 - .1874 | • | • | • | • | |
| .075 - .1250 | • | • | • | • | |
| .0291 - .075 | • | • | • | • | |
| .0178 - .029 | • | • | • | • | |
| .015 - .0177 | | | | | |

| Table III | Allowable Pinholes |
|---|---|
| DEFECT SIZE (SQ. IN.) | FREQUENCY |
| .003 - .012 | 10 in any ten sq. ft. |
| < .003 | No limit, except when visibly clustered |

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## Fabrication
Joinery should be mechanical to avoid affecting the highly reflective surface. If welding or soldering must be used, it should be limited to hidden areas. Heat tint scales and soldering flux residue must be removed.

#8 Mirror is somewhat directional. It is therefore advisable to orient panels in the same direction.

## Fire Resistance
Since stainless steel is dimensionally stable up to 2000°F, #8 Mirror provides an added measure of protection in the event of a fire.

## Flatness
#8 Mirror is supplied to ASTM (American Society for the Testing of Materials) standard commercial allowances.

## Installation
#8 Mirror is supplied with a high grade protective plastic covering. It is advisable to remove this material promptly after installation to prevent adhesive residue from remaining on the stainless steel finish.

While this product's appearance is very uniform, it should be noted, however, that any metallic surface, even a painted one, is sensitive to misalignment of panels on differing planes. Care should be taken to ensure installation within reasonable tolerances in order to get the full benefit of this material's homogeneous appearance.

## Maintenance
Designed to be essentially maintenance free, #8 Mirror will last for decades without requiring attention. It may, however, be appropriate to clean the surface to maintain its original appearance. Specific stainless steel agents are available on the market. Any detergent/ammonia solution can be effective for general cleaning. A sodium carbonate paste can be applied with a warm water rinse to address stains. Severe stains can be removed with tri-sodium phosphate and caustic soda solutions. More tenacious contaminants, like adhesive residue will respond to pure acetone. Chloride-containing products must be avoided. Areas where incidental debris can collect, such as gutters, must be cleaned on a regular basis. For more information, please refer to "Cleaning Stainless Steel Finishes" in the Resources section of our website at www.metalresources.net.

## Warranty
For warranty information, please contact a representative.