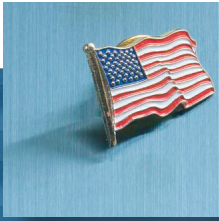
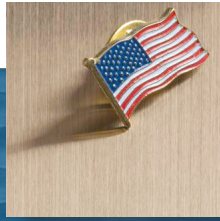




*InvariBlend®
(Black)*



*InvariBlend®
(Blue)*



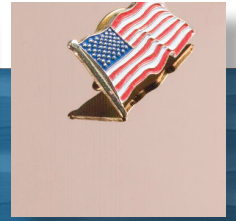
*InvariBlend®
(Bronze)*



*InvariBlend®
(Gold)*



*InvariBlend®
(Nickel Silver)*



*#8 Mirror
(Pink Bronze)*

Vapor Deposition Colorized Finishes

Product Description

Vapor Deposition Colorized Finishes are stainless steel substrates finished with a thin ceramic film designed for use in architectural applications. Visually, the film serves to tint the stainless steel with a given color which allows the surface characteristics of the substrate finish to remain visible. Vapor Deposition Colorized Stainless Steel Finishes can be used in a variety of applications, including elevators, wall panels, coping and trim.

The film is produced by the deposition of ceramics, such as titanium carbonitrides in a vacuum furnace. Unlike paints coatings, the finish is not reactive to ultraviolet light. Since the Vapor Deposition process can compromise the chromium oxide layer of the stainless steel substrate, Vapor Deposition Colorized material is best used indoors. For exterior application, anodic colorized stainless steel is preferred (please see the Anodic Colorized data sheet). Vapor Deposition Colorized Finishes are suitable for applications subjected to pedestrian traffic, like elevators and entryways, As always, if there is any doubt as to the suitability of our products to a given application or environment, please contact a representative.

Grade Selection

The long-term performance of Vapor Deposition Colorized Finishes is dependent on proper grade selection. For interiors and mild exterior environments, Type 304 will be sufficient. Since the colorizing process modifies the chromium oxide layer of the substrate material, vapor deposition colorized finishes should not be used in marine environments or those subjected to de-icing salt use.

Pounds Per Piece

Thickness (in.) x Width (in.) x Length (in.) x .292

Available Sizes

.018 - .120" thick in widths up to 48" are available in lengths up to 157". Please contact a sales representative for details.

Available Substrate Finish & Color Combinations

Please refer to Table I. More information relating to substrate finishes can be found in the data sheets specific to those finishes.

Table I	SUBSTRATE FINISHES & COLOR COMBINATIONS					
SUBSTRATE	COLOR					
	Black	Blue	Bronze	Gold	Nickel Silver	Pink Bronze
Linen	•	•	•	•	•	•
InvariWisp	•	•	•	•	•	•
InvariBlend®	•	•	•	•	•	•
#8 Mirror	•	•	•	•	•	•
Sandtex®	•	•	•	•	•	•

Fabrication

Vapor Deposition Colorized Finishes can be welded or soldered. However, exposure to high temperatures will destroy the colorized film layer. Once destroyed, the film cannot be repaired. In the case of welding, a grade of welding wire more noble than the work piece should be used. While formation of a heat tint scale can be avoided in lighter gauges through use of shield gasses, care must be taken to remove this scale through chemical means, preferably a phosphoric acid pickling paste (avoid hydrochloric). Since welding will destroy the black oxide film in the heat-affected zone of the weld, the design should provide for concealed welds and joints that are either open or sealed by means of soldering. In the case of soldering, it is necessary to remove the coating in the area of the solder joint. It is also advisable to use low temperature tin/lead soldering practices and avoid chloride-containing fluxes. Flux residue must be thoroughly removed after soldering.

Fire Resistance

Since stainless steel is dimensionally stable up to 2000°F, Vapor Deposition Colorized Finishes provide an added measure of protection in the event of a fire.

Flatness

Vapor Deposition Colorized Finishes are supplied to ASTM (American Society for the Testing of Materials) commercial tolerances.

Installation

Since there is a degree of variability in the appearance of the finish from batch to batch, we recommend establishing an installation technique, similar to the way shingle roofs are installed, whereby the installer works from a few different crates of panels on the job site, so as to distribute panels with certain finish attributes over a wide area, co-mingled with panels made from other sheets.

Vapor Deposition Colorized Stainless Steel Finishes are shipped with a high-grade UV resistant protective plastic covering designed to withstand the elements for several weeks. However, it is advisable to remove this material promptly after installation to prevent adhesive residue from remaining on the colorized stainless steel finish. After installation is completed, any rust stains from tools or construction debris must be removed.

Maintenance

Designed to require very little maintenance, Vapor Deposition Colorized Finishes require only periodic attention. It may, however, be appropriate to clean the surface to maintain its original appearance. Any detergent/ammonia solution can be effective for general cleaning. 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.