



Why Low Glare Stainless Steel Matters

Stainless steel is an extraordinary building material. It is attractive, energy efficient, durable, and is arguably the most sustainable choice among metals with which we build buildings.

Traditionally, stainless steel has been used in construction for interior elements. Today, there has been a substantial increase in its use as exterior cladding material. Part of this recent increase in usage can be attributed to the development of InvariMatte® stainless steel which allows this material to be used in large surface areas in glare-sensitive environments.

InvariMatte® was specifically developed because stainless steel in its natural surface condition, as well as the vast majority of decorative surface treatments previously available was just simply too bright to use for large surface area facades and roofing systems. Such installations would generate unwanted glare that could be disturbing at best, but in the worst cases substantially dangerous.

In recent years we have seen evidence of problems associated with highly reflective finishes on buildings. The famous Disney Concert Hall in Los Angeles required remediation to address this problem. More recently, a high-rise building in London, earning the dubious distinction of being called the Fryscraper, also caused damage in that city, though the offending material on this particular building was glass, not stainless steel as was the case in Los Angeles.

Airport environments are particularly sensitive to glare, out of concern for the safe navigation of aircraft. Simply put, blinding pilots with glare emanating from buildings is a bad idea. Since the introduction of InvariMatte®, most if not all of the airport roofs constructed of stainless steel have borne that impressive material.

If you are designing or building a building and you wish to take advantage of the numerous benefits of stainless steel, please use care in determining the proper amount of gloss the surface finish should have. Large surface areas will invariably benefit from InvariMatte®. Despite being low glare it still has a certain spectral quality that exudes the impression of high-end material. Coated metals cannot truly replicate this appearance. For building elements that can carry a higher level of reflectance, Rigidized® Metals Corporation is uniquely positioned to offer graduating degrees of gloss thanks to our micro texture processing technology.