

QA

ask the Hollaender Engineers...

Q: Can the Hollaender aluminum fittings be used with steel and stainless steel pipe?

A: Although most aluminum alloys will corrode when combined with a dissimilar metal (i.e. steel, black iron, stainless steel), the aluminum/magnesium alloy 535 which Hollaender uses to manufacture all cast fittings is the most corrosive resistant casting alloy available and can be used with any type of metal.

Q: Have Hollaender Fittings been tested in corrosive environments?

A: Yes, Hollaender standard fittings have been tested for 1000 hrs. of salt spray (per ASTM B117 specifications) after which the set screws could still be removed and retightened. In addition, Hollaender fittings' corrosion resistance to Hydrazine Fuel has also been tested by the United States Air Force prior to the products' use at Cape Canaveral Air Force Station and the Kennedy Space Center. Not only have our products been tested in the laboratory, but they have also stood the test of time for over forty years in some of the most corrosive environments including: chemical plants, offshore oil rigs, waste water treatment plants, pulp & paper mills, etc.

Q: If I have an extremely corrosive environment, are there any additional coatings or features that are available for the fittings to insure that the installation performs and continues to look good for a long time?

A: The standard material is highly corrosive resistant, however, for the most extreme environments, we recommend that the fittings be anodized and that stainless steel set screws be used. The anodizing process creates a coating, which is not only harder and more corrosive resistant than the base metal, but also provides significant resistance to staining.

Q: Should the fittings be used in a chlorine rich environment?

A: No. The chlorine aggressively attacks the aluminum, which can result in significant deterioration of our product. Our recommendation would be to use reinforced fiberglass railing in this environment.

Q: If Superman and a Speed-Rail fitting were both placed in a vat of Hydrazine Fuel, which one would last longer?

A: According to the test reports, the fitting of aluminum would outlast the man of steel.

Q: What does IPS mean?

A: IPS stands for "Iron Pipe Size" – A standard which was originally developed for fluid transfer has also become the standard for handrail systems, both steel and aluminum.

Q: What determines the wall thickness of my pipe?

A: One of two terms will tell you the wall thickness of your pipe, either the "Schedule" or "Gauge." If you are using true IPS sizes, the wall thickness is determined by the schedule – the higher the schedule, the thicker the wall, i.e. 1-1/2" schedule 80 has a thicker wall than 1-1/2" schedule 40. For gauge sizes, the lower the number, the thicker the wall, i.e. 1.90" diameter 11 gauge is thicker than 1.90" diameter 12 gauge.

Q: What wall thickness should be used with Hollaender fittings?

A: The actual wall thickness you select will depend upon the type of system you are assembling, however, the wall thickness should never be less than the minimums listed below.

Steel Pipe – Schedule 10 or 14 Gauge

Aluminum – Schedule 40 or 10 Gauge

Q: What pipe materials can I use with Hollaender fittings?

A: Any metal pipe (including galvanized steel, stainless, black iron, aluminum, etc.) can be used with our slip-on fittings as long as it is sized properly (see above). Plastic, FRP and thin wall sleaving should never be used unless a reinforcing dowel is also used inside the pipe.