



A Product of US Duct, Inc.

The Ultimate Seal[®]

www.us-tubing.com

The Ultimate Seal[®]

US Tubing General Description and Technical Specifications

General Description: The US Tubing modular ducting is manufactured in Kernersville, North Carolina. The system consists of straight pipes and fittings where each part has an integral 5/16" (7.9 mm) 90-degree Vanstone edge or "lip" on each end. A gasket fits over one of the Vanstone ends at each joint and the two pipes or fittings are joined together using a stainless steel clamp with a v-shaped band. The clamp compresses the two pipe ends and the gasket together to provide an airtight seal. The Vanstone edge is turned directly onto all fittings. All seams are fully welded as "standard" but spot or stitch welds with epoxy seams are an option.

Materials

Metal:

Galvanized Steel – G-90 to ASTM A 653 Type B Chem Dry. Working temperature less than 390 degrees Fahrenheit.

Stainless Steel –ASTM A240 Type 304 and T316—Working temperature maximum for 304 (intermittent) 800 degrees. Working temperature maximum for 316 (intermittent) 870 degrees.

Carbon Steel – HRP&) to ASTM A1011 Pickled and Oiled. Working temperature maximum 650 degrees Fahrenheit.

Clamps:

All clamps are made of type 304 2B Stainless Steel.

Gaskets:

The standard gaskets are made primarily from Ethylene-propylene Ethylidene Norbornene Terpolymer.

The material is compliant to FDA requirements.

Working Temperature up to 300 degrees Fahrenheit for brief periods.

Optional higher temperature and chemical resistant gaskets or available.

Construction Methods

Straight Pipes:

The standard length for a straight pipe is 59.25" (1505 mm)

All seams on straight pipes and branches are fully welded on standard US Tubing products to eliminate leakage.

The standard thickness is 16 gauge, except for 5" diameter where the standard is 14 gauge. Optional 14, 18 and 20 gauge thicknesses are available.

Elbows:

8" and smaller elbows are made from extruded tubes with Vanstone collars fully welded onto each end.

Standard 3" and 4" diameters are constructed from 16-gauge tube.

5" diameter are constructed from 14 gauge metal.

Standard 6"-8" diameters are constructed from 14 gauge tube.

Clamp-Connect or Flange-Connect Options!



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Elbows (cont.):

Optional welded segments, epoxy sealed gore locked and stitch welded elbows are available in lighter gauges. The standard for elbows larger than 8" diameter, is fully welded segments. 16 gauge is standard, but optional 14 and 18 gauge thickness is available. Optional epoxy sealed gore-locked elbows are available.

Fittings:

Standard fittings are fully welded and the Vanstone flange is turned directly onto the ends to eliminate the need for collars (and the possible leaks associated with them). As an option, spot welded fittings with epoxy-sealed seams are also available.

The standard angle for the "C" dimension or tap into a branch is 45-degrees, but 30-degree taps are available upon request.

The standard thickness for fittings is 16 gauge, though 14 gauge and 18 gauge thicknesses are available.

Clamp:

The US Tubing clamp consists of a .060 (16 Gauge) 304 stainless steel custom contoured band with brackets spot welded onto it. The clamp is divided into two sections for easier installation. The two sections consist of a riveted latch, over-center handle with a spot-welded retention ring and an opposing bracket with a 1/4" socket head cap screw for tightening the clamp after assembly.

Caulking:

ASI MP 55300 structural adhesive

Please refer to the "US Tubing product guide" for more information.

