



SUBMITTAL FOR AIRpipe:
COMPRESSED AIR, GAS, AND VACUUM PIPING SYSTEMS
www.airpipeusa.com – 602.362.PIPE (7473)

Engineering standards:

- ASME B31.1 & B31.3
- UL94HB
- UL94V-2
- ASTM B241
- TUV
- CE & EN
- PED 97/23/EC

Certifications and Compliances:

- ISO 9001 version 2000
- ISO 8573-1 version 2010
- ASME, UL, TUV, CRN, CE, and EN

Performance criteria:

- Approved for compressed air (dry, wet, lubricated), vacuum, and inert gases (including Argon, Helium, Nitrogen, CO2 mixes)
- Working pressure - AIRpipe:
 - Compressed air:
 - 300 psi (3/4" – 2")
 - 232 psi (2 1/2" – 6")
 - 188 psi (8")
 - Vacuum – 3.8" Hg (Exceeding 28" Hg)
- Working temperature:
 - 4°F to +176°F
- Storage temperature:
 - 40°F to +176°F

Resistance to:

- Corrosion
- Aggressive environments
- Mechanical shocks
- Thermal variations
- Ultraviolet (U.V.)
- Compressor oil carry over (mineral/synthetic)

Recyclability:

The material used to manufacture the pipe and fittings are 100% recyclable.



Safety:

Components are non-flammable with no propagation of flame. The aluminum & steel fittings conform to ASME pressure vessel testing and UL94HB flammability standards. The fixing clips conform to UL94V-2 flammability standards. The AIRpipe system is certified for installation within a plenum space.

System:

The air/gas distribution system shall be of all aluminum metal pipe and aluminum & steel fittings to quick-connect type, (manufactured by AIRpipe) and shall be manufactured to the quality standards of TÜV, ASME B31.3, and B31.1 standard (POWER PIPING - ASME Code for pressure piping). It shall be recyclable and be full-bore passage without diameter restriction for the fittings- in order to avoid pressure drop. The pipe shall be powder coated.

Air Quality:

The international ISO standard used for compressed air quality is ISO 8573 series. Specifically, ISO 8573-1:2010, which is used to specify the purity of air required at a particular point of use. AIRpipe meets Class 1.1.1 of this standard. AIRpipe fittings are individually bagged for cleanliness, and all pipe is wrapped and capped. AIRpipe is certified for use with Class D breathing air applications.

Pipe:

The pipe shall be rigid and manufactured in marine grade Aluminum 6063-T5 as defined in ASTM B241. It shall be extruded and calibrated within the tolerances specifically required by the manufacturer. The pipe shall have been qualified as in order to warranty gripping and bubble-tight performance of the system. The pipe shall be supplied with powder coating. The pipe shall be available in 10 & 19 ft. lengths and be available in the following diameters: (OD) 20 mm (17.5 mm inside), 25 mm (22.5 mm inside), 40 mm (36.5 mm inside), 50 mm (45.7 mm inside), 67.6 mm (63 mm inside), 84.8 mm (80 mm inside), 101.8 mm (96.8 mm inside), 153 mm (147.5 mm inside), 205 mm (198.6 mm inside)

Fittings:

The fittings shall be manufactured from powder coated aluminum & steel. Steel clamshells (63 mm to 200 mm) are die stamp manufactured. Aluminum clamshells (20 mm to 50 mm) are die cast manufactured. Quick-connection sealing technology will incorporate AIRpipe's active concentric seals – superior to O-ring seals.

Fixing Clips:

The system shall be installed using fixing clips manufactured in engineering grade polymer (PA 12). The fixing clips shall allow an axial movement of the pipe to take into account expansion, contraction, and ambient vibration.