

APPLICATION:

Corrosion resistant injection molded ABS pipe fittings, IPS sizes 1-1/4" through 6" produced to DWV dimensions for use at temperatures up to and including 140°F. Fittings are intended for use in non-pressure sanitary drain, waste and vent (DWV), sewer, storm drainage, and other gravity fed drainage applications. LASCO ABS DWV fittings are in compliance with both the Uniform Plumbing Code and the National Plumbing Code of Canada. ABS DWV fittings are generally resistant to most household chemicals and cleaners, as well as corrosive and abrasive liquids commonly found in industrial applications. Chemical resistance data must be referenced by the design authority for proper material selection prior to use in any special systems involving chemical drainage.

SCOPE:

This specification establishes minimum manufacturing requirements for Acrylonitrile-Butadiene-Styrene (ABS) drain, waste, and vent (DWV) fittings. These fittings are intended for use in non-pressure applications where the temperature of the fluid conveyed does not exceed 140 °F. These fittings meet or exceed the industry standards set forth by the American Society for Testing and Materials (ASTM), CSA Group (CSA), and NSF International ANSI/NSF Standard 14.

MATERIALS:

The materials used in the manufacturing of the fittings shall be an Acrylonitrile-Butadiene-Styrene (ABS) compound having a Cell Classification of 32222 per ASTM D3965.

DIMENSIONS AND PROPERTIES:

All sizes of ABS DWV injection molded fittings shall be manufactured in strict accordance to the requirements of ASTM D2661 for physical dimensions and tolerances. These fittings shall consistently meet and/or exceed the quality assurance and other requirements of ASTM D2661 regarding material, workmanship, impact resistance, dimensions, and product markings. All sizes of ABS DWV injection molded fittings shall also consistently meet the geometries and lay length requirements of ASTM D3311.

MARKING:

All sizes of ABS DWV fittings shall meet the marking requirements of ASTM D2661, that includes as a minimum the manufacturer's name and/or trademark and the material designation ABS.

LASCO Fittings Inc. ABS DWV Fittings Conform to the Following Standards and Specifications as applicable:

ASTM D3965 (Material)	Standard Classification System and Basis for Specifications for Rigid Acrylonitrile-Butadiene-Styrene (ABS) Materials for Pipe and Fittings Cell Classification 32222
ASTM D2661	Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings
ASTM D3311	Standard Specification for Drain, Waste and Vent (DWV) Plastic Fittings Patterns
ASTM D2321	Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications
ASTM F1668	Standard Guide for Construction Procedures for Buried Plastic Pipe.
CSA B181.1	Acrylonitrile-butadiene-styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings.
NSF Standard 14	Plastics Piping System Components and Related Materials (Third Party Certification products meet applicable ASTM performance requirements.)
UPC	LASCO ABS DWV fittings are third party certified to the Uniform Plumbing Code (UPC)
NPCC	LASCO ABS DWV fittings are third party certified to be in compliance with the National Plumbing Code of Canada (NPCC)

ABS DWV FITTINGS SAMPLE SPECIFICATION:

All ABS DWV fittings shall be supplied by LASCO Fittings, Inc. from a rigid Acrylonitrile-Butadiene-Styrene (ABS) compound with a Cell Classification 32222 per ASTM D3965. ABS DWV fittings supplied by LASCO shall be manufactured in compliance to ASTM D2661, consistently meeting and/or exceeding the Quality Assurance and requirements of this standard regarding material, workmanship, impact resistance, dimensions, and product marking. All ABS DWV fittings shall meet the geometries and lay length requirements of ASTM D3311. All ABS DWV injection molded fittings shall be supplied by LASCO Fittings, Inc.

LIMITATIONS

LASCO DWV fittings are intended for use in non-pressure sanitary drain, waste and vent systems or storm water drainage systems. Fittings can withstand temperatures typically found in DWV and storm water drainage applications. The maximum recommended continuous use temperature in drainage systems is 140°F.

STORAGE & HANDLING

Keep products clean. Store in original packaging indoors, or under a suitable ventilated non-transparent cover when stored outdoors. Do not store the material in direct sunlight. Store pipe properly to prevent sagging or bending. Do not store ABS piping products in close proximity to heat producing sources or in tightly enclosed areas. Exposure to excessive temperatures ($\geq 150^{\circ}\text{F}$) can result in distortion and discoloration of product. Exposure to sunlight during typical construction periods is not harmful. Prolonged exposure to direct sunlight must be avoided. Use care when handling to avoid damage. Do not drop or drag product or have other objects dropped on LASCO DWV products.

INSTALLATION

Follow applicable plumbing code requirements.

Solvent Welding – Follow ASTM D2235 Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings, solvent cement manufacturer's instructions, and/or LASCO ABS Solvent Welding Guidelines.

General Solvent Welding Review:

- Follow safety precautions. Use proper ABS solvent cement, per ASTM D2235, for products to be joined
- Cut pipe square, bevel, and deburr
- Check dry fit (pipe should enter fitting socket between 1/3 and 3/4 of socket depth)
- Using correct size applicator, apply a moderate coating of ABS solvent cement using outward strokes to the inside of fitting socket then to outside of pipe end.
- Immediately while solvent cement is still wet, assemble pipe and fittings with one smooth insertion action (while making one quarter turn) not stopping until pipe is completely bottomed out to the pipe stop at socket bottom
- Hold in place for a minimum of 30 seconds to avoid push out
- Avoid disturbing the joint until initial set time is reached
- Do not test for leakage until cure time has been reached – the system shall be tested hydrostatically

HANGERS AND SUPPORTS

Hangers Hangers and supports selected must have adequate load bearing surface, and must not compress, abrade, cut or otherwise distort pipe or fittings. Hangers and supports are to be installed in such a manner as to allow free movement of the piping caused by thermal expansion/contraction. All piping system components are to be aligned properly without strain. Grade of horizontal drainage and vent piping is to be adhered to ensure proper drainage as specified in applicable code. Horizontal runs of drainage piping are to be supported at no more than 4ft intervals, at changes in direction or elevation, and at end of branches. On vertical runs maintain pipe in straight alignment and support at each floor level or at 10 ft intervals, whichever is less. Provide proper support to piping exposed to wind, snow and ice loading, and extreme temperature swings. Follow applicable plumbing code requirements.

THERMAL EXPANSION

Provisions must be made for expansion and contraction of piping systems exposed to temperature fluctuations by using properly sized expansion loops, piping offsets, or the installation of expansion joints.

FIRE STOPPING

Through wall penetrations of fire rated assemblies meeting the requirements of ASTM E814 using ABS pipe are accepted in the model codes. Verify code interpretations regarding plastic pipe through penetrations with local authority having jurisdiction (AHJ).

CHEMICAL COMPATIBILITY

ABS can be damaged by contact with certain fire-stop compounds, thread sealants, cleaning and wetting agents, surface surfactant and other chemical agents. Contact LASCO Technical Services for additional information.

NOTES:

Follow applicable plumbing code. Plastic piping systems must be engineered, installed, operated, and maintained in accordance with accepted codes, standards, and procedures. Installation shall conform to all applicable plumbing, building, and fire codes. Suitability for the intended application should be determined and verified by the designer and/or installer prior to use. Chemical resistance data must be referenced for proper material selection prior to use in chemical drainage applications.

Contact LASCO Technical Services for additional information.
Customer Service: 800-776-2756 • www.lascofittings.com

