



AKDUCT® SPECIFICATIONS:

I. GENERAL

All round supply, return and exhaust ductwork shall be AKDUCT® as manufactured by CDC Enterprises, Inc (763) 416-7773. The duct system shall consist of all male pipe and fittings that are with sealing gasket and clamp which, when installed according to the manufacturer's instructions, will seal the duct joints air and water tight and can be tested to 1.5" water column for 5 minutes.

II. MATERIALS

A. Unless otherwise noted, all pipes and fittings shall be High Density Polyethylene and Foam poly in accordance with ASTM D2412.

B. When specified on contract documents, stainless steel clamps may be used for 16" and 18" pipe and fittings.

III. CONSTRUCTION

A. Unless otherwise noted, all pipes and fittings shall be constructed per SMACNA's Duct Construction Standards (+10 in W.G.) shown in the following table:

<u>Diameter (inches)</u>	<u>PE Pipe</u>	<u>PE Fittings</u>
3", 6", 8", 10", 12"	.5"	.5"
14", 16", 18"	.625"	.5"

B. FITTINGS

- All fitting ends shall be manufactured with male ends. Gasket shall be manufactured to gauge and flexibility so as to insure that system will meet all of the performance criteria set forth in the manufacturer's literature. Gasket shall be classified by an internationally recognized laboratory authority to conform to air and water tight.

- All fitting ends shall be calibrated to manufacturer's published dimensional tolerance.
- All fitting ends shall have trimmed edges for good fit.
- All 90° elbows shall be constructed to be able to cut to two 45° elbows.

AKDUCT®:

- Duct shall be calibrated to manufacturer's published dimensional tolerance standard.
- The pipe is pre-insulated by manufacturing eight foot sections to test greater than PVC wrapped in R-10 value giving the contractor insulating above current R-5 code on pipe and fittings.

IV. PERFORMANCE

- Duct system performance shall exceed SMACNA's Leakage Class 3 requirements at the system design static pressure as indicated on the contract documents not to exceed -20 in W.G. or +12 in W.G.

V. PRESSURE CLASS

- AKDUCT® components are constructed per SMACNA's Duct Construction Standards for +10 in W.G.

VI. CONNECTIONS

- AKDUCT® fittings are sized to fit male to male duct and fittings of the same normal size. Fitting to fitting connections can be made by duct size clamps. Duct to duct connections require gasket and clamp.

VII. GASKET

- The gasket is to overlap at the end of the fitting and is securely fastened by means of MAXSEAL. In order to achieve optimum sealing for all diameters, different size gaskets are used.

VII. U.L. RATINGS

- UL 181B Section 11.0 Mold Growth
- PMG-1014
- BSS 7239-88 Test Method for Toxic Gas Sensation

IX. GASKET TEMPERATURE TOLERANCES

Continuous
MAXSEAL -90°F to 300°F

X. CLAMP

- Clamp is made of Polyethylene with 410 Stainless Steel Plates and 3” SS Screws. When a fitting is installed with the duct as described in CDC installation instructions, the gasket creates a seal against the exterior of the duct. The air duct system exceeds SMACNA’s Leakage Class 3 performance (as defined in SMACNA’s Duct Design Manual) from -20 in. W.G. to +12 in W.G.

XI. DETAIL



XII. ASSEMBLY INSTRUCTIONS

- Only used undamaged AKDUCT® duct and fittings.
- Duct must be cut straight and deburred.
- Bump male fittings into the duct.
- Fasten the duct and fitting together with gasket and clamp.
- Rotate clamp and screws so that the 5/16” x 3” SS screws face up to easy tightening.
- Installation instruction can be downloaded from akduct.com web site