

AQC Industries AKDuct “Blue Duct” Specification

PART 2 PRODUCTS – UNDERGROUND DUCTWORK

A. Acceptable Manufacturers:

1. Blue Duct by AQC Industries

B. DUCT MATERIAL AND SEALANTS

1. Provide elbows, pipe, diffusers, plenum, clamp & gasket, boots, saddle registers, caulk, water gauge test and adapters as required by drawings for underground installation. Provide 10-yr manufacturer's parts warranty.
2. Ductwork shall be HDPE, food grade, closed cell plastic material that is recyclable, does not emit volatile organic compounds, and conforms to ASTM-D2412. Ductwork shall be resistant to mildew, mold (UL 181B), and radon gas (BSS 7239-88). Ductwork shall not rust or crack under external stress or strain. Ductwork shall have R-10 thermal insulation value without the use of external insulation. Fiberglass style ductwork or PVC coated galvanized steel ductwork shall not be acceptable.
3. All joints shall be gasketed and sealed. Clamps and gaskets shall be used on ductwork without flanges. Clamps shall be polyethylene with 410 stainless steel plates and stainless steel screws. Gaskets shall comprise of 1/4" thick butyl rubber sealant tape with Tedlar facing that is water and UV resistant and shall not stain. Gaskets shall comply with ASTM-E84 for flame and smoke spread.
4. Flanged joints and duct branches shall use a co-polymer adhesive caulking sealant that is water and UV resistant. Flanges shall be connected with stainless steel bolts.
5. Assembled ductwork shall be able to maintain +/- 10" static pressure with no leakage.
6. Assembled ductwork shall be approved for installations 27" below flood plain elevation without water intrusion.
7. Duct system installed by manufacture trained installer will be a air and water tight system.

PART 3 EXECUTION

A. Installation

1. Follow manufacturer's installation instructions.
2. Excavate a trench evenly. No bedding is required, but sand or light aggregate may be used. Backfill material may consist of pea gravel, sand or excavated material, if equivalent. Tamper backfill material to hold in place. Do not allow heavy loads to travel over backfilled duct, as crushing may occur.
3. Cut piping material with hand, circular, reciprocating, jig or chain saw.
4. Apply gaskets, clamps, sealant, screws or bolts to connect ductwork.

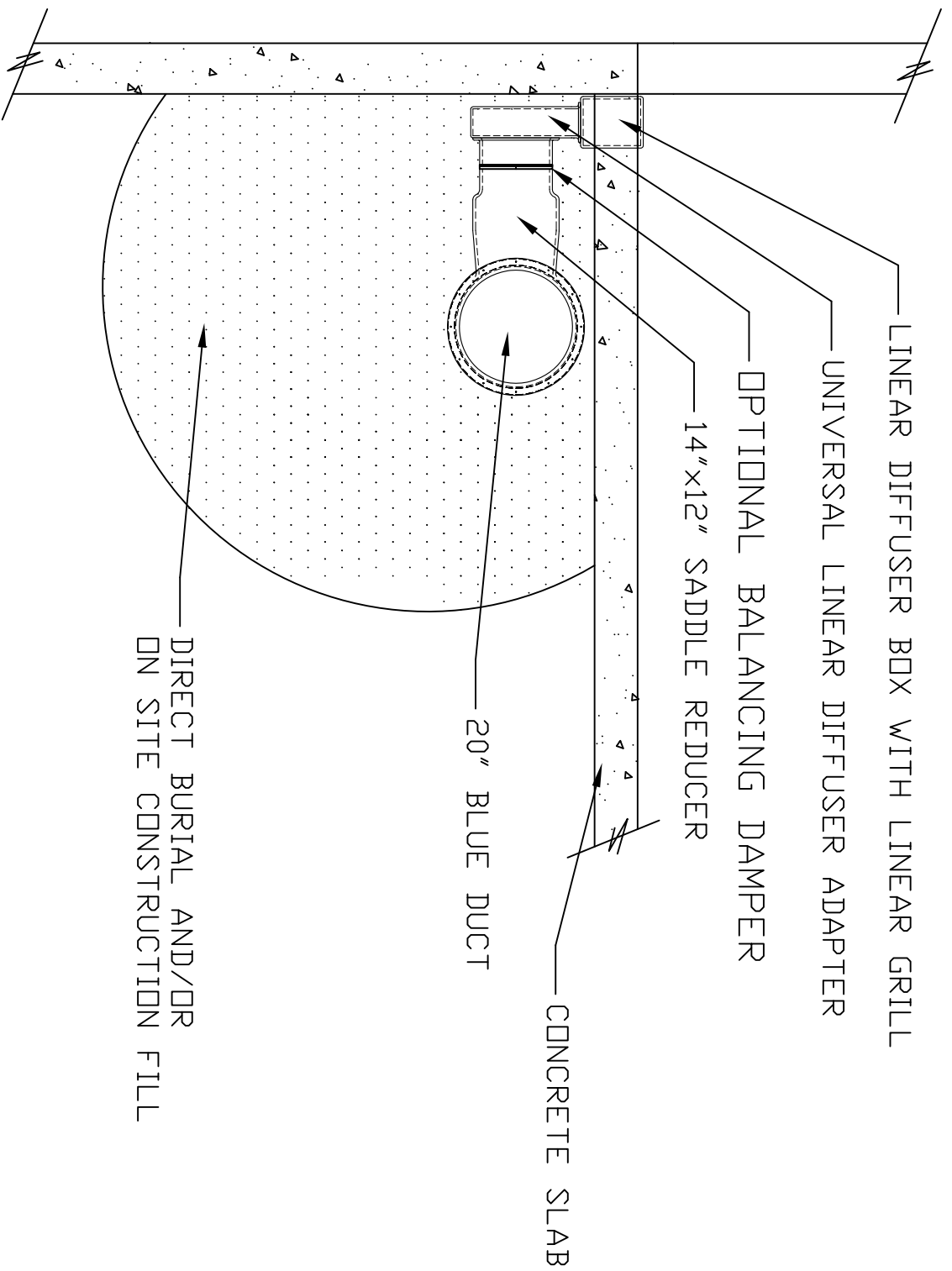
B. Testing

1. Currently no code requirement for air testing underground duct systems.
2. If a desired test we recommend SMACNA air duct leakage test standard.
3. Test ductwork 24 hours after installation.

C. Cleaning

1. Remove dust and debris from ductwork prior to occupancy.

TYPICAL UNDERSLAB BLUE DUCT



NOTES:
 PLENUM ADAPTERS/LD TO BE ATTACHED WITH SCREWS
 AND AIRTITE SEALANT ALL NON-FLANGED CONNECTIONS
 TO BE ATTACHED WITH CLAMP AND GASKET KIT

AQC BLUE DUCT

DR BY A. TARAN
 DATE 08/01/11

UNDERSLAB DETAIL

SCALE

PART NO.

REV. 3