

CDC ENTERPRISES INC.

AKDUCT™ & QADUCT™

Green Building with Advance PE Ductwork

"The Green Point Rated checklist tracks green features incorporated into the home. The recommended minimum requirements for a green home are: Earn a total of 50 points or more; obtain the following minimum points per category: Energy (30), Indoor Air Quality/Health (5), Resources (6), and Water (9); and meet the prerequisites. A.3.a (50% construction waste diversion), J.1 (Exceed Title 24 by 15%), and N.1 (Incorporate Green Points checklist in blueprints).

The green building practices listed below are described in the New Home Construction Green Building Guidelines, available at www.builditgreen.org. Build It Green is a non-profit organization providing the Green Point Rated program as a public service. Build It Green encourages local governments to leverage program resources to support voluntary, market-based programs and strategies.

NEW HOMES & ADDITIONS GREEN POINTS CALCULATOR HEATING, VENTILATION, AIR CONDITIONING							
GREEN BUILDING REQUIREMENT	Community & Atmosphere	Energy	IAQ & Health	Resources	WATER	PRODUCT	
CDC ENTERPRISES, INC. PRODUCT DESCRIPTION							
Built in recycled center for manufacturing & waste 50% Recycled Rate is Required. Up to 4 point if 80% or more	1			1		QADUCT	AKDUCT
1) 100% Recyclable, there is absolute no waste at manufacturing, 2) Can use up to 100% recycled product to manufacture components.							
Innovation in energy use and community awareness	1			1		QADUCT	AKDUCT
Manufacturing uses cleanest-burning fossil fuel 100% natural Gas							
Innovation in energy use and community awareness	1			1		QADUCT	AKDUCT
Carbon footprint is less when compared FRP and PVC products used for the same application, i.e., HVAC underground air distribution. From manufacturing to service in a building.							
Innovative Design meets 0.7 sones / Per 400 cfm & no more 60db IDr	1	1				QADUCT	AKDUCT
Acoustic Dampening: Due to close cell structure, components reduce the transmission of structure noise and vibration and acts as a barrier reducing the transmission of noise from the source. (ibc Section 1206)							
Innovation in Indoor Air Quality IEQ & Health Clean Air Act							
1) Resins meet the requirements of the Food and Drug Administration 21 CFR 177.1520, Subpart C, Item 3.1.] 2) Protects against microbial growth and no mold or mildew growth. 3) Toxicological Status is less than material having a MI from 0.05 to 10 g/10 min. 14# Blue, antioxidant package to minimize discoloration and eliminate die build-up.			1			QADUCT	AKDUCT

DESCRIPTION	Community & Atmosphere	Energy	IAQ & Health	Resources	WATER	PRODUCT	
						QADUCT	AKDUCT
Pipe and Ductwork Low-Emitting Materials IEQ							
1) Ozone Depletion: ECO friendly, odorless, the fittings and pipes are Polyvinyl Chloride Free. Use of stable blowing agents during the manufacturing process which will not diffuse out of the cells. Agent is used to increase thermal insulating properties. 2) Zero VOC Polyethylene, Radon and UV Resistant. Domestic Substances List (DSL) Compliance with US and Canada	1		1			QADUCT	AKDUCT
Construction Management Plan (MR)							
1) Each components is pre-fabricated, simple joint connections 2) Less waste and materials using slab-on-grade i.e., Space gained is 7 percent with no bulkhead inside building	1	1		1			AKDUCT
Optimize Energy Performance, IEQ							
Energy Saving can be measured, [Coheat Test Project Stork #30160 08-99090 Final Draft R2		1					AKDUCT
Optimize Energy Performance, IEQ							
INNOVATION: Air tight performance can be tested as AIR FLOW RATE and percentage of leakage		1	1			QADUCT	AKDUCT
Mastic Tape has Construction Management Plan, MR							
1) MASTIC joint gasket is prefabricated so there is no waste 2) Zero Volatile Organic Compounds VOC ASTM D-6886 3) SMACNA Seal Classes: A, B, and C.	1	1	1				MAXSEAL
1) Optimize Energy Performance, 2) Low-Emitting Material. MR							
Sealant Adhesive caulk used around registers & saddles & flange VOC 8.5 g/l LEED Approved, Class "A" / 1 Rated Meets U.S.D.A. Meat & Poultry Areas / Meets FDA 21CFR175.105		1	1				AIRTITE LEED
1) Optimize Energy Performance, 2) Low-Emitting Material. MR							
Sealant Adhesive caulk used around registers & saddles & flange Odorless after 24 hour cure, VOC 188 g/l Meets U.S.D.A. Meat & Poultry Areas / Meets FDA 21CFR175.105		1	1				AK AIRTITE
Optimize Energy Performance,							
Pressure Balance System, SMACNA Pressure Class: 0.5 - 10 w.g. 2 Low to high pressure systems 3) less then Neg. -18 CFM per 100 ft.		1	1			QADUCT	
IEQ Construction Management Plan							
Ductwork Components are self insulated. 22% less labor to install compared to current methodologies. Compared with wrap, brush and tape method to achieve the same optimized energy performance.	1	1				QADUCT	AKDUCT

Our Commitment to the Environment and human health: EPA - DOH

- Manufacture a “Air to Air Exchange” ductwork system
- Product burn will not produce harmful gases to humans
- Resists harmful chemicals
- Resists Mold & Mildew
- Resists Pests
- No fibrous material in airflow
- Sound Proof
- Air Tight
- No VOC

Our Commitment to SUSTAINABLE PRODUCT

- Can use recyclable content to manufacture
- Low Maintenance Cost
- Non-toxic; made with food grade plastic
- Product life cycle is long
- Manufacturing requires less energy to produce
- Manufacturing recycles waste

LEED QUALIFIED PRODUCT

- Lower operating costs and increased asset value
- Reduce waste sent to landfills
- Conserve energy
- Healthier and safer for occupants
- Reduce harmful greenhouse gas emissions
- Demonstrate an owner's commitment to environmental stewardship and social responsibility

Notes:

INDOOR ENVIRONMENTAL QUALITY CREDITS

CREDIT 4.1 Low Emitting Materials, Adhesives 1 point

Requirements: VOC content of adhesives and sealants used must be less than the current VOC content limits of South Coast Air Quality Management District Rule #1168, AND all sealants used as fillers must meet or exceed the requirements of the Bay Area Air Quality Managements District Regulation 8, Rule 51.

References:

Single Family Green point Check List www.greenbuilding.org
2007 Home Remodeling Guideline Checklist www.greenbuilding.org
San Francisco, Calif. Green Point Rated Check List www.greenbuilding.org
LEED for Homes Simplified Project Checklist for California

Glossary

Indoor Environmental Quality IEQ
Materials and Resources MR
Energy and Atmosphere EA