



### DUROCAP™

Vented Solution for Painting/Coating/Welding  
8,000 CFM to 200,000 CFM



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## Product Data Sheet – DuroCap™

### Applications

Dust Control, Welding, Painting and Coating

### Ducting

Ducting is required with the DuroCap™ system. Duroair's DuroCap™ system exhausts air to the exterior and requires ducting and make up air. Ducting and make up air to be done by others.

### Tapered Airflow Design

The Duroair product line is a cross draft design. Shop air enters the enclosure through the front filter doors. Clean air travels in a horizontal direction towards the back of the enclosure using Duroair's patented tapered airflow design. Airflow is drawn through multiple stages of filtration and is discharged upward.

The filter assembly creates a tapered airflow which directs air down the center of the enclosure maximizing control of overspray and keeping the sidewalls clean. During the dry cycle, airflow rates are increased which creates a wicking process that reduces dry times without the need for heaters or blowers. The cross-draft exhaust is attached to an enclosure with air intake filters, housing a work piece.

- Patented "Taper Draft" air flow to maximize velocities around the products being worked on and minimize overspray on enclosure walls
- Cross draft airflow creates a wicking process that decreases dry times without dirt transfer
- Exhaust system creates a negative pressure vacuum seal creating a clean purified environment

### DuroCap™ Overview

The DuroCap model allows complete control over airflow and provides overall quality construction. The two-stage or optional three-stage filtration uses both panel and pocket filters, increasing the filter face by 4 times over panel booths. This allows for better capture rates and filter loading, reducing on the number of filter changes required.

Each system has a built-in variable frequency drive for complete control of the airflow. The system is designed to achieve airflow over 100 FPM at the intake filter face (front wall). With this designed airflow, the system will easily remain below the code requirement of 25% of the Lower Explosion Limit (LEL). Airflow will remain strong and capture rate will be maximized.

- Vented Solution, suitable for production painting and paints over 2.8 lbs VOCs per gallon
- Duroair's patented "Taper-Draft" technology ensures optimal capture of 99.4% of all airborne contaminants reducing dust, dirt and creating a clean room environment for diverse uses and industries
- "Taper-Draft" technology minimizes overspray
- Ideal for painting and coating, sanding and grinding, bonding applications and other finishing processes

CFM	FAN SIZE	MOTOR SIZE	FLA @ 480/3/60	VFD	FILTER MONITORING GAUGE	NUMBER OF FILTERS EACH STAGE	TWO OR THREE STAGE FILTRATION (NESHAP 319)	FRONT LOADING FILTERS
13,500 CFM	30" Tube Axial Fan	3 HP	4	✓	✓	6	✓	✓
18,000 CFM	34" Tube Axial Fan	5 HP	6.5	✓	✓	9	✓	✓
25,000 CFM	42" Tube Axial Fan	7.5 HP	9.8	✓	✓	12	✓	✓
30,000 CFM	42" Tube Axial Fan	10 HP	13	✓	✓	15	✓	✓
40,000 CFM	2 x 42" Tube Axial Fan	2 x 5 HP	13.4	✓	✓	20	✓	✓
50,000 CFM	2 x 42" Tube Axial Fan	2 x 7.5 HP	19	✓	✓	24	✓	✓
60,000 CFM	2 x 42" Tube Axial Fan	2 x 10 HP	2 x 4	✓	✓	30	✓	✓
75,000 CFM	3 x 42" Tube Axial Fan	3 x 7.5 HP	3 x 9.8	✓	✓	36	✓	✓
90,000 CFM	3 x 42" Tube Axial Fan	3 x 10 HP	3 x 4	✓	✓	45	✓	✓

### Safety Features

- Production air interlocked with fans for safety with fresh breathing air supplied into enclosure
- Enclosure made of a durable fire rated PVC vinyl meeting the requirements of NFPA 701
- Exhaust system creates a negative pressure vacuum seal creating a clean purified environment. This is ideal for a retractable clean room and/or containing airborne particulates and chemicals.
- Custom designed Kidde Badger fire suppression system that will open and close with the enclosure
- LEL monitor (Optional)

### Fans

Fans are precision balanced non-sparking aluminum blade tube axial. Fans are sized from 18" to 60", with 1hp to 10hp motors dependent on required airflow. The drive compartment is ventilated with air from the exterior of fan, motor is outside the airstream.

### Variable Frequency Drive

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A VFD is used to give the customer complete control of airflow and doubles as a soft starter to eliminate the need for a motor starter.

**Control Panel**

The Control Panel is a lockable fused disconnect and is a C/UL/US listed panel, with an on/off, speed dial control. Customer is required to supply building power. The control panel is prewired and contains an air solenoid for production air.

**Filters****Fire Suppression**

The fire suppression system used on Duroair equipment is a dry chemical system (BC or ABC) designed by Kidde Badger and protects both exhaust system and the enclosure.

