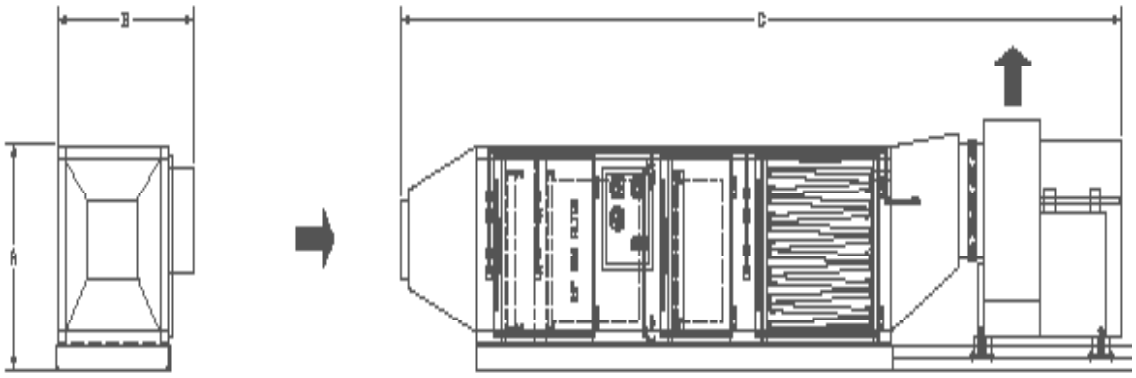
CAS Unit Selection Table



Inlet Elevation **Side Elevation**

CAS Model PBRC	Air Volume CFM (1) Maximum	Dimensions (in) A	B	C	Weight (lbs.)
PBRC - 10 - 10	2,000	34	33	173	1100
- 10 - 20	4,000	34	56	173	1600
- 10 - 30	6,000	34	80	173	2150
- 20 - 20	8,000	58	56	201	2600
- 20 - 30	12,000	58	80	201	3500
- 20 - 40	16,000	58	104	201	4200
- 30 - 30	18,000	82	80	227	4700
- 30 - 40	24,000	82	104	227	5700
- 40 - 40	32,000	106	104	235	7300
- 40 - 50	40,000	109	130	235	8300

(1) Maximum cfm is based on 375 fpm velocity across the face of each filter stage and 1000 lbs. of carbon per 1,000 cfm.
(2) The type and volume of cooking/cooking fuel must be factored in when selecting unit. Consult factory for final selection.

Model Number Development

P B R C — 20 — 30 — SW

- SW — Type Blower
- 30 — 3 filters wide, nominal 6 ft.
- 20 — 2 filters high, nominal 4 ft.
- C — Carbon/odor control section
- R — Rigid final filter, 95% per IEST Type A, MERV 16 per ASHRAE 52.2
- B — Headered bag filter 95% per ASHRAE 52.1; MERV 14 per ASHRAE 52.2
- P — Pleated prefilter, 30% per ASHRAE 52.1; MERV 8 per ASHRAE 52.2

Unit Selection Guide

1. From the Size Selection Table above, select the size with Air Volume and Dimensions that meet the required efficiency and arrangement
2. Two units of the same height may be arranged side-by-side to create a larger, multi-section unit with RH and LH access doors.
3. CAS is designed for light or medium cooking applications. Consult factory for unit selection and sizing.
4. Each unit is shipped as one piece. Alternately, CAS can be shipped in separate sections if required.

CAS

4-Stage Filter Kitchen Exhaust System

Specification

A. General

Furnish a kitchen exhaust air pollution control system in a progressive efficiency, 3-stage mechanical filter arrangement, 4th stage odor control section and blower, as described below and shown on the submittal drawings.

B. Equipment Description

The system shall be furnished as a single, factory assembled unit, consisting of: pleated prefilter, bag filter, final filter, odor control section, outlet transistion and blower/motor, all mounted on a 4" x 5.4 lb./ft. structural steel support base. The base shall have lifting lugs at the 4 corners and along the length as needed. The unit shall be furnished in a side access housing fabricated from 14-gage steel, continuous welded pre-treated and powder coated with thermo-set powder paint, inside and outside. Side access doors shall be provided to service all internal components. The access doors shall be on lift-off hinges, full perimeter high temperature gasketed and use multi-point closure latches. The system shall be ETL listed to UL 710 Exhaust Hoods for Commercial Cooking Euqipment and shall conform to NFPA 96 Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations.

1. The multi-stage filter section shall contain the following:

a. Pleated prefilters, 4" deep, 30% per ASHRAE 52.1; MERV 8 per ASHRAE 52.2

b. 10 pocket bag filter, 22" deep, 95% per ASHRAE 52.1; MERV 14 per ASHRAE 52.2

c. Final filter, 12" deep, 95% per ASHRAE 52.2: E1 - E3 MERV 16 per ASHRAE 52.2

d. All filters shall be held in place with extruded aluminum tracks with replaceable bulb seal gasketing.

e. Filter frames shall be metal or die cut. Plastic frames are not acceptable.

f. Filters shall be sealed with high temperature gasketed pressure plate to prevent air bypass.

2. The odor control section shall contain the following:

a. Bonded Activated Carbon, furnished in a self-supporting, bonded granular briquette panel with galvanized steel perimeter frame and covered on both sides with spun bonded scrim. Carbon is composed of virgin coconut shell granular activated carbon with a minimum carbon tetrachloride activity of 60% per ASTM D-3467, is 4 x 8 US mesh size, and impregnated with active ingredients to enhance cooking odor molecule adsorption. Bonded carbon shall have a minimum bulk density of 30 lbs/ft^3, and applied at the rate of 100 lbs. minimum/1,000 cfm for a minimum residence time of 0.15 seconds. Carbon panels shall be held in place with extruded aluminum tracks with replaceable bulb seal gasketing.

3. Outlet transition shall be factory installed, connecting the housing to the blower, fabricated from 14 gage CRS and finished to match the housing. Transition to blower connection shall be made with high temperature flex fabric.

4. Blower/motor assembly shall be the centrifugal SWSI__ or tubular inline__ type, belt drive with backward inclined wheel sized to deliver ___cfm @___" w.g. total (___"w.g. external resistance allowed)< operate on ___V, ___ PH, ___ Hz, ___ HP and shall be UL 762 listed for Power Ventilators in Restaurant Service. A factory mounted ON-OFF disconnect switch shall be furnished and pre-wired to the blower motor. Motor starter to be provided by others. The blower assembly shall be mounted on housed, spring isolators

5. The complete assembly shall be factory mounted on 4-inch x 5.4 lbs/ft. structural stee, C-channel base frame.

6. Fire system shall be Ansul ___ or Amerex___ with factory installed detector and prepiped nozzles. Detector and nozzle arrangement shall be according to the respective manufacturers instructions. 3/8" IPS field connection, tanks, controls and commissioning of the fire system shall be provided on site by others. The AHJ may require other protection in order to comply with local codes.

7. A remote mounted Filter Status Indicator panel shall be furnished to indicate when each individual stage of filter requires servicing. The panel shall be NEMA 4X with LED indicators. Signal to the LED's shall be provided from pressure switches, factory mounted on the scrubber housing. Each filter stage shall have a dedicated pressure switch.

8. The kitchen exhaust scrubber shall be the CAS, Model_____ as manufactured by Caddy Corporation.

CADDY CORPORATION