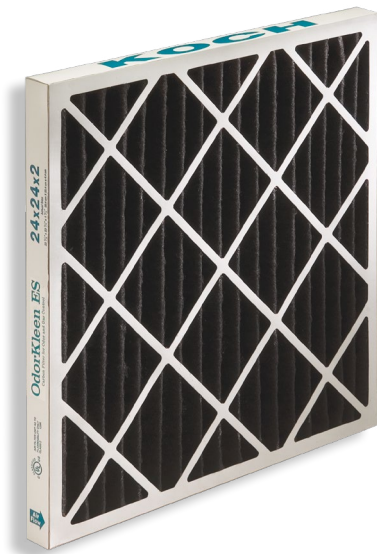


OdorKleen™ ES

Extended Surface Carbon Particulate Filter



FEATURES

High odor absorption

Impregnated carbon media

MERV 8 performance rating

Extended lifecycle between filter changes

1", 2" and 4" thickness

OdorKleen ES

The Koch OdorKleen ES is MERV 8 extended surface pleated panel which offers a unique combination of particulate filtration and odor removal in a totally disposable unit.

OdorKleen ES Construction

The filter media utilized in OdorKleen ES panels is a dual purpose multi-layer product, designed to collect airborne particulate and remove odors and other gasses from the air stream.

100% mechanical media provides high efficiency, excellent dust holding capacity throughout the filter's lifecycle with a MERV 8 performance rating before and after conditioning steps when tested in accordance to ASHRAE Test Standard 52.2-2007. The upstream layer provides an efficiency rating of 70% for 3 to 10 micrometers. The downstream odor removal layer is impregnated with carbon media for absorption of volatile organic compounds (VOC's) from the air stream. This carbon media carries a minimum activation of 60%, insuring high odor absorption efficiency, and extended lifecycles between filter changes.

The two-ply media element is pleated and supported by a rugged, rustproof expanded metal grid. This extended surface configuration provides high dust holding capacity and excellent performance capabilities in a wide variety of applications.

The enclosure frame utilized in OdorKleen ES filters is a rigid, high wet-strength beverage board. This ultra-tough frame makes the OdorKleen ideal for use in nearly any application, especially in systems where high moisture levels have rendered standard air filters ineffective.

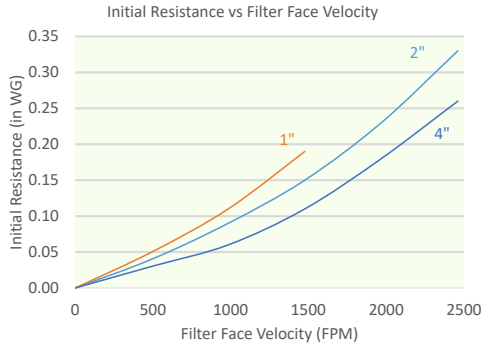
The OdorKleen ES can be used in several types of applications to remove odor and particulates in a wide variety of installations, with light to moderate contaminate levels:

- Commercial Office Buildings
- Airports
- Sports Arenas
- Hospitals
- Schools
- Painting Facilities
- Industrial Plants
- Smoking Lounges

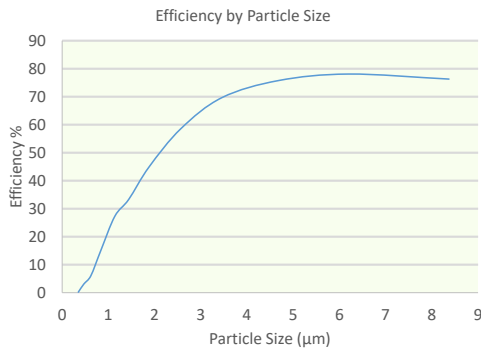
OdorKleen ES Performance Data

Filter Depth	Air Velocity	Initial Resistance (inches w.g.)	Final Resistance (inches w.g.)	Pleats Per Linear Foot
1"	300 FPM	0.27	1.0	12
2"	500 FPM	0.36	1.0	10
4"	500 FPM	0.29	1.0	9

Initial Resistance vs. Air Flow Rate



Efficiency by Particle Size



Additional Information

1. Recommended Final Pressure Drop is 1.0 inches w.g.
2. OdorKleen ES filters are Underwriters' Laboratories Class 2 listed according to UL Standard 900.
3. OdorKleen ES filters are designed for continuous operating temperatures up to 120° F (49°C).

Part Number	Nominal Size*	Actual Size	Capacity (CFM)	
			300 FPM	500 FPM
102-051-020	10x10x1	9-1/2x9-1/2x3/4	200	350
102-790-001	10x20x1	9-1/2x19-1/2x3/4	425	700
102-790-051	12x12x1	11-1/2x11-1/2x3/4	300	500
102-051-001	12x18x1	11-1/2x17-1/2x3/4	450	750
102-051-002	12x20x1	11-1/2x19-1/2x3/4	500	850
102-790-002	12x24x1	11-3/8x23-3/8x3/4	600	1000
102-051-003	12x25x1	11-1/2x24-1/2x3/4	625	1050
102-790-003	14x20x1	13-1/2x19-1/2x3/4	575	986
102-051-005	14x24x1	13-1/2x23-1/2x3/4	700	1175
102-790-004	14x25x1	13-1/2x24-1/2x3/4	725	1225
102-051-039	14x30x1	13-1/2x29-1/2x3/4	875	1450
102-790-005	15x20x1	14-1/2x19-1/2x3/4	625	1050
102-051-006	15x25x1	14-1/2x24-1/2x3/4	775	1300
102-051-007	16x16x1	15-1/2x15-1/2x3/4	550	900
102-790-006	16x20x1	15-1/2x19-1/2x3/4	675	1125
102-051-008	16x24x1	15-1/2x23-1/2x3/4	800	1350
102-790-007	16x25x1	15-1/2x24-1/2x3/4	850	1400
102-051-018	16x30x1	15-1/2x29-1/2x3/4	1000	1675
102-051-009	18x18x1	17-1/2x17-1/2x3/4	675	1125
102-051-015	18x20x1	17-1/2x19-1/2x3/4	750	1250
102-051-016	18x24x1	17-3/8x23-3/8x3/4	900	1500
102-051-011	18x25x1	17-1/2x24-1/2x3/4	950	1575
102-051-044	18x30x1	17-1/2x29-1/2x3/4	1125	1875
102-790-008	20x20x1	19-1/2x19-1/2x3/4	850	1400
102-051-049	20x22x1	19-3/4x21-1/2x3/4	900	1525
102-051-017	20x24x1	19-3/8x23-3/8x3/4	1000	1675
102-790-009	20x25x1	19-1/2x24-1/2x3/4	1000	1750
102-051-012	20x30x1	19-1/2x29-1/2x3/4	1250	2100
102-790-010	24x24x1	23-3/8x23-3/8x3/4	1200	2000
102-051-013	24x30x1	23-1/2x29-1/2x3/4	1500	2500
102-051-014	25x25x1	24-1/2x24-1/2x3/4	1300	2175
102-790-011	10x20x2	9-1/2x19-1/2x1-3/4	700	875
102-052-035	12x12x2	11-1/2x11-1/2x1-3/4	500	625
102-052-002	12x20x2	11-1/2x19-1/2x1-3/4	850	1050
102-790-012	12x24x2	11-3/8x23-3/8x1-3/4	1000	1250
102-052-003	12x25x2	11-1/2x24-1/2x1-3/4	1050	1300
102-790-013	14x20x2	13-1/2x19-1/2x1-3/4	975	1225
102-790-014	14x25x2	13-1/2x24-1/2x1-3/4	1225	1525
102-052-039	14x30x2	13-1/2x29-1/2x1-3/4	1450	1825
102-790-015	15x20x2	14-1/2x19-1/2x1-3/4	1050	1300
102-052-005	16x16x2	15-1/2x15-1/2x1-3/4	900	1125
102-790-016	16x20x2	15-1/2x19-1/2x1-3/4	1125	1400
102-790-053	16x24x2	15-1/2x23-1/2x1-3/4	1350	1675
102-790-017	16x25x2	15-1/2x24-1/2x1-3/4	1400	1750
102-052-018	16x30x2	15-1/2x29-1/2x1-3/4	1675	2100
102-052-007	18x18x2	17-1/2x17-1/2x1-3/4	1125	1400
102-052-015	18x20x2	17-1/2x19-1/2x1-3/4	1250	1575
102-790-018	18x24x2	17-1/2x23-1/2x1-3/4	1500	1875
102-052-009	18x25x2	17-1/2x24-1/2x1-3/4	1575	1950
102-790-019	20x20x2	19-1/2x19-1/2x1-3/4	1400	1750
102-790-020	20x24x2	19-1/2x23-1/2x1-3/4	1675	2100
102-790-021	20x25x2	19-1/2x24-1/2x1-3/4	1750	2175
102-052-010	20x30x2	19-1/2x29-1/2x1-3/4	2100	2600
102-052-030	20x35x2	19-1/2x34-1/2x1-3/4	2450	3050
102-790-022	24x24x2	23-3/8x23-3/8x1-3/4	2000	2500
102-052-011	24x30x2	23-1/2x29-1/2x1-3/4	2500	3125
102-790-050	25x25x2	24-1/2x24-1/2x1-3/4	2175	2725
102-790-023	12x24x4	11-3/8x23-3/8x3-3/4	1000	1250
102-790-024	15x20x4	14-1/2x19-1/2x3-3/4	1050	1300
102-790-025	16x20x4	15-1/2x19-1/2x3-3/4	1125	1400
102-054-005	16x24x4	15-3/8x23-3/8x3-3/4	1350	1675
102-790-026	16x25x4	15-1/2x24-1/2x3-3/4	1400	1750
102-790-027	18x24x4	17-1/2x23-3/8x3-3/4	1500	1875
102-790-028	20x20x4	19-1/2x19-1/2x3-3/4	1400	1750
102-790-029	20x24x4	19-3/8x23-3/8x3-3/4	1675	2100
102-790-030	20x25x4	19-1/2x24-1/2x3-3/4	1750	2175
102-790-031	24x24x4	23-3/8x23-3/8x3-3/4	2000	2500
102-054-010	25x29x4	28-1/2x24-1/2x3-3/4	2525	3150
102-790-041	24x24x6	23-3/8x23-3/8x5-3/4	2000	2500