

Detroit Lubricator Company

Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION

Detroit 8, Michigan, U. S. A.

CHICAGO 5, ILL.,
816 S. Michigan Avenue

NEW YORK 18, N. Y., 40 West 40th Street

LOS ANGELES 13,
CALIF., 320 Crocker Street

Canadian Representative:

RAILWAY AND ENGINEERING SPECIALTIES LIMITED, Montreal, Toronto, Winnipeg

"DETROIT" AIR FILTERS

Detroit Air Filters are of the replacement type. Highly efficient and very low initial resistance. The entire depth of filter is used in cleaning the air—large dust carrying capacity.

The pollen removal characteristics of Detroit Air Filters make them extremely effective in treatment of hay fever. Tests indicate efficiency of 99 per cent when used in tandem; over 95 per cent for single filters.

OPERATION

Dust laden air entering the filter changes direction 45 deg causing a scrubbing action along the sides of the first cellular passages; then changes direction 90 deg again scrubbing along the sides of the smaller cellular passages.

As dust impinges on the sides of the passages, oil is absorbed by capillary attraction into each dust particle, and that dust particle then becomes the medium for catching other dust particles which, in turn, absorb oil and become the new dust catching medium, and so on, until the filter becomes completely dust-laden.

CONSTRUCTION

The Detroit Air Filter is constructed of fiber board and is completely reinforced to make a rigid, non-sagging unit.

In the No. 1 Filter the cellular passages formed by the fiber board are the same size on both the inlet and outlet sides of the filter. In No. 2 and No. 25 Filters passages on the inlet side are larger than the passages on the outlet side. These passages are so arranged that they make a 90 deg angle.

COATING

The absorbent coating or dust catching medium is a special odorless compound that remains tacky at minus 10 F. and will not drip at temperatures as high as 180 F. It does not contain any substance that will become rancid. This special compound is sprayed on the fiber board before assembling, at a temperature that insures thorough penetration. Because of the porous nature of the fiber board the Detroit Air Filter holds many more times the weight of adhesive substance than filters made of non-porous materials.

TYPES

No. 1. Inlet $\frac{3}{16}$ in. corrugations. Outlet $\frac{3}{16}$ in. corrugations. For high efficiency applications and pollen removal.

No. 2. Inlet $\frac{3}{16}$ in. corrugations. Outlet $\frac{3}{16}$ in. corrugations. For ventilating systems or for furnace and air conditioning installations where a portion of air handled is outside air. Usually installed in tandem in ventilating systems.

No. 25. Inlet $\frac{1}{2}$ in. corrugations. Outlet $\frac{3}{16}$ in. corrugations. For installations where larger part of air handled is recirculated air. When ordering specify type number and size.

Type No. 2 Filter 2 in. thick furnished on all orders unless otherwise specified.

STANDARD SIZES

Type No.	NOMINAL SIZES			Available with 2-pass $\frac{3}{16}$ in., 1-pass $\frac{3}{16}$ in. or $\frac{1}{8}$ in. Corrugations:					
	Wide	High	Thick	NOMINAL SIZES					
Nos. 1, 2 and 25.....	16"	20"	2"	Wide	High	Thick	Wide	High	Thick
	16"	25"	2"						
	20"	20"	2"	16"	20"	1"	20"	20"	1"
	20"	25"	2"						
	15"	20"	2"						
	10"	20"	2"						
	10"	20"	2"						
	10"	10"	2"						

The above nominal sizes allow sufficient clearance for easy replacement. Detroit Air Filters can be made in any size and any thickness to meet requirements. Prices supplied upon application.

Research Products Corporation

Madison, Wisconsin

RESEARCH AIR FILTERS FOR HEATING AND AIR CONDITIONING
SILICA GEL MOISTURE ABSORBING MATERIAL

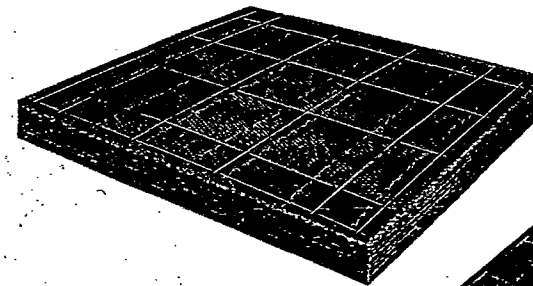
U. S. Patent 2070073

U. S. Patent 2294478

RESEARCH Air Filters



With RiP-CLEAN Features

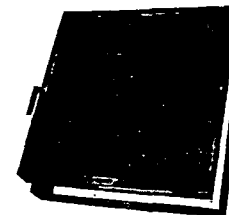


No. "200" Series

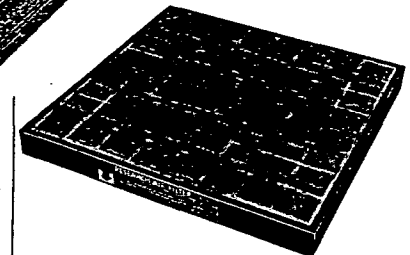
Exclusive Rip-Clean Feature—When the filter becomes clogged you need only rip off two top layers of filter pad to remove the surface dirt and lint. This may be repeated 5 times—extending the useful life of the filter at high efficiency.

Research Filter Banks—Research Air Filters are used extensively in filter banks—both flat and V designs. Write for technical data sheets to determine type and size of bank for any installation.

Research Washable Filter—This filter is used where a washable filter is specified and also above kitchen ranges to trap grease particles. Wash with hot water or steam.



No. "200" Series—When this Re-Fil-Able filter becomes dirt filled, the wire grids are unhooked, the filter pad replaced. Pads fit snugly, sealing against air leaks. (Can be Rip-Cleaned).



No. "100" Series

No. "100" Series—A fiber framed filter is designed so the entire unit is easily replaced by a new one. Offers high dust removing efficiency throughout its long life—adaptable to heating, ventilating and air conditioning systems. (Can be Rip-Cleaned).

A Research Air Filter 20 x 20 x 2 in., when tested according to the test code of the AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS has an efficiency of 91 per cent, tested with 80-20 dust. The dust holding capacity with standard code dust is 150 grams per sq ft of filter area, the restriction at this dust load being .2 in. of water.

Research Silica-Gel—For maintaining dry conditions in storage rooms; ideal for drying refrigerants.