Flame Gard® Grease Filters

- **Full filter-height overlapped baffles for maximum efficiency and zero bypass**
- **Handles included**
- **Available in aluminium or stainless steel**
- **Range of sizes available**
- **Made in USA to stringent standards.**

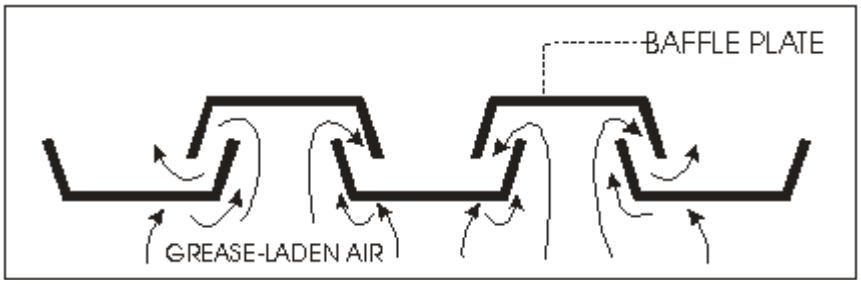
Air Care TECHNOLOGY LTD

At Air Care Technology Ltd we continuously strive to improve the design and quality of our products, and we reserve the right to change or discontinue any product at our discretion without notice or obligation.

Clean Air Systems and Products

TECHNICAL DATA

Airflow L/s	Static Pressure(Pa)									
	242×394	242×496	394×394	394×496	394×623	496×394	496×496	496×623	623×394	632×496
95	85	47	30	17	12	22	10	7	12	7
142	290	120	82	47	30	57	27	17	32	17
190	364	207	142	82	52	102	47	32	57	32
237	566	319	214	125	80	152	72	49	89	49
284	815	464	317	182	115	224	105	70	130	72
332	1110	631	431	247	157	307	142	95	175	97
379	1429	828	564	324	204	397	185	122	229	126
427	1840	1045	716	409	259	509	234	160	292	162
474	2277	1284	865	506	319	621	292	195	355	197
521		1556	1065	608	387	758	349	237	434	242
569		1840	1267	728	459	895	416	282	516	287
616		2180	1491	853	541	1062	491	332	608	337
664			1726	985	628	1229	569	384	703	389
711			1983	1135	721	1411	651	441	808	449



HOW FLAME GARD® WORKS

The effluent from cooking processes contains aerosols of water vapor mixed with evaporated fat or oil. These are carried from the cooking surface by the moving air being drawn into the exhaust hood. Although small, each aerosol is much heavier than the air molecules surrounding it. Thus, when the air stream containing these aerosols strikes the Flame Gard Baffle System, the inertial force of the moisture-grease aerosol is considerably greater than that of the air molecule. While the air molecules change direction easily, the aerosol strikes the baffle and “splatters” on the surface.

Whereas the heaviest aerosols, because of their greater inertial force, impinge on the surfaces of the baffles facing and perpendicular to the air flow, the lighter ones remain in the air stream. As the air stream is drawn through the baffle system, the restrictions in area created by the baffles cause the air to increase in velocity while changing direction by 180 degrees. Since the inertial force is a product of the mass and the square of the velocity, this increase in velocity serves to increase the inertial force of the remaining smaller aerosols, causing them to impinge on the inner surfaces of the baffles in the same manner in which the heavier aerosols impinged on the entering surfaces.

The design of the baffle system provides several impingement surfaces and two rapid 180-degree direction changes. The grease slides down to the grease trough and then to the collection container.

STANDARDS

1. THE NATIONAL EVALUATION SERVICES COMMITTEE OF THE COUNCIL OF AMERICAN BUILDING OFFICIALS recognizes Flame Gard® when installed with the manufacturer’s recommendation and the following table:

STAINLESS STEEL FILTER TABLE 1 HEIGHT OF GREASE FILTERS	
Type of Cooking Equipment	Height Above Cooking Surface
No Exposed Flame	150 mm
Exposed Flame	600 mm
Charcoal Burning	600 mm

2. UNDERWRITERS’ LABORATORIES, INC., Flame Gard® Grease Filters are classified as to flammability after exposure to grease-laden air only. Guide AKUS, File R6593, Control #854G. See Underwriters’ Laboratories Classified Building Materials Index.
3. Meets the requirements of NATIONAL FIRE PROTECTION ASSOCIATION, Standard No. 96.

SIZES / INSTALLATION

Flame Gard® should always be installed with the baffles in a vertical position, in order to allow the grease particles to be drawn into the collection system by gravity.
Standard sizes are ordered with the vertical (top to bottom) dimension first and the horizontal (left to right) dimension second. For information on sizes not listed, contact Air Care Technology Ltd or your distributor.

Related Products:

Airefil WG Grease Filter
Airefil Holding Frames

Data Sheets:

E54128
E54134

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