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Installation & Operations Manual for Energenics Multi Dryer Flat Mount (FM) Utility Free OPL Series Lint Filters

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THE NEED FOR A LINT FILTER / HOW IT WORKS

Your new Energenics State-of-the-Art Lint Filter has evolved from over 30 years of research and development to be the optimum solution for catching up to 98% of all bypassed lint produced from textile dryers. 3 problems that are minimized by reducing excess lint are:

1. Dryer exhaust may be in close proximity to air-handling equipment such as A/C Units, Cooling Apparatus, and Fresh Air Intake systems.
2. When there is a longer exhaust run from the dryers to the outside atmosphere there is likely that the inside of the duct will accumulate with lint causing dryer inefficiency and creating a potential fire hazard.
3. Quite often the Laundry Room is located near the front of the building. When this occurs the duct is usually directed to the front of the building. This results in an unsightly mess in the landscaping.

The Air Free Lint filters key components are an internal lint screen for lint capture and a removable lint bag or hard container at the bottom of the filter for storage and disposal. When dryers are operating the lint screen which is similar to a parachute is expanded upward.. As the dryer cycle progresses the lint screen forms a canopy which captures the lint while letting dryer exhaust flow efficiently through the screen. When dryers are off the lint screen relaxes, allowing the canopy to collapse shedding the lint into the storage bag or container. At the end of the shift the storage bag or container is emptied into a trash receptacle.

RECEIVING AND INSTALLATION

1. Inspect the filter inside and outside for damage.
2. Adjust the height and anchor the base plate to the floor.
3. Remove the shipping rubber band from the white screen (inside the filter housing).
4. Install the black vinyl lint bag (if equipped) to the bottom of the filter.
5. Duct individually ([READ PAGE 4](#)) from the dryers to the filter.
6. If the dryer ducts are too many or too large for the filter inlet have the ducting contractor fabricate a short adapter inlet to match to the filter.
7. For outside installations, specify the side discharge option from Energenics. Alternatively, install a "goose neck" on the top of the filter a total of 120 degrees to face downward. Do not put bird screen on the end, it will clog with lint and become a maintenance issue and may possibly cause a fire.
8. For low ceiling laundries use the Side Discharge Option for horizontal exhaust requirements.
9. The filter can be lowered to 16 inches from ground to filter bottom from our recommended standard of 24 inches. The lint storage (bag or container) located under the lint filter will be slightly more difficult to empty.
10. When ducting from the filter to the outside, direct the exhaust away from sensitive air handling equipment, even minor lint by-pass clogs compressors.
11. Duct runs longer than 50 feet to the filter are a problem, consult Energenics for review.

*****INSTALLATION WARNING*****

AF-2, AF-4 & AF-10 FLAT MOUNT (FM) AIRFREE LINT FILTERS

The AF-2 (2000 CFM), AF-4 (4,000 CFM) and the AF-10 (10,000 CFM) Flat Mount (FM) Lint Filters are products of many years of experience and development to produce a cost effective, space saving & energy efficient solution to remove 98% of the lint produced during the drying of textiles. Because of the small footprint of the AF-2, AF-4 & AF-10 Flat Mount ((FM) units special consideration must be given to the location of ducting entering the Lint Filter.

For the best level of performance we encourage the ducts to enter the Lint Filter spaced uniformly across the inlet of the Lint Filter. Concentrating the ducts in a small area of the Lint Filter may be disruptive to proper airflow.

The following are keys to a proper installation resulting in optimum airflow:

AF-2 & AF-4 FLAT MOUNT (FM)

- For the AF-4 ducting in the front entrance, Energenics will supply 45 degree Saddle Taps to help insure that the dryer exhaust enters the Lint Filter at the optimum angle for efficient airflow. 45 degree Saddle Taps are not necessary for ducts entering the side. Any duct dimension larger than 8" must enter the Lint Filter at either or both sides.

AF-10 FLAT MOUNT (FM)

- The AF-10 Lint Filter will accept a maximum duct dimension of 18". Due to the force of airflow from an 18" duct there should be a reasonable distance between the ducts. It is important the ducts do not enter the filter at a 90 degree angle side and front in close proximity to each other. The ducts should enter the filter spread as far apart as possible.

Adherence to the above items will insure many years of successful, efficient dryer venting. If there are any questions or need for clarification we recommend contacting Energenics at 800-944-1711. This is especially important during the planning/design stage as opposed to an installation already completed.

REMEMBER AS IN ALL DRYER DUCTING NO BIRDSCREEN AT THE EXIT

PROPER OPERATION OF AIRFREE LINT FILTERS WITH BOOSTER FANS

Air Free lint filters do not use compressed air. They are self-cleaning when all of the dryers are turned off. It is important that all of the dryers are turned off ever few hours so the lint can fall off of the screen and drop into the lint storage container.

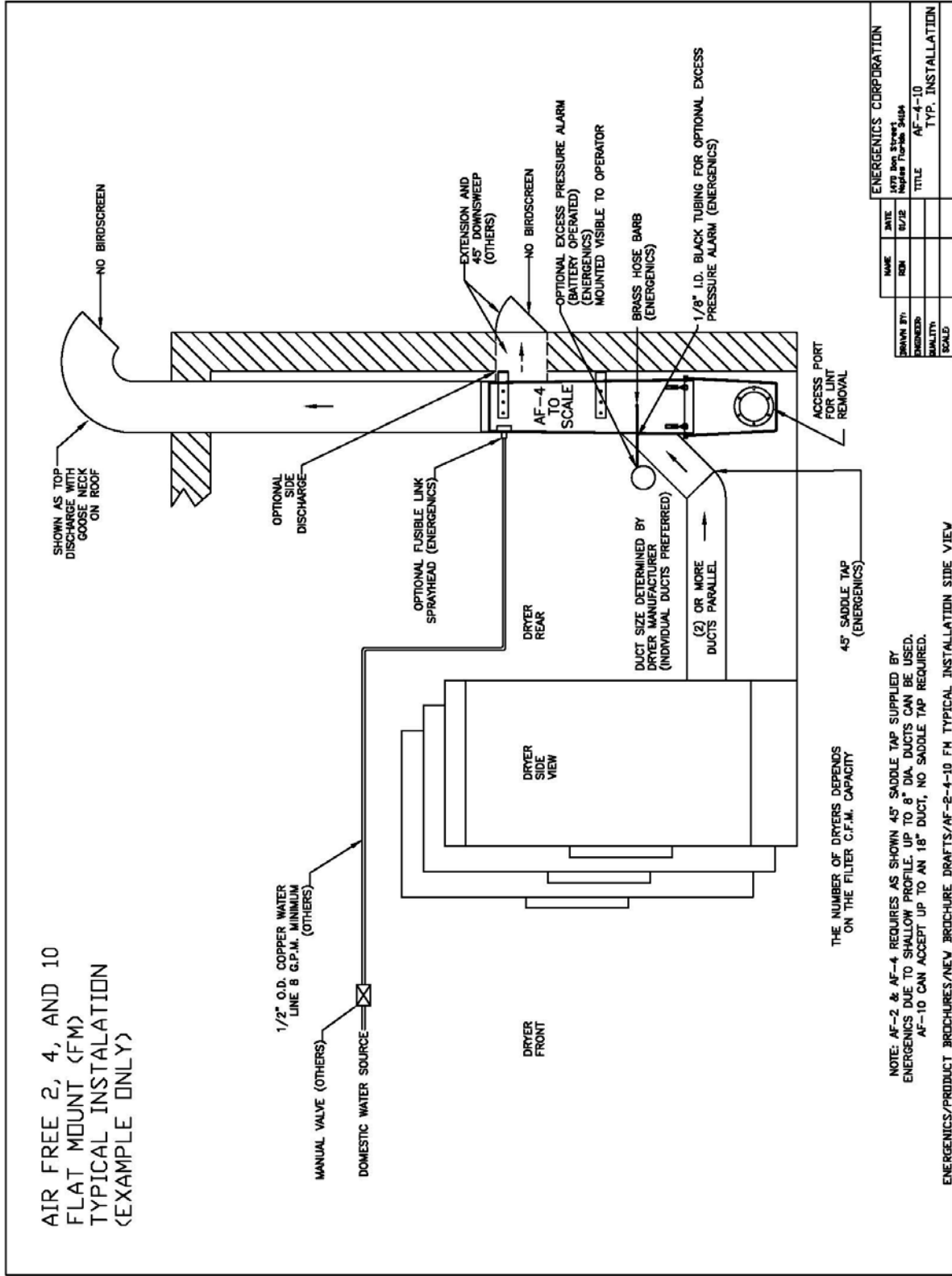
Simultaneously the booster fan must also be turned off to not allow the lint to be drawn up into the screen by the suction of the blower. Properly controlled the booster fan is off when the dryers are off. A byproduct of this procedure is a savings in utility cost incurred by the blower operation needlessly.

The airflow entering the Lint Filter must be under a slight positive back pressure. In most cases .12" w.c. is acceptable for proper dryer operation. If the air is too negative the airflow going across the burner is too great thus lowering inlet temperature going into the load resulting in the burner cycling too often.

The Energenics Air Flow Optimizer is designed to maintain a low positive back pressure and allowing the booster fan to turn off when not required to operate (i.e. when all dryers are off. This allows the lint to be released from the screen and fall into the lint storage container.

If the proper airflow and sequencing of dryer/blower shutdown is not achieved the lint filter will no clean itself. The result is the lint will be pulverized and be allowed to bypass the lint screen.

AIR FREE 2, 4, AND 10
 FLAT MOUNT (FM)
 TYPICAL INSTALLATION
 (EXAMPLE ONLY)



THE NUMBER OF DRYERS DEPENDS
 ON THE FILTER C.F.M. CAPACITY

NOTE: AF-2 & AF-4 REQUIRES AS SHOWN 45° SADDLE TAP SUPPLIED BY
 ENERGISTICS DUE TO SHALLOW PROFILE. UP TO 8" DIA. DUCTS CAN BE USED.
 AF-10 CAN ACCEPT UP TO AN 18° DUCT, NO SADDLE TAP REQUIRED.

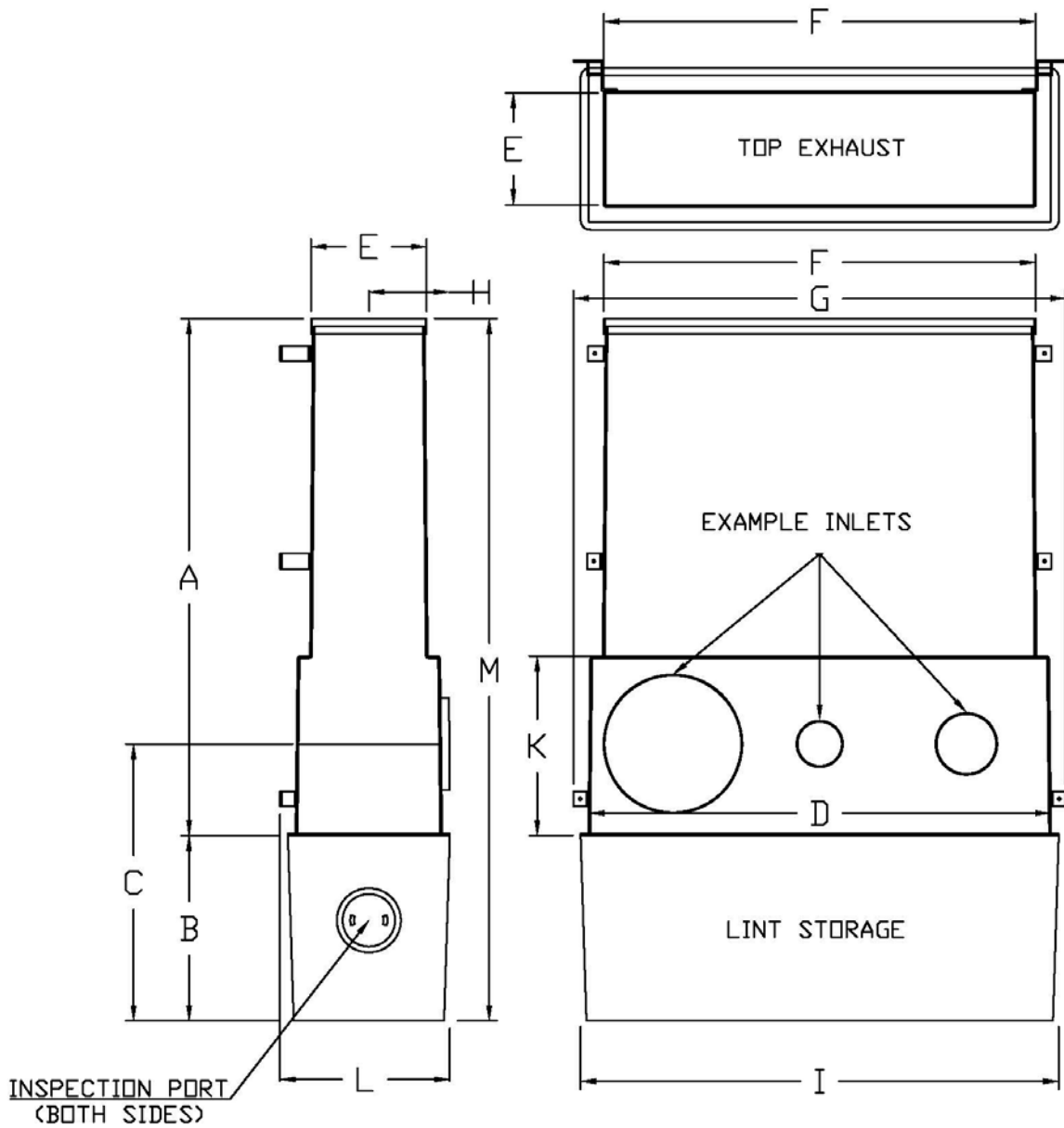
ENERGISTICS/PRODUCT BROCHURES/NEW BROCHURE DRAFTS/AF-2-4-10 FM TYPICAL INSTALLATION SIDE VIEW

ENERGISTICS CORPORATION	
NAME	DATE
ROOM	8/12
DRAWN BY:	Major Tomoko Sakai
DESIGNED	TITLE AF-4-10
QUALITY	TYP. INSTALLATION
SCALE	

**AIRFREE SERIES FLAT MOUNT (FM)
(DRAWING PAGES 8 & 9)**

Model #	AF-2-FM TOP	AF-2-FM SIDE	AF-4-FM TOP	AF-4-FM SIDE	AF-10-FM TOP	AF-10-FM SIDE
CFM	2,000	2,000	4,000	4,000	10,000	10,000
Oper. Wt. Lbs.	100	100	145	145	175	175
Ship Wt. Lbs.	140	140	180	180	210	210
A	36	36	43	42	67	66
B	9 1/4	9 1/4	21	21	24	24
C	16 1/4	16 1/4	29 1/2	29 1/2	35 7/8	35 7/8
D	25 1/2	25 1/2	52	52	60	60
E	11	10	10 5/8	11	15	15
F	25 1/2	22	51	48	56	56
G	25 1/2	25 1/2	55 7/8	55 7/8	63 7/8	63 7/8
H	5 1/2	5 1/2	6 1/2	6 1/2	10 3/8	10 3/8
I	24 1/2	24 1/2	54	54	62	62
J	N/A	25	NA	26	NA	45
K	13 1/2	13 1/2	16	16	23 1/4	23 1/4
L	11	11	12 1/4	12 1/4	22	22
M	45 1/4	45 1/4	64 1/8	63 1/8	91	90

AIFREE SERIES FLAT MOUNT (FM) TOP DISCHARGE DIMENSIONAL DIAGRAM



AF-(FM) 2/4/10 FLAT MOUNT TOP DISCHARGE

MAINTENANCE REQUIREMENTS

The frequency of your maintenance requirements depends upon the number of hours of operation and upon variances in your product output. For a single-shift operation, without special problems, the frequency recommended below should suffice. You should set your own schedule based on your experience.

1. WEEKLY

Visually inspect the filter inside and outside, its controls and their operation. At time of such inspection, note and correct any discrepancies from normal operation. Inspection should be made at the dryer for lint, which may back up and cause a fire if not cleaned. Empty the lint bag and clean the screen as required.

PARTS LIST & CUSTOMER SERVICE

ENERGENICS CUSTOMER SERVICE 1-800-944-1711

www.energenics.com

MODEL #	LINT SCREEN #	LINT BAG #
AF-2 Flat Mount (FM)	AF-2-160	N/A
AF-4 Flat Mount (FM)	AF-4-160	N/A
AF-10 Flat Mount (FM)	AF-10-160	N/A