

Check condensate drain pans for algae every three months. If algae growth is found, consult a water treatment specialist for proper chemical treatment.

VIBRATION LEVELS

Should excessive vibration develop, check the following possibilities: (1) Build-up of dirt or foreign matter on wheel; (2) Bolts on bearings, housings or driver loose; (3) V-belt drives improperly aligned, belts must have proper tension, sheaves must be balanced; (4) Check bearing locking collars for tightness; (5) Check wheel set screws; (6) Foreign matter entered fan causing damage to wheel, shaft or bearings. (7) Vibration may be coming from a source other than the fan. stop the fan and determine if the vibration still exists. Disconnect the driver motor from the fan and operate it or by itself to determine if it produces vibration.

FILTERS

INSERTING FILTERS

1. Check quantity and size of filters. Refer to Table 5, 6, 7 and 8.

2. Check that the gasketing in the bag filter channel is in place.
3. Always load filters from bottom row to top.
4. On bag filters, leave paper banding in place until filters are installed; then remove. Install filters so that foam gasket on filter frame is perpendicular to filter rack.

NOTE: On unit sizes 105, 120, 150, and 170 the bottom row of bag filters could be installed with the pleats horizontally.

5. Prefilters are to be installed on upstream side of bag filters. Airflow arrows must point downstream (in direction of air-flow).

MAINTENANCE AND REPLACEMENT

Filters should be replaced when the pressure drop, measured by a manometer, reaches the prescribed limits for the installation.

TABLE 5 - FLAT FILTER SIZES AND QUANTITIES

		UNIT SIZE																
Area (sq. ft.)		35	60	80	105	120	150	170	215	250	305	360	400	500	580	660	800	1000
Filter Size	12" x 24"		1			13.3	16.7	17.8	22.2	24.0	32.0	40.0	41.7	50.0	60.0	66.0	82.7	108.8
	16" x 20"					6		8								3	3	
	16" x 25"				4		6											
	20" x 20"								8									
	24" x 20"											15						14
24" x 24"		1	1	2						6	8	12		15			5	21

NOTES:

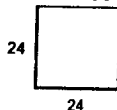
NOTES:

1. See the filter configurations below for specific filter arrangements.
2. Flat filters are side-loaded.
3. Open return filters are front-loaded.

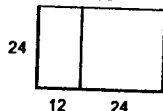


INDICATES BLOCKOFF

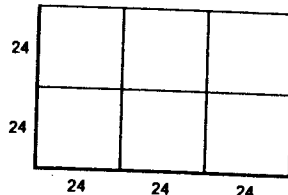
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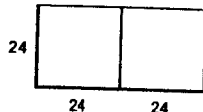
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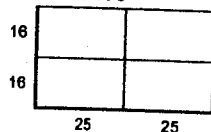
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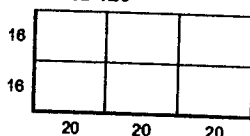
SIZE 80



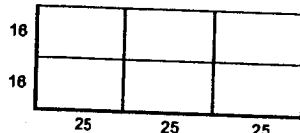
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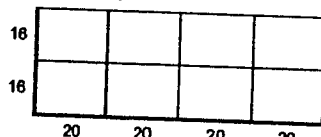
SIZE 120



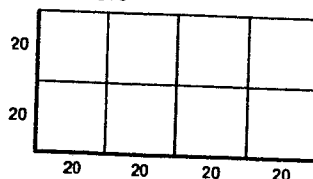
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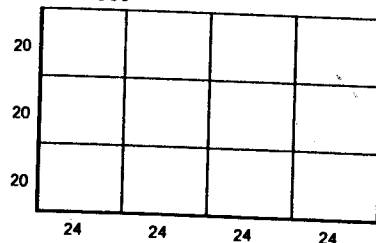
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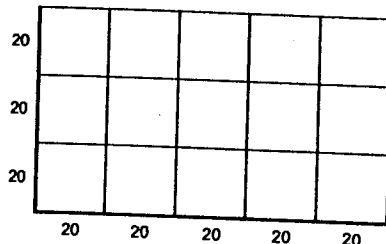
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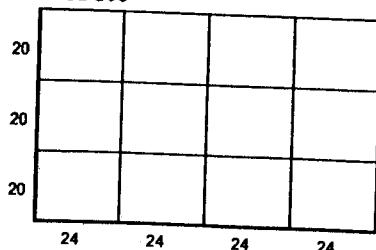
SIZE 360



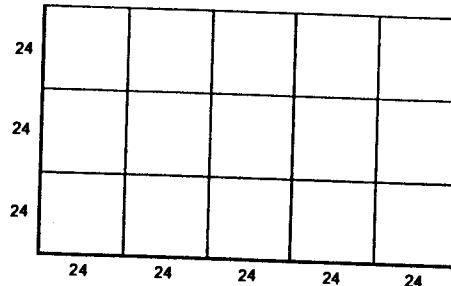
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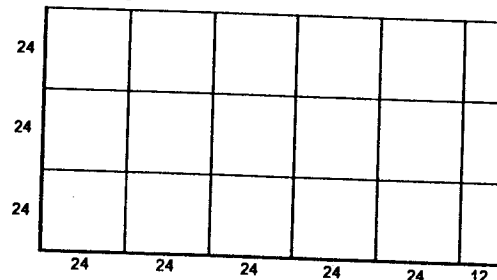
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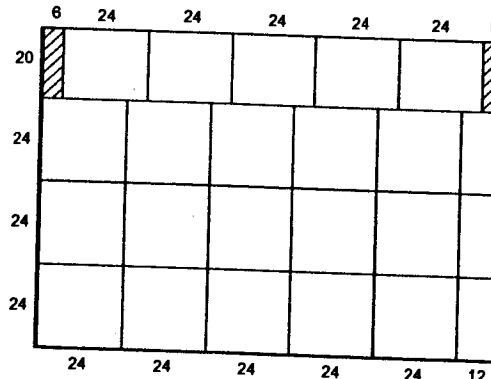
SIZE 580



SIZE 660



SIZE 800



SIZE 1000

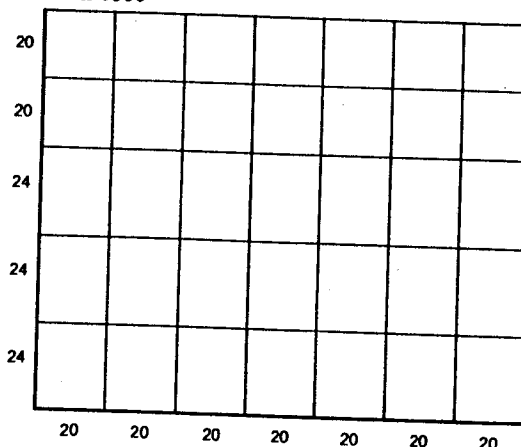


TABLE 6 – ANGLE FILTER SIZES AND QUANTITIES

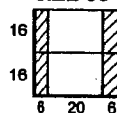
		UNIT SIZE																
		35	60	80	105	120	150	170	215	250	305	360	400	500	580	660	800	1000
Area (sq. ft.)		4.4	8.9	11.1	15.6	16.7	21.1	22.2	29.2	35.6	42.2	50.0	55.6	66.7	80.0	88.0	133.3	140.0
Filter Size	12" x 24"															4		
	16" x 20"	2	4		2		2			16	4							
	16" x 25"								8		12							
	20" x 20"			4	4	6	6	8				8		24			48	
	20" x 24"																	42
	20" x 25"								2			8	16					
24" x 24"															20	20		

NOTES:

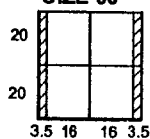
1. See the filter configurations below for specific filter arrangements.
2. Angle & filter / mixing box filters are side-loading.

 INDICATES BLOCKOFF

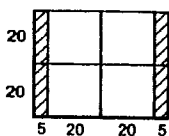
SIZE 35



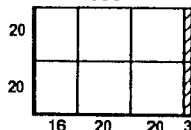
SIZE 60



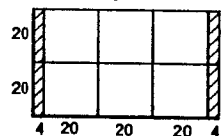
SIZE 80



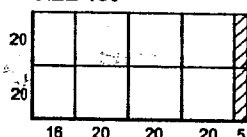
SIZE 105



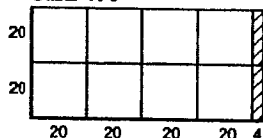
SIZE 120



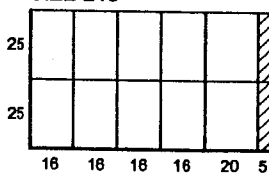
SIZE 150



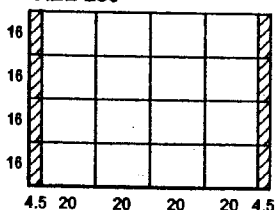
SIZE 170



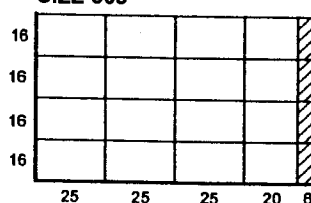
SIZE 215



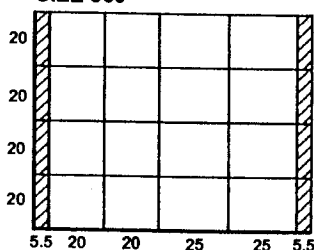
SIZE 250



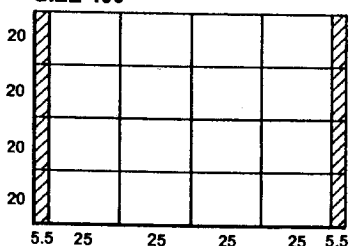
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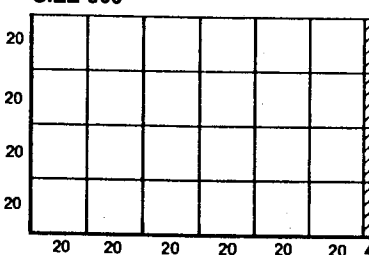
SIZE 360



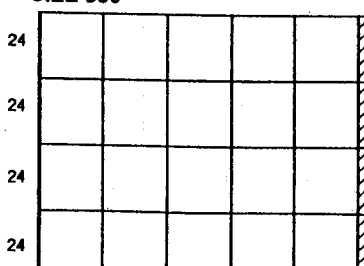
SIZE 400



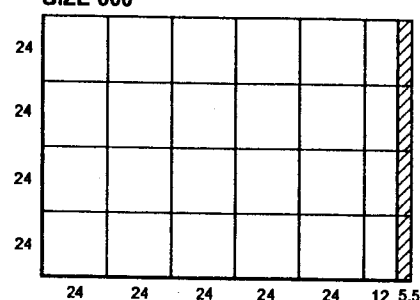
SIZE 500



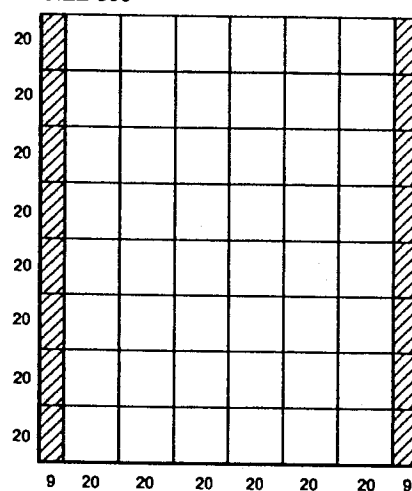
SIZE 580



SIZE 660



SIZE 800



SIZE 1000

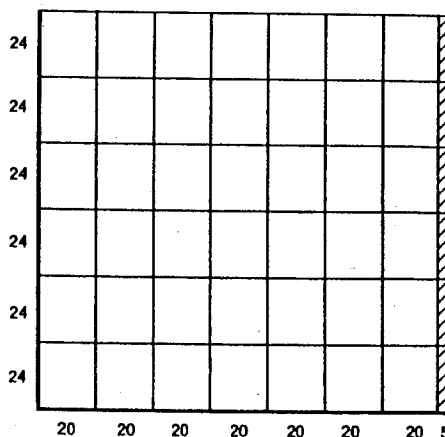


TABLE 7 – BAG FILTER / RIGID FILTER SIZES AND QUANTITIES

		UNIT SIZE																
		35	60	80	105	120	150	170	215	250	305	360	400	500	580	660	800	1000
Area (sq. ft.)		4.0	6.0	8.0	12.0	12.3	16.0	17.1	22.2	24.0	32.0	40.0	41.7	50.0	60.0	66.0	82.7	108.8
Filter Size	12" x 24"		1		2	2	3	3								3	3	
	20" x 20"					3		4	8									
	24" x 20"				2		3					15						14
	24" x 24"	1	1	2								12		15			5	21

NOTES: 1. Filter sizes are dimensioned width by height.

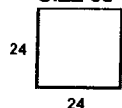
- NOTES: 1. Filter sizes are dimensioned width by height (W x H). Example: Filter size 12 x 24 = 12" wide by 24" high filter.
 2. See the filter configurations below for specific filter arrangements.
 3. Bag, rigid & pre-filter filters are all side-loading.



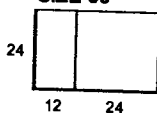
INDICATES BLOCKOFF

Bag & Rigid Filters with a pre-filter require 2 sets of Blockoffs.
 One set for the Pre-filter Track & one for the Final Filter Track.

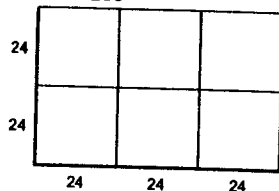
SIZE 35



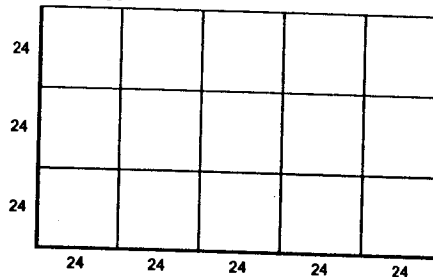
SIZE 60



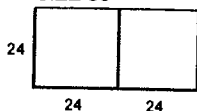
SIZE 250



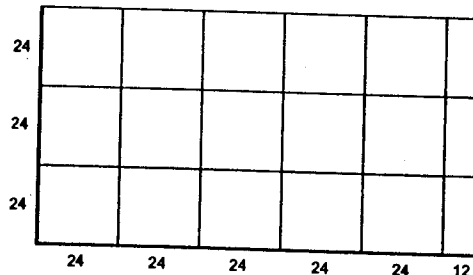
SIZE 580



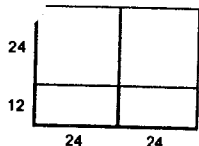
SIZE 80



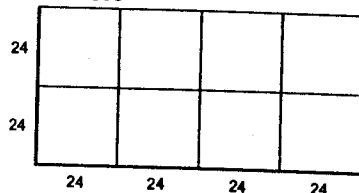
SIZE 660



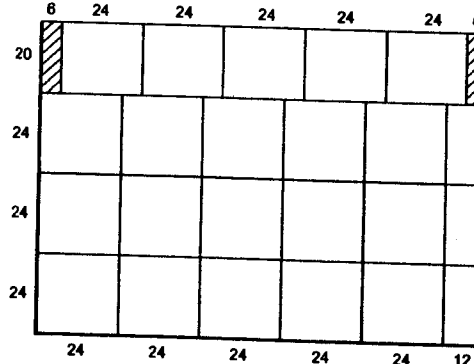
SIZE 105



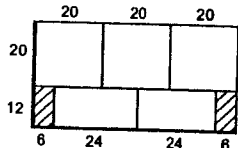
SIZE 305



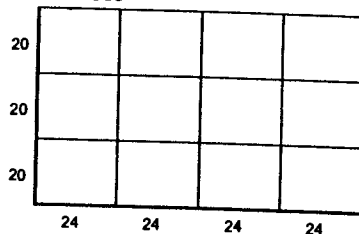
SIZE 800



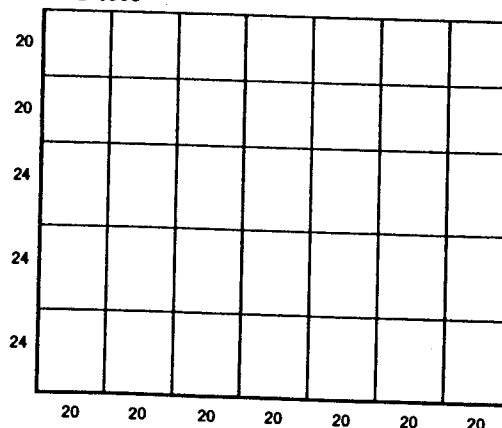
SIZE 120



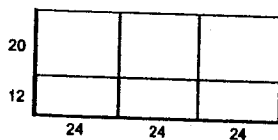
SIZE 360



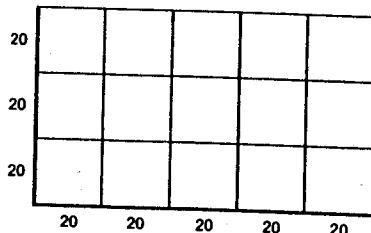
SIZE 1000



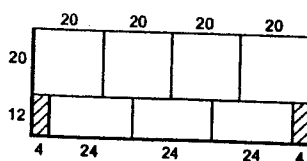
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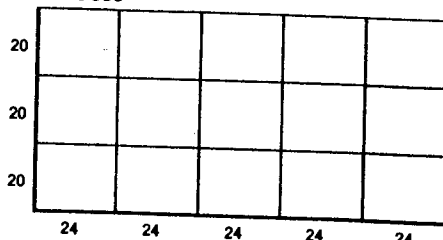
SIZE 400



SIZE 170



SIZE 500



SIZE 215

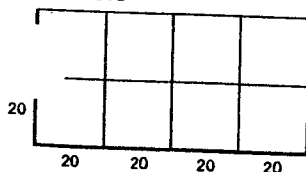


TABLE 8 – HEPA FILTER SIZES AND QUANTITIES PER UNIT SIZE

		UNIT SIZE																
		35	60	80	105	120	150	170	215	250	305	360	400	500	580	660	800	1000
Area (sq. ft.)		4.0	6.2	7.5	10.0	12.5	15.0	18.0	21.1	26.0	30.0	37.5	40.0	49.8	61.7	68.2	81.3	98.9
Max CFM		2,000	3,125	3,750	5,000	6,250	7,500	9,000	10,563	13,000	15,000	18,750	20,000	24,938	30,875	34,125	40,888	49,500
Filter Size	24" x 24"	1						3	2	4				2	2	8	8	12
	24" x 12"																	
	12" x 24"							3										
	15" x 24"								2					1			4	
	15" x 30"								1					3			1	
	24" x 30"								1	2	6			6	6	2	2	8
	12" x 30"																	2
	30" x 24"			1	2		3						8		1	4	4	
	30" x 30"		1			2						6			3	1	1	
30" x 12"				1														

NOTES:

- See the filter configurations below for specific filter arrangements.
- For further details, see the HEPA filter IOM enclosed with unit.

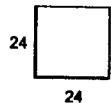
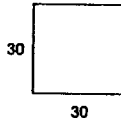
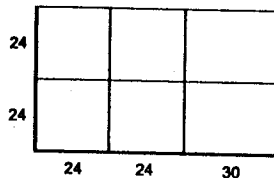
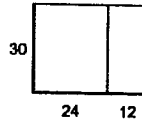
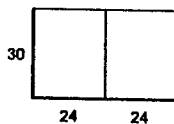
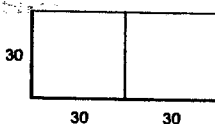
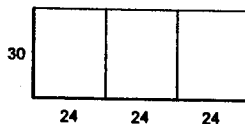
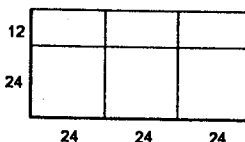
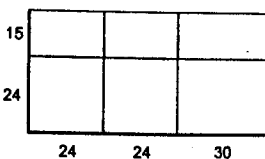
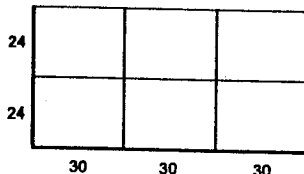
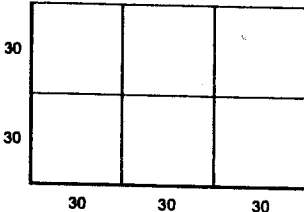
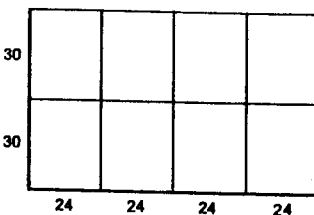
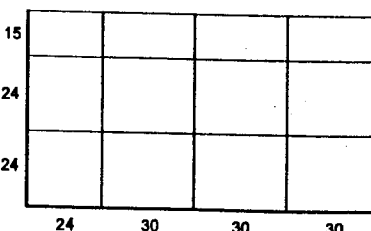
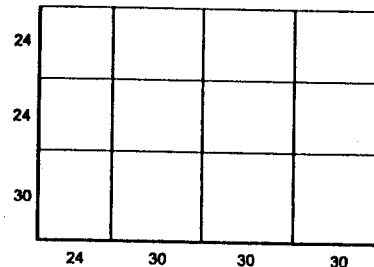
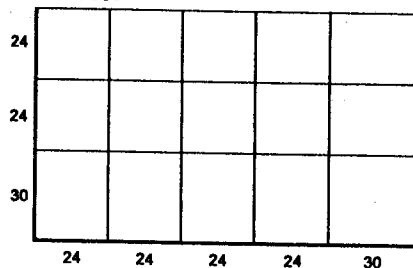
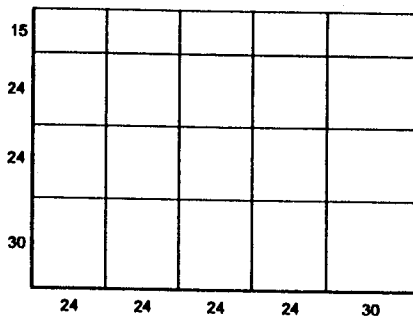
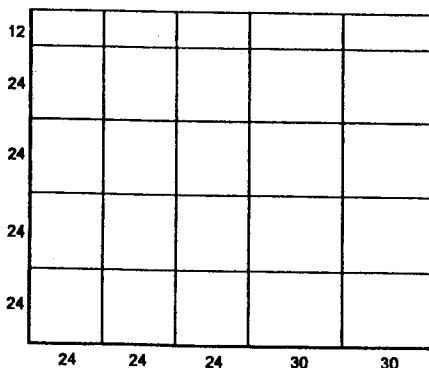
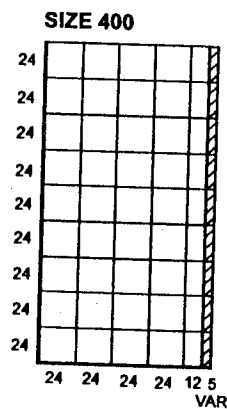
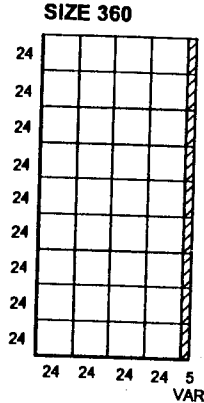
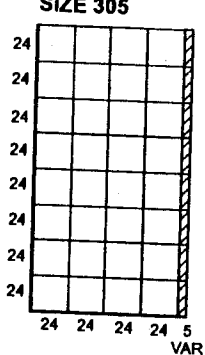
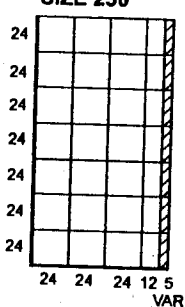
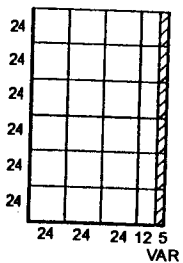
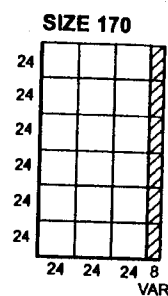
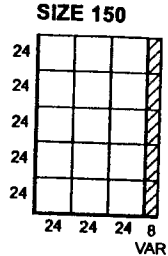
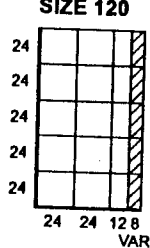
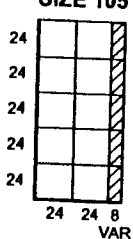
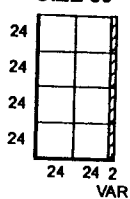
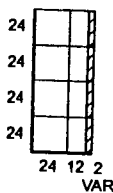
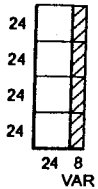
SIZE 35**SIZE 60****SIZE 250****SIZE 80****SIZE 105****SIZE 120****SIZE 150****SIZE 170****SIZE 215****SIZE 305****SIZE 360****SIZE 400****SIZE 500****SIZE 580****SIZE 860****SIZE 800****SIZE 800**

TABLE 9 – CARBON FILTER SIZES AND QUANTITIES PER UNIT SIZE

	UNIT SIZE																
	35	60	80	105	120	150	170	215	250	305	360	400	500	580	660	800	1000
AREA (sq.ft.)	16	24	32	40	50	60	72	84	98	128	144	162	200	240	264	330	432
24" x 24"	4	4	8	10	10	15	18	18	21	32	36	36	50	60	60	75	108
24" x 12"		4			5			6	7			9			12	15	

NOTES: 1. See the filter configurations below for specific filter arrangements.

NOTES: 1. See the filter configurations below for specific filter arrangements.
2. Carbon filters are side loading.



INDICATES BLOCKOFF

