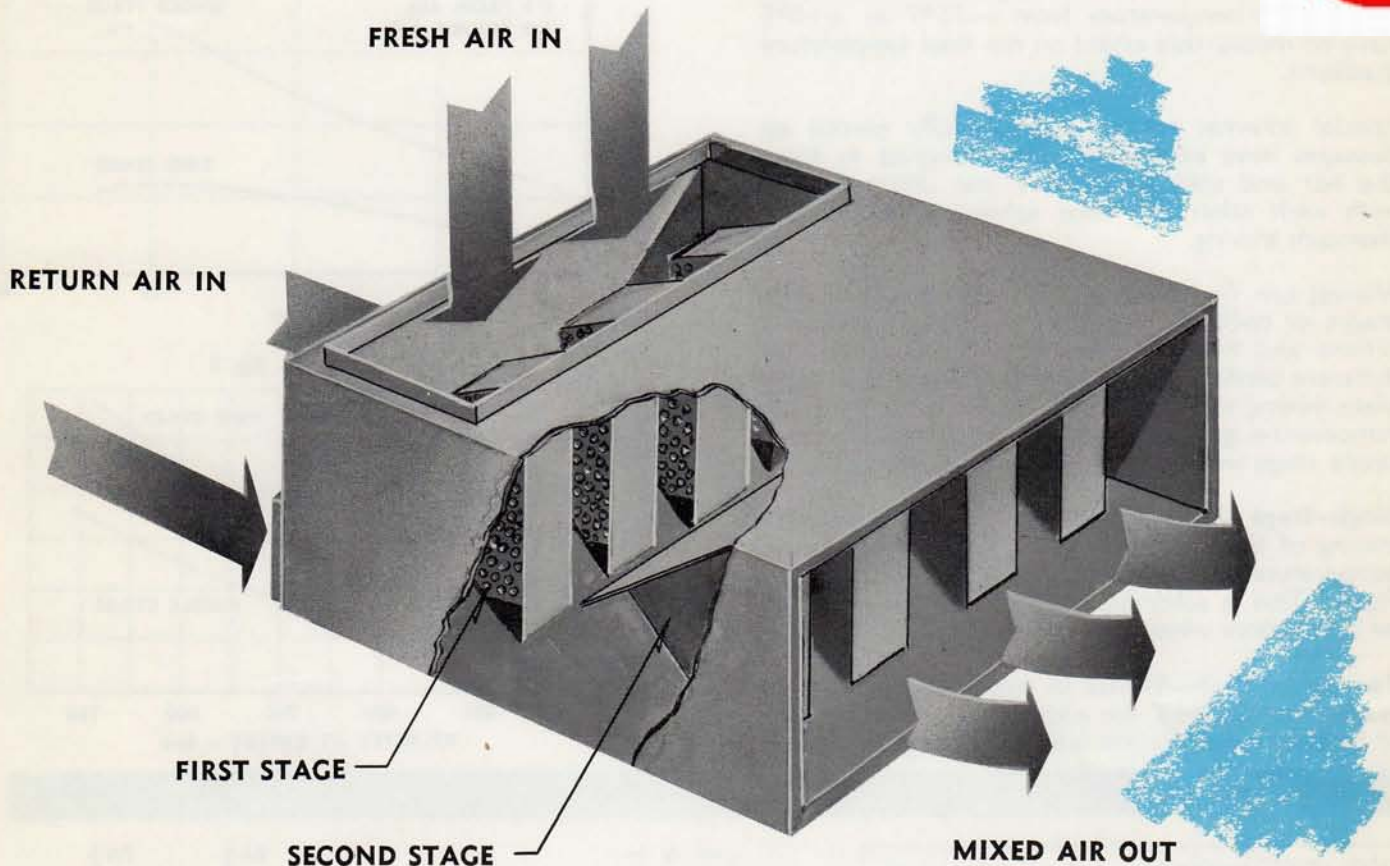


"EVEN-TEMP"

MIXING BOX



FEATURES

- Minimum stratification of mixed air.
- Avoids cold spots and heating coil freeze-ups.
- Complete mixing over range of 5% to 75% FRESH AIR Supply
- Temperature gradients across outlet as low as 3°F.
- Efficiency maintained with FRESH AIR temperature down to -15°F.
- 2-Stage baffling for partial or complete mixing of HOT and COLD air streams.
- Multi-leaf FA and RA dampers.
- Fully tested and guaranteed performance.
- Fits all SHELDONS standard H & V, and AC units.

EVEN-TEMP MIXING BOX

To meet the need for improved mixing of the fresh and return air in heating, ventilating and air conditioning units, Sheldons have designed the EVEN-TEMP Mixing Box to provide practically 100% uniform temperature air across the entire outlet area of the mixing box, under almost any condition of fresh or return air.

Sheldons EVEN-TEMP mixing box has a maximum temperature gradient of 3° to 6°F across the whole discharge area, over the range from 5% to 75% fresh air, with fresh air entering at 0°F. Variations in fresh air temperature from -15°F to +10°F have no measurable effect on the final temperature gradients.

Special internal baffles and carefully placed air passages have been effectively designed to force the hot and cold air streams into direct contact with each other and thus achieve complete and thorough mixing.

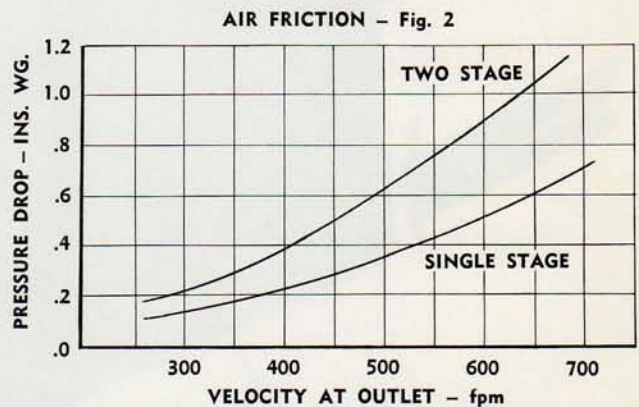
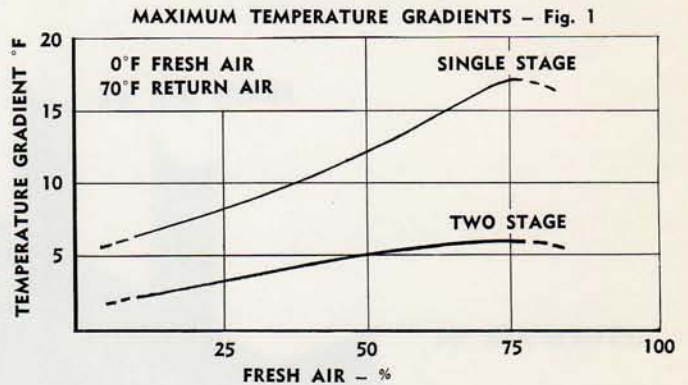
Mixing can be obtained with either one or two stages of baffling, depending on the desired conditions and the space available. Tests on several different configurations of baffles showed that complete mixing of fresh air and return air down to 5° temperature gradient could not be achieved with a single stage mixing box.

Single-Stage Unit—This design provides very good mixing of the two air streams, giving a maximum temperature gradient of about 15°F as shown in Fig. 1. This is achieved with a short box and may be satisfactory when space is limited.

Two-Stage Unit—Where an improved temperature gradient is required, the addition of a second stage of baffles completes the intimate mixing of the air

stream and effectively reduces the maximum temperature gradient to approximately 5°F as shown in Fig. 1.

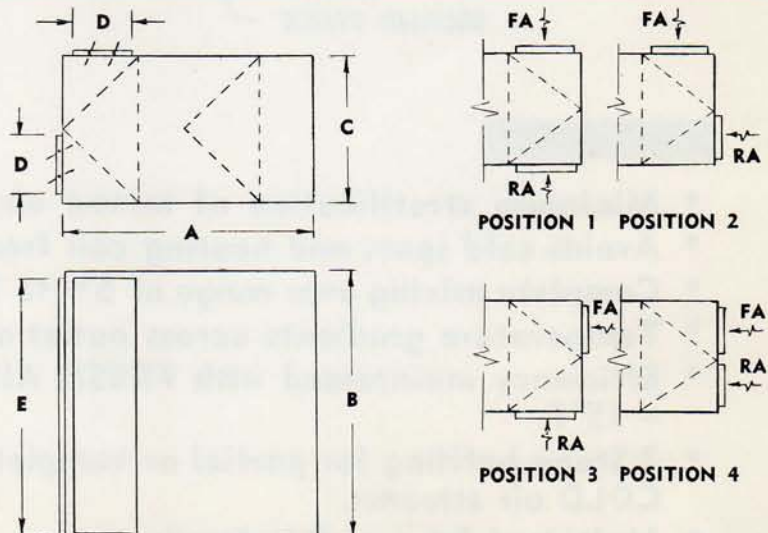
NOTE: To obtain the results indicated in Fig. 1, the fresh air MUST ALWAYS ENTER ABOVE THE HORIZONTAL CENTRE-LINE. Four alternate positions of FA and RA supply connections are available as shown.



DIMENSIONS

UNIT SIZE	CAPACITY at 500 fpm	A		B	C	D	E	WT. _{lb}
		Single Stage	Two Stage					
110	3050	20	37	40	22	9	36	144
111	4000	21	41	48	24	10	44	186
112	4150	24	45	45	26½	11	41	204
113	4680	27	51	45	30	13	41	242
115	6120	31	59	51	34½	15	47	320
116	6840	31	59	57	34½	15	53	340
118	8640	37	71	60	41½	18	56	482
120	9080	37	71	63	41½	18	59	495
211	6420	24	45	69	26½	11	65	270
212	6420	24	45	69	26½	11	65	270
213	7800	27	51	75	30	13	71	337
215	8900	31	59	75	34½	15	71	405
216	11200	34	65	84	38½	17	80	507
218	13850	37	71	96	41½	18	92	645
220	16800	38	72	114	42½	19	110	995
222	18700	41	77	120	45	20	116	1120
224	26100	55	104	120	61½	28	116	1750

*Weights based on 2-stage units. Single stage units are approx. 50% of these weights.



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