

Ventilation Design

DEL-AIR's ventilation design service will give you information on recommended ventilation rates, equipment location, proper air flows, and heat and moisture balance calculations. DEL-AIR stands behind their designs.

DEL-AIR GUARANTEE

DEL-AIR Systems Ltd. guarantees, for one full year (12 months) from the date of installation, that the DEL-AIR ventilation system will maintain temperature, relative humidity, air change rate, and air pattern within the range specified in the original design.

The Service Contract

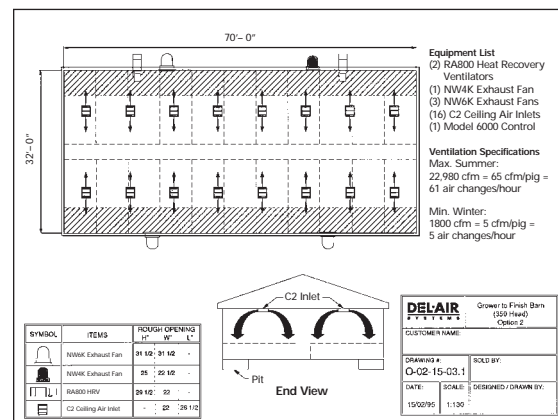
DEL-AIR Systems Ltd. and their dealer and distributors wish to show concern for their customers' satisfaction by entering into a service contract with the buyer. The contract is to reassure each customer that we are serious about **your** satisfaction and will confirm in writing what we intend to do to fulfill our end of the purchase agreement.

Professionally Designed Environments for Your Animals



- Engineering** Every room in the facility is ventilated according to its specific requirements.
- Drawings** Specifications are accompanied by an equipment layout drawing which shows the recommended equipment for your facility, and gives you the full picture.
- Product** Superior performance and quality through use of engineered products, corrosion resistant materials and on-going quality control.
- Service** Your DEL-AIR representative is professionally trained and is there to meet your every need, before and long after the sale is made.

DEL-AIR
S Y S T E M S
ISO 9001 PENDING



General Ventilation Standards

ANIMAL TYPE	COMMENTS lbs (kg)	WINTER RATES		SUMMER RATES	
		Range* CFM (m ³ /hr)	Range ACH	Range* CFM (m ³ /hr)	Range ACH

Hogs

Dry Sows	-	6-15 (10.2 - 25.5)	2.0 ACH to 6.0 ACH	220-300 (374 - 510)	45 - 90
Sow and Litter	-	15-30 (25.5 - 51)		400-600 (680 - 1019)	45 - 60
Weanlings	15-50 (6.8 - 22.7)	2.0-3 (3.4 - 5.1)		40-50 (68 - 85)	60 ACH to 100 ACH
Growers	50-125 (22.7 - 56.7)	2.5-4 (4.2 - 6.8)		50-80 (85 - 136)	
Finishers	125-250 (56.7 - 113)	4-8 (6.8 - 13.6)		80-100 (136 - 170)	
Grower/Finishers	50-220 (22.7 - 100)	4-8 (6.8 - 13.6)		80-90 (136 - 153)	

Poultry

Cage Layers	per bird	.4-.5 (.7 - .9)	2.0 ACH to 6.0 ACH	6-.7.5 (10.2 - 12.7)	50 ACH to 70 ACH
Floor Layers	per bird	0-.5 (0 - .9)		4.5-5 (7.6 - 8.5)	
Breeder Hens	per bird	0-.5 (0 - .9)		5-6 (8.5 - 10.2)	
Broilers	start: 3 oz (.08 kg)	0-.1 (0 - .17)		0-.5 (0 - .85)	
Broilers	finish: 4 lbs (1.8 kg)	1-1.5 (1.7 - 2.5)		4.5-7 (7.6 - 11.9)	
Roasters	start: 3 oz (.08 kg)	0-.1 (0 - .17)		0-.5 (0 - .85)	
Roasters	finish: 7.5 lbs (3.4 kg)	1-.2 (1.7 - 3.4)		6-8 (10.2 - 13.6)	
Turkeys	start: per lb/kg	0-.125 (0 - .21)		.5-.625 (.85 - 1.1)	
Turkeys	finish: per lb/kg	.1-.25 (.17 - .42)		1-1.25 (1.7 - 2.1)	

Cattle

Dairy Cows	per 1,100 (499)	60-90 (102 - 153)		400-450 (680 - 765)	
Replacement Calves	140 (64)	15-20 (25.5 - 34)		80-100 (136 - 170)	
Replacement Calves	110 (50)	15-20 (25.5 - 34)		55-70 (93 - 119)	
White Veal	300 (136)	25-30 (42.5 - 51)		140-150 (238 - 255)	
White Veal	100 (45)	20-25 (34 - 42.5)		60-70 (102 - 119)	
Beef Cattle	per 1,100 (499)	50-60 (85 - 102)		350-400 (595 - 680)	

Other

Horses	per 1,000 lbs (454)	30-40 (51 - 68)		140-150 (238-255)	
Sheep/Goats	per 100 lbs (45)	6-10 (10.2 - 17)		75-100 (127-170)	
Dogs	per dog	Kennels: 5 ACH in winter and 40 ACH in summer			
Rabbits	per lb (.45)	Varies from 0.5 – 2.0 cfm per lb. (Call for firm recommendation)			
Chinchillas	per lb (.45)	.15-.2 (.25-.34)		4.2-5 (7.1-8.5)	

* These values represent the ventilation rates used successfully on thousands of facilities. Your DEL-AIR representative will work with you to optimize the ventilation for your facility.

The standards shown here are meant as a guide only. They are the culmination of years of experience in ventilation of animal confinement buildings right across North America. When deciding on summer ventilation rates, you should be at the high end if the building is located in a warm climate, or the low end if the building is in a cooler area. You should contact a DEL-AIR representative for accurate winter ventilation and heating needs for specific applications.

The difference in cost between an adequate ventilation system and an excellent one is very little.

Don't be satisfied with adequate!