



## ELECTRIC ORGAN BLOWER COMPANY

### Blower Capacity Chart

Maximum Static	½ hp	¾ hp	1 hp	1½ hp	2 hp	3 hp	5 hp	7½ hp	10 hp
Regular Fans	6"	7¼"	7½"	8½"	9"	9½"	11"	15"	19"
Hi-Static Large Fans	7½"	8½"	N/A	N/A	11"	11"	13"	16"	N/A
Wind Pressure (At Chest)	Maximum Number of Stops & C.F.M.								
3"	14 630	20 900	25 1125	33 1485	40 1800	55 2475	90 4050	124 5559	162 7290
3½"	11 547	15 764	20 987	26 1307	33 1653	46 2276	73 3638	102 5100	131 6548
4"	9 475	12 649	16 864	21 1154	28 1510	40 2089	60 3272	86 4674	108 5890
4½"	7 413	10 534	13 755	18 1026	24 1371	33 1911	52 2945	75 4279	93 5301
5"	6 360	8 480	11 660	15 921	20 1235	29 1744	44 2655	65 3911	79 4779
6"	-	6 390	-	12 780	15 975	22 1441	33 2170	60 3250	59 3906
7"	-	-	-	-	11 779	17 1176	26 1800	39 2680	47 3240
8"	-	-	-	-	8 584	13 949	21 1533	30 2190	38 2759
10"	-	-	-	-	-	-	16 1280	22 1799	29 2304
12"	-	-	-	-	-	-	-	18 1530	23 1974
14"	-	-	-	-	-	-	-	15 1350	19 1755
16"	-	-	-	-	-	-	-	-	15 1560

# How to Calculate Blower Capacity

How to calculate number of stops and pressure:

Step 1: Calculate the number of stops on each pressure.

Great	7 stops x 3.25" pressure	=	22.75" pressure units
Great	1 stop x 5" pressure	=	5" pressure units
Swell	7 stops x 4" pressure	=	28" pressure units
Choir	7 stops x 3.5" pressure	=	24.5" pressure units
Choir	1 stop x 8" pressure	=	8" pressure units
Pedal	2 stops x 5" pressure	=	10" pressure units
Pedal	3 stops x 4" pressure	=	12" pressure units

Step 2: Add the total stops listed. Add the total pressure units.

28 stops      110.25" pressure units

Step 3: Divide the total pressure units calculated above by the total stops listed.

110.25" pressure units/28 total stops = 3.9375" average pressure  
(round up = 4")

Step 4: Use the Zephyr Capacity Chart to find the recommended blower size.

At 4" of pressure, a 2 hp Zephyr Blower will accommodate a 28 stop organ.

Helpful Tips:

- When counting stops, Manual 16' stops with more than 61 pipes and unit action should be counted as two stops.
- The maximum required pressure may increase the required blower size. A Blowers static pressure should be two to three inches higher than the maximum required pressure at the windchest.
- For Blowers in locations with higher elevation, discount the capacity by 4% for each 1,000 feet above sea-level (assuming zero-feet elevation).
- Use of Hi-Static Fans increases C.F.M. by 10-20% depending on horsepower.