

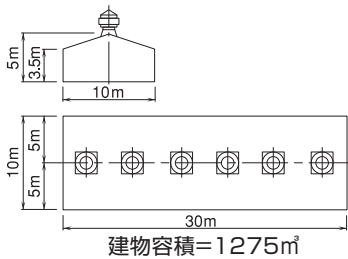
HD型ベンチレーター算出法

あらかじめ台数が設定されている場合

$$Q = \frac{aV}{60N}$$

Q：ベンチレーター1台の排気量（㎡/min）
a：建物1時間当たりの換気回数
N：ベンチレーターの台数
（通常5～6mにつき1台と仮定して計算します。）
V：建物の容積（㎡）

例：一般工場



a=6回/h V=1,275㎡ N=6台
室内外温度差=5℃ 外気風速=3m/s
(設置高)=5m

$$Q = \frac{6 \times 1,275}{60 \times 6} = 21.3 \text{ ㎡/min}$$

よってP.12性能表よりHD-600の
22.6㎡/minに近い数値となり、
HD-600が適当となります。

HD型ベンチレーター風量性能表 (㎡/min)※SHD型(40メッシュ網付)の場合、約半分となります。

型式	温度差 (℃) 設置高 (m) 外気 風速 (m/s)	Δt=3℃						Δt=5℃						Δt=10℃						Δt=15℃					
		5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30	5	10	15	20	25	30
(S)HD-300	1	2.9	3.9	4.6	5.2	5.8	6.3	3.6	4.8	5.8	6.7	7.4	8.1	4.8	6.7	8.1	9.3	10.4	11.3	5.8	8.1	9.8	11.3	12.6	13.8
	2	4.0	4.7	5.3	5.9	6.4	6.9	4.5	5.5	6.4	7.2	7.9	8.5	5.5	7.2	8.5	9.7	10.7	11.6	6.4	8.5	10.2	11.6	12.9	14.1
	3	5.3	5.8	6.4	6.8	7.3	7.7	5.7	6.5	7.3	8.0	8.6	9.2	6.5	8.0	9.2	10.3	11.2	12.1	7.3	9.2	10.8	12.1	13.4	14.5
	4	6.7	7.1	7.6	8.0	8.4	8.7	7.0	7.7	8.4	9.0	9.5	10.1	7.7	9.0	10.1	11.1	12.0	12.8	8.4	10.1	11.5	12.8	14.0	15.1
	5	8.1	8.5	8.9	9.2	9.6	9.9	8.4	9.0	9.6	10.1	10.6	11.1	9.0	10.1	11.1	12.0	12.8	13.6	9.6	11.1	12.4	13.6	14.7	15.8
(S)HD-360	1	4.2	5.6	6.6	7.6	8.4	9.1	5.2	7.0	8.4	9.6	10.7	11.6	7.0	9.6	11.6	13.4	14.9	16.3	8.4	11.6	14.2	16.3	18.2	19.9
	2	5.7	6.8	7.7	8.5	9.2	9.9	6.5	8.0	9.2	10.3	11.3	12.3	8.0	10.3	12.3	13.9	15.4	16.8	9.2	12.3	14.7	16.8	18.6	20.3
	3	7.6	8.4	9.2	9.8	10.5	11.1	8.2	9.4	10.5	11.5	12.4	13.2	9.4	11.5	13.2	14.8	16.2	17.5	10.5	13.2	15.5	17.5	19.3	20.9
	4	9.6	10.3	10.9	11.5	12.0	12.6	10.1	11.1	12.0	12.9	13.7	14.5	11.1	12.9	14.5	15.9	17.2	18.4	12.0	14.5	16.6	18.4	20.1	21.7
	5	11.7	12.3	12.8	13.3	13.8	14.2	12.1	12.9	13.8	14.5	15.3	16.0	12.9	14.5	16.0	17.3	18.5	19.6	13.8	16.0	17.9	19.6	21.2	22.7
(S)HD-400	1	5.2	6.9	8.2	9.3	10.3	11.3	6.4	8.6	10.3	11.8	13.2	14.4	8.6	11.8	14.4	16.5	18.4	20.1	10.3	14.4	17.5	20.1	22.5	24.6
	2	7.1	8.4	9.5	10.5	11.4	12.2	8.0	9.8	11.4	12.8	14.0	15.1	9.8	12.8	15.1	17.2	19.0	20.7	11.4	15.1	18.1	20.7	23.0	25.0
	3	9.4	10.4	11.3	12.2	12.9	13.7	10.1	11.6	12.9	14.2	15.3	16.3	11.6	14.2	16.3	18.3	20.0	21.6	12.9	16.3	19.1	21.6	23.8	25.8
	4	11.9	12.7	13.4	14.2	14.9	15.5	12.4	13.7	14.9	15.9	16.9	17.9	13.7	15.9	17.9	19.7	21.3	22.8	14.9	17.9	20.5	22.8	24.9	26.8
	5	14.5	15.1	15.8	16.4	17.0	17.6	14.9	16.0	17.0	17.9	18.8	19.7	16.0	17.9	19.7	21.3	22.8	24.2	17.0	19.7	22.1	24.2	26.2	28.0
(S)HD-450	1	6.6	8.7	10.4	11.8	13.1	14.3	8.1	10.9	13.1	15.0	16.7	18.2	10.9	15.0	18.2	20.9	23.3	25.5	13.1	18.2	22.1	25.5	28.4	31.1
	2	9.0	10.6	12.0	13.3	14.4	15.5	10.1	12.4	14.4	16.1	17.7	19.2	12.4	16.1	19.2	21.7	24.1	26.2	14.4	19.2	22.9	26.2	29.1	31.7
	3	11.9	13.1	14.3	15.4	16.4	17.3	12.7	14.7	16.4	17.9	19.4	20.7	14.7	17.9	20.7	23.1	25.3	27.3	16.4	20.7	24.2	27.3	30.1	32.6
	4	15.0	16.1	17.0	17.9	18.8	19.6	15.7	17.3	18.8	20.2	21.4	22.6	17.3	20.2	22.6	24.9	26.9	28.8	18.8	22.6	25.9	28.8	31.5	33.9
	5	18.3	19.2	20.0	20.8	21.5	22.2	18.9	20.2	21.5	22.7	23.8	24.9	20.2	22.7	24.9	27.0	28.9	30.7	21.5	24.9	27.9	30.7	33.2	35.5
(S)HD-500	1	8.2	10.7	12.8	14.6	16.2	17.6	10.0	13.4	16.2	18.5	20.6	22.4	13.4	18.5	22.4	25.8	28.8	31.4	16.2	22.4	27.3	31.4	35.1	38.4
	2	11.1	13.1	14.8	16.4	17.8	19.1	12.4	15.4	17.8	19.9	21.9	23.6	15.4	19.9	23.6	26.9	29.7	32.3	17.8	23.6	28.3	32.3	35.9	39.1
	3	14.7	16.2	17.7	19.0	20.2	21.4	15.7	18.1	20.2	22.1	23.9	25.5	18.1	22.1	25.5	28.5	31.2	33.7	20.2	25.5	29.9	33.7	37.1	40.3
	4	18.6	19.8	21.0	22.1	23.2	24.2	19.4	21.4	23.2	24.9	26.5	27.9	21.4	24.9	27.9	30.7	33.2	35.6	23.2	27.9	32.0	35.6	38.8	41.9
	5	22.6	23.6	24.7	25.6	26.5	27.4	23.3	25.0	26.5	28.0	29.4	30.8	25.0	28.0	30.8	33.3	35.7	37.9	26.5	30.8	34.5	37.9	40.9	43.8
(S)HD-600	1	11.8	15.5	18.4	21.0	23.3	25.3	14.4	19.3	23.3	26.6	29.6	32.3	19.3	26.6	32.3	37.1	41.4	45.3	23.3	32.3	39.3	45.3	50.5	55.3
	2	15.9	18.8	21.3	23.6	25.6	27.5	17.9	22.1	25.6	28.7	31.5	34.1	22.1	28.7	34.1	38.7	42.8	46.5	25.6	34.1	40.8	46.5	51.7	56.3
	3	21.1	23.4	25.4	27.3	29.1	30.8	22.6	26.1	29.1	31.9	34.4	36.8	26.1	31.9	36.8	41.1	45.0	48.6	29.1	36.8	43.1	48.6	53.5	58.0
	4	26.7	28.5	30.3	31.9	33.4	34.9	27.9	30.8	33.4	35.8	38.1	40.2	30.8	35.8	40.2	44.2	47.9	51.2	33.4	40.2	46.1	51.2	55.9	60.3
	5	32.5	34.1	35.5	36.9	38.2	39.5	33.6	36.0	38.2	40.4	42.4	44.3	36.0	40.4	44.3	48.0	51.3	54.5	38.2	44.3	49.7	54.5	58.9	63.1
(S)HD-750	1	18.4	24.2	28.8	32.8	36.4	39.6	22.4	30.2	36.4	41.6	46.3	50.5	30.2	41.6	50.5	58.0	64.7	70.8	36.4	50.5	61.5	70.8	79.0	86.4
	2	24.9	29.4	33.3	36.8	40.0	43.0	28.0	34.5	40.0	44.9	49.2	53.2	34.5	44.9	53.2	60.4	66.8	72.7	40.0	53.2	63.7	72.7	80.7	88.0
	3	33.0	36.5	39.7	42.7	45.5	48.1	35.4	40.8	45.5	49.8	53.8	57.4	40.8	49.8	57.4	64.2	70.3	75.9	45.5	57.4	67.3	75.9	83.6	90.6
	4	41.8	44.6	47.3	49.8	52.2	54.5	43.7	48.1	52.2	56.0	59.5	62.9	48.1	56.0	62.9	69.1	74.8	80.1	52.2	62.9	72.0	80.1	87.4	94.2
	5	50.8	53.2	55.5	57.6	59.7	61.8	52.4	56.2	59.7	63.1	66.2	69.3	56.2	63.1	69.3	74.9	80.2	85.2	59.7	69.3	77.6	85.2	92.1	98.5
(S)HD-900	1	26.5	34.8	41.5	47.2	52.4	57.0	32.3	43.5	52.4	59.9	66.6	72.7	43.5	59.9	72.7	83.6	93.2	101.9	52.4	72.7	88.5	101.9	113.7	124.4
	2	35.9	42.4	48.0	53.0	57.6	61.9	40.3	49.7	57.6	64.6	70.9	76.6	49.7	64.6	76.6	87.0	96.3	104.7	57.6	76.6	91.7	104.7	116.2	126.7
	3	47.5	52.6	57.2	61.5	65.5	69.3	50.9	58.7	65.5	71.7	77.4	82.7	58.7	71.7	82.7	92.4	101.2	109.2	65.5	82.7	96.9	109.2	120.3	130.5
	4	60.1	64.2	68.1	71.7	75.2	78.5	62.9	69.3	75.2	80.6	85.7	90.6	69.3	80.6	90.6	99.5	107.7	115.3	75.2	90.6	103.7	115.3	125.9	135.6
	5	73.2	76.6	79.9	83.0	86.0	88.9	75.5	80.9	86.0	90.8	95.4	99.7	80.9	90.8	99.7	107.9	115.5	122.6	86.0	99.7	111.8	122.6	132.6	141.9
(S)HD-1000	1	32.7	43.0	51.2	58.3	64.6	70.4	39.9	53.7	64.6	74.0	82.3	89.8	53.7	74.0	89.8	103.2	115.1	125.8	64.6	89.8	109.3	125.8	140.4	153.6
	2	44.3	52.3	59.3	65.5	71.2	76.4	49.8	61.4	71.2	79.7	87.5	94.6</												