

TABLE 3. CAPACITY TABLES FOR WARM-AIR AND RETURN-AIR BRANCHES^{a, b}

FIRST STORY

FOR UNINSULATED METAL DUCTS	ACTUAL LENGTH (FROM BONNET TO BOOT) OR, (FROM RETURN PLENUM TO BOOT) IN FEET							WARM AIR COMBI- NATION No.	RETURN AIR COMBI- NATION No.
	1 to 7 FT.	8 to 12 FT.	13 to 17 FT.	18 to 24 FT.	25 to 34 FT.	35 to 44 FT.	45 to 54 FT.		
	COL. A	COL. B	COL. C	COL. D	COL. E	COL. F	COL. G		
Section A.	7200	6700	6100	5600	4800	4100	3500	41	51
40 to 69	12500	11700	10800	9900	8500	7400	6400	42	52
Equivalent	16000	15000	14000	13000	11300	9900	8700	43	53
Ft for Fit-	19100	18000	17000	16000	14200	12500	11000	44	54
tings and	25000	23400	21600	19800	17000	14800	12800	45°	55
Register	32000	30000	28000	26000	22600	19800	17400	46°	56
	80000	75000	70000	65000	56500	49500	43500	—	57°
Section B.	5500	5100	4800	4500	3900	3400	3000	41	51
70 to 99	9900	9200	8600	8100	7100	6200	5400	42	52
Equivalent	13100	12300	11600	10900	9700	8500	7500	43	53
Feet	16300	15400	14500	13700	12200	10800	9500	44	54
	19800	18400	17200	16200	14200	12400	10800	45°	55
	26200	24600	23200	21800	19400	17000	15000	46°	56
	65500	61500	58000	54500	48500	42500	37500	—	57°
Section C.	4600	4300	4100	3800	3300	2700	2400	41	51
100 to 129	8500	7900	7400	6900	6100	5300	4700	42	52
Equivalent	11300	10600	10000	9400	8400	7400	6500	43	53
Feet	14300	13500	12700	11900	10500	9300	8300	44	54
	17000	15800	14800	13800	12200	10600	9400	45°	55
	22600	21200	20000	18800	16800	14800	13000	46°	56
	56200	52600	50200	47300	42000	37000	32400	—	57°
Section D.	4100	3800	3600	3400	2900	2600	2300	41	51
130 to 164	7300	6900	6400	6000	5300	4700	4200	42	52
Equivalent	9800	9100	8600	8100	7200	6400	5600	43	53
Feet	12300	11700	11000	10300	9100	8100	7100	44	54
	14600	13800	12800	12000	10600	9600	8400	45°	55
	19600	18200	17200	16200	14400	12800	11200	46°	56
	49200	45800	41900	40300	36000	31800	28100	—	57°
Section E.	3800	3500	3300	3100	2700	2400	2100	41	51
165 to 200	6500	6100	5700	5400	4800	4300	3800	42	52
Equivalent	8800	8200	7700	7200	6400	5700	5000	43	53
Feet	11000	10500	9900	9300	8300	7300	6400	44	54
	13000	12200	11400	10800	9600	8600	7600	45°	55
	17600	16400	15400	14400	12800	11400	10000	46°	56
	44100	41500	38800	36000	32000	28200	24700	—	57°
FOR INSULATED DUCTS	COL. A	COL. B	COL. C	COL. D	COL. E	FOR DUCTS THAT ARE COM- PLETELY INSULATED WITH 1 IN. THICK INSUL- ATION FROM BONNET TO BOOT. — USE THESE COLUMN HEADINGS.			
	1 to 9 FT.	10 to 17 FT.	18 to 24 FT.	25 to 34 FT.	35 to 54 FT.				

- ^a These tables are for use in sizing both the warm air and the return air branches.
- ^b Frictional resistances and temperature drops in ducts have both been accounted for in these tables.
- ^c Use these items only when the building construction, or capacity requirements, necessitate the use of two adjoining stacks or floor registers.

TABLE 4. CAPACITY TABLES FOR WARM-AIR AND RETURN AIR BRANCHES^{a, b}

SECOND STORY

FOR UNINSULATED METAL DUCTS	ACTUAL LENGTH (FROM BONNET TO BOOT) OR, (FROM RETURN PLENUM TO BOOT) IN FEET							WARM AIR COMBI- NATION No.	RETURN AIR COMBI- NATION No.
	1 to 7 FT.	8 to 12 FT.	13 to 17 FT.	18 to 24 FT.	25 to 34 FT.	35 to 44 FT.	45 to 54 FT.		
	COL. A	COL. B	COL. C	COL. D	COL. E	COL. F	COL. G		
Section A.	6300	5700	5200	4800	4100	3500	3100	41	51
40 to 69	10900	10000	9200	8500	7300	6400	5600	42	52
Equivalent	14000	13000	12100	11400	10000	8800	7800	43	53
Ft for Fit-	17000	15900	14900	13900	12400	11100	9900	44	54
tings and	21800	20000	18400	17000	14600	12800	11200	45°	55
Register	28000	26000	24200	22400	20000	17600	15600	46°	56
	70000	65000	60500	57000	50000	44000	39000	—	57°
Section B.	5000	4600	4300	4000	3400	3000	2700	41	51
70 to 99	9000	8200	7600	7100	6200	5400	4700	42	52
Equivalent	11900	11000	10300	9600	8400	7500	6700	43	53
Feet	14800	13900	13000	12200	10800	9500	8500	44	54
	18000	16400	15200	14200	12400	10800	9400	45°	55
	23900	22000	20600	19200	16800	15000	13400	46°	56
	59500	55000	51500	48000	42000	37500	33500	—	57°
Section C.	4200	3900	3700	3500	3000	2600	2400	41	51
100 to 129	7700	7200	6700	6200	5400	4700	4100	42	52
Equivalent	10400	9700	9000	8400	7400	6500	5800	43	53
Feet	13000	12100	11300	10600	9400	8300	7400	44	54
	15400	14400	13400	12400	10800	9400	8200	45°	55
	21700	19400	18000	16800	14800	13000	11600	46°	56
	52200	48400	45300	42300	37000	32500	29000	—	57°
Section D.	3800	3500	3200	3000	2700	2300	2100	41	51
130 to 164	6800	6300	5800	5500	4800	4200	3700	42	52
Equivalent	9100	8400	7900	7400	6300	5700	5000	43	53
Feet	11400	10500	9800	9200	8100	7200	6400	44	54
	13600	12600	11600	11000	9600	8400	7400	45°	55
	18200	16800	15800	14800	12600	11400	10200	46°	56
	45500	42000	39600	36800	32200	28200	25100	—	57°
Section E.	3500	3200	2900	2700	2500	2100	1900	41	51
165 to 200	6100	5700	5300	5000	4400	3900	3400	42	52
Equivalent	8200	7600	7100	6700	5700	5100	4500	43	53
Feet	10300	9500	8900	8300	7400	6500	5800	44	54
	12200	11400	10600	10000	8800	7800	6800	45°	55
	16400	15200	14200	13400	11400	10200	9000	46°	56
	41000	38300	35800	33400	29000	25800	22800	—	57°
FOR INSULATED DUCTS	COL. A	COL. B	COL. C	COL. D	COL. E	COL. F	FOR DUCTS THAT ARE COM- PLETELY INSULATED WITH 1 IN. THICK INSUL- ATION FROM BONNET TO BOOT. — USE THESE COLUMN HEADINGS.		
	1 to 8 FT.	9 to 14 FT.	15 to 20 FT.	21 to 27 FT.	28 to 42 FT.	43 to 54 FT.			

- ^a These tables are for use in sizing both the warm air and the return air branches.
- ^b Frictional resistance and temperature drops in ducts have both been accounted for in these tables.
- ^c Use these items only when the building construction, or capacity requirements, necessitate the use of two adjoining stacks or floor registers.