

- ^H Height measured from the floor to the bottom of the unit heater.
^X Point where heated air from the heater reaches the floor.
^Y Point where heated air tends to rise from the floor.
^Z Point where the air velocity drops below 50 feet per minute (254 mm/sec).

Applies to both Model UDAS and Model UDAP

Dimension in feet

Size	30				45				60				75				100				125				150			
Mounting Height	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle
5	6	14	30	-21°	7	16	40	-20°	8	18	45	-16°	9	20	57	-14°	9	20	59	-18°	10	22	65	-14°	--	--	--	--
8	7	13	26	-39°	9	16	37	-34°	10	18	42	-29°	12	22	54	-25°	11	21	56	-28°	12	23	63	-24°	13	24	73	-26°
10	6	11	22	-52°	9	15	33	-43°	10	17	39	-37°	12	22	52	-32°	12	20	52	-36°	13	24	60	-30°	14	24	69	-32°
12	--	--	--	--	8	12	27	-55°	10	16	34	-46°	12	21	48	-39°	11	19	47	-44°	14	23	57	-36°	14	24	64	-39°
14	--	--	--	--	--	--	--	--	9	14	29	-56°	12	19	44	-46°	11	17	42	-51°	14	22	53	-43°	14	22	59	-45°
16	--	--	--	--	--	--	--	--	--	--	--	--	11	17	38	-54°	10	14	34	-58°	13	20	47	-50°	13	20	53	-51°
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	17	40	-57°	11	17	44	-58°
Size	175				200				225				250				300				350				400			
Mounting Height	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle
8	15	28	90	-22°	16	30	93	-20°	14	27	86	-24°	16	29	93	-21°	15	28	94	-24°	17	31	105	-20°	18	34	113	-17°
10	17	29	87	-27°	17	31	91	-25°	15	27	82	-30°	17	30	90	-26°	16	28	89	-29°	18	32	103	-25°	20	35	110	-21°
12	18	29	84	-32°	18	31	88	-30°	16	27	78	-35°	18	30	87	-31°	17	28	85	-34°	19	32	98	-30°	21	36	108	-25°
14	18	28	79	-37°	19	30	84	-34°	16	26	73	-41°	18	30	83	-36°	17	27	80	-40°	20	32	95	-34°	23	35	105	-29°
16	18	27	74	-42°	19	29	79	-39°	16	24	67	-47°	19	28	78	-41°	17	25	74	-45°	21	31	90	-38°	23	35	101	-33°
18	17	26	68	-48°	19	28	74	-44°	14	22	60	-53°	18	27	72	-46°	16	24	66	-51°	20	30	85	-43°	23	35	97	-37°

Dimension in metric

Size	30				45				60				75				100				125				150			
Mounting Height	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle
1.5	1.8	4.3	9.1	-21°	2.1	4.9	12.2	-20°	2.4	5.5	13.7	-16°	2.7	6.1	17.4	-14°	2.7	6.1	18.0	-18°	3.0	6.7	19.8	-14°	--	--	--	--
2.4	2.1	4.0	7.9	-39°	2.7	4.9	11.3	-34°	3.0	5.5	12.8	-29°	3.7	6.7	16.5	-25°	3.4	6.4	17.1	-28°	3.7	7.0	19.2	-24°	4.0	7.3	22.3	-26°
3.0	1.8	3.4	6.7	-52°	2.7	4.6	10.1	-43°	3.0	5.2	11.9	-37°	3.7	6.7	15.8	-32°	3.7	6.1	15.8	-36°	4.0	7.3	18.3	-30°	4.3	7.3	21.0	-32°
3.7	--	--	--	--	2.4	3.7	8.2	-55°	3.0	4.9	10.4	-46°	3.7	6.4	14.6	-39°	3.4	5.8	14.3	-44°	4.3	7.0	17.4	-36°	4.3	7.3	19.5	-39°
4.3	--	--	--	--	--	--	--	--	2.7	4.3	8.8	-56°	3.7	5.8	13.4	-46°	3.4	5.2	12.8	-51°	4.3	6.7	16.2	-43°	4.3	6.7	18.0	-45°
4.9	--	--	--	--	--	--	--	--	--	--	--	--	3.4	5.2	11.6	-54°	3.0	4.3	10.4	-58°	4.0	6.1	14.3	-50°	4.0	6.1	16.2	-51°
5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.4	5.2	12.2	-57°	3.4	5.2	13.4	-58°
Size	175				200				225				250				300				350				400			
Mounting Height	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle	X	Y	Z	Lvr. Angle
2.4	4.6	8.5	27.4	-22°	4.9	9.1	28.3	-20°	4.3	8.2	26.2	-24°	4.9	8.8	28.3	-21°	4.6	8.5	28.7	-24°	5.2	9.4	32.0	-20°	5.5	10.4	34.4	-17°
3.0	5.2	8.8	26.5	-27°	5.2	9.4	27.7	-25°	4.6	8.2	25.0	-30°	5.2	9.1	27.4	-26°	4.9	8.5	27.1	-29°	5.5	9.8	31.4	-25°	6.1	10.7	33.5	-21°
3.7	5.5	8.8	25.6	-32°	5.5	9.4	26.8	-30°	4.9	8.2	23.8	-35°	5.5	9.1	26.5	-31°	5.2	8.5	25.9	-34°	5.8	9.8	29.9	-30°	6.4	11.0	32.9	-25°
4.3	5.5	8.5	24.1	-37°	5.8	9.1	25.6	-34°	4.9	7.9	22.3	-41°	5.5	9.1	25.3	-36°	5.2	8.2	24.4	-40°	6.1	9.8	29.0	-34°	7.0	10.7	32.0	-29°
4.9	5.5	8.2	22.6	-42°	5.8	8.8	24.1	-39°	4.9	7.3	20.4	-47°	5.8	8.5	23.8	-41°	5.2	7.6	22.6	-45°	6.4	9.4	27.4	-38°	7.0	10.7	30.8	-33°
5.5	5.2	7.9	20.7	-48°	5.8	8.5	22.6	-44°	4.3	6.7	18.3	-53°	5.5	8.2	21.9	-46°	4.9	7.3	20.1	-51°	6.1	9.1	25.9	-43°	7.0	10.7	29.6	-37°

Louver angle listed in the table is relative to the top of the unit heater.

See illustration on previous page.

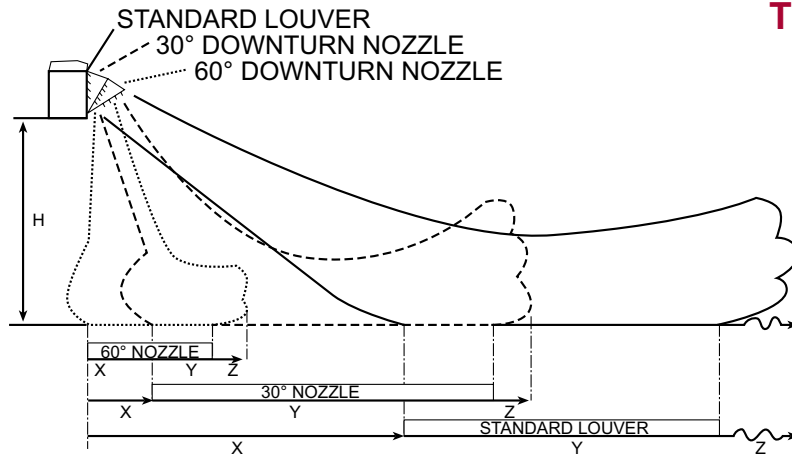
Dimension in feet

	Low Speed																								75°F Rise			
Size	30				45				60				75				100				125				150			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
5	7	15	38	-27°	7	17	44	-20°	11	26	78	-15°	11	24	74	-13°	10	23	74	-16°	10	22	69	-14°	--	--	--	--
8	7	13	32	-44°	9	17	40	-34°	14	26	76	-23°	13	26	72	-23°	13	25	72	-25°	12	24	65	-24°	9	16	44	-39°
10	7	11	25	-56°	9	16	37	-42°	15	27	72	-29°	15	25	69	-28°	14	25	69	-31°	13	24	62	-31°	9	14	38	-48°
12	--	--	--	--	9	14	31	-52°	16	26	70	-34°	15	25	65	-34°	14	24	66	-37°	14	23	58	-37°	7	11	30	-58°
14	--	--	--	--	--	--	--	--	16	25	65	-40°	15	24	62	-40°	14	23	62	-43°	14	21	54	-43°	--	--	--	--
16	--	--	--	--	--	--	--	--	15	24	60	-46°	15	23	56	-46°	14	21	57	-49°	12	19	47	-51°	--	--	--	--
18	--	--	--	--	--	--	--	--	14	22	53	-52°	14	21	50	-52°	12	18	51	-56°	11	17	40	-57°	--	--	--	--
	Medium Speed																								60°F Rise			
Size	30				45				60				75				100				125				150			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
5	7	16	43	-24°	9	21	60	-15°	12	28	91	-13°	11	27	84	-11°	11	27	86	-13°	12	29	96	-10°	--	--	--	--
8	9	16	38	-38°	11	23	57	-26°	16	30	89	-21°	15	29	82	-19°	15	28	83	-21°	16	31	94	-18°	13	24	74	-28°
10	8	14	33	-48°	13	22	54	-32°	17	30	86	-26°	16	30	79	-25°	17	29	81	-26°	18	32	92	-23°	13	22	62	-35°
12	8	12	28	-56°	13	21	51	-39°	18	31	83	-31°	17	30	77	-30°	17	29	78	-32°	19	32	89	-27°	13	21	57	-42°
14	--	--	--	--	12	20	46	-46°	18	30	79	-36°	18	29	74	-34°	18	29	74	-37°	20	32	87	-32°	12	19	51	-49°
16	--	--	--	--	11	17	40	-53°	19	29	75	-41°	18	28	70	-39°	18	27	70	-42°	20	31	83	-36°	11	16	43	-57°
18	--	--	--	--	--	--	--	--	17	28	69	-46°	18	26	65	-44°	17	26	64	-47°	20	30	78	-40°	--	--	--	--
	High Speed																								45°F Rise			
Size	30				45				60				75				100				125				150			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
5	8	19	51	-20°	11	28	81	-11°	13	30	105	-11°	12	30	97	-09°	13	32	110	-10°	13	33	113	-7°	--	--	--	--
8	10	19	48	-31°	15	29	79	-19°	17	33	103	-19°	17	33	95	-16°	18	34	108	-17°	19	36	111	-13°	18	32	107	-19°
10	11	19	44	-39°	16	30	78	-24°	19	34	100	-23°	19	33	94	-20°	20	36	106	-21°	21	37	109	-17°	19	34	104	-24°
12	11	17	40	-46°	17	30	75	-29°	21	35	98	-27°	20	34	92	-25°	22	36	104	-25°	23	39	107	-21°	21	34	102	-28°
14	9	15	33	-56°	18	30	72	-34°	22	34	95	-31°	21	34	89	-29°	23	36	102	-29°	24	39	105	-25°	22	34	98	-32°
16	--	--	--	--	19	29	69	-39°	23	33	91	-35°	22	33	86	-33°	24	36	99	-33°	25	40	103	-29°	22	33	94	-36°
18	--	--	--	--	18	28	64	-44°	21	33	86	-40°	22	33	83	-37°	23	36	95	-37°	26	39	101	-32°	21	33	89	-41°
	75°F Rise																								80°F Rise			
Size	175				200				225				250				300				350				400			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
8	12	22	69	-30°	13	24	76	-27°	13	24	82	-29°	14	27	95	-26°	12	21	70	-32°	13	25	82	-27°	15	28	95	-24°
10	12	22	65	-37°	14	24	72	-33°	12	21	66	-38°	16	27	91	-31°	12	21	65	-39°	14	25	77	-33°	16	28	92	-29°
12	13	21	59	-43°	14	23	68	-39°	12	20	60	-45°	16	27	86	-37°	12	19	58	-47°	14	24	72	-40°	17	28	88	-34°
14	11	19	52	-51°	14	22	62	-46°	11	18	53	-52°	16	25	80	-43°	10	17	50	-55°	14	22	66	-46°	17	27	82	-39°
16	--	--	--	--	12	20	53	-53°	--	--	--	--	16	23	73	-49°	--	--	--	--	13	20	57	-53°	17	26	76	-45°
18	--	--	--	--	--	--	--	--	--	--	--	--	14	21	64	-56°	--	--	--	--	--	--	--	--	16	24	69	-50°
	60°F Rise																								70°F Rise			
Size	175				200				225				250				300				350				400			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
8	15	29	92	-22°	16	31	100	-21°	16	29	100	-24°	19	34	127	-20°	16	28	100	-24°	18	33	119	-20°	17	31	111	-21°
10	16	29	89	-28°	18	31	97	-25°	16	30	96	-29°	20	35	123	-24°	17	29	96	-29°	19	34	116	-25°	18	32	107	-26°
12	17	29	85	-33°	19	31	93	-30°	17	30	92	-34°	21	36	120	-28°	18	29	92	-34°	21	34	113	-29°	19	32	103	-31°
14	17	28	80	-38°	20	30	89	-34°	18	28	87	-38°	22	35	116	-32°	18	28	87	-39°	22	34	109	-33°	20	31	99	-35°
16	17	27	75	-43°	20	29	84	-39°	18	27	80	-44°	23	35	111	-37°	18	27	81	-44°	22	33	104	-37°	20	31	93	-40°
18	17	25	69	-48°	19	29	79	-44°	17	26	74	-49°	23	34	106	-41°	17	25	73	-50°	22	32	98	-41°	20	29	88	-44°
	45°F Rise																								50°F Rise			
Size	175				200				225				250				300				350				400			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
8	22	41	146	-15°	23	43	157	-13°	23	43	168	-16°	26	48	198	-14°	21	39	146	-17°	24	45	169	-14°	24	44	169	-14°
10	24	43	144	-19°	25	46	155	-17°	26	45	166	-19°	29	50	196	-17°	23	41	143	-21°	26	47	167	-18°	26	46	167	-17°
12	26	43	141	-22°	27	47	152	-20°	28	45	163	-22°	31	52	194	-20°	25	42	140	-25°	28	48	165	-21°	28	48	165	-20°
14	28	44	137	-25°	29	48	150	-23°	30	46	160	-25°	32	54	191	-22°	26	42	137	-28°	30	49	162	-24°	31	48	162	-23°
16	29	44	134	-28°	31	48	147	-26°	31	47	157	-29°	34	53	189	-25°	27	42	133	-31°	32	48	159	-26°	32	49	159	-26°
18	29	44	131	-32°	31	49	144	-29°	31	47	153	-32°	34	54	185	-28°	28	41	129	-34°	33	49	156	-29°	32	49	156	-29°

Applies to both Model UDBS and Model UDBP

Dimension in metric

		Low Speed																				42°C Rise						
Size	30				45				60				75				100				125				150			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
1.5	2.1	4.6	11.6	-27°	2.1	5.2	13.4	-20°	3.4	7.9	23.8	-15°	3.4	7.3	22.6	-13°	3.0	7.0	22.6	-16°	3.0	6.7	21.0	-14°	--	--	--	--
2.4	2.1	4.0	9.8	-44°	2.7	5.2	12.2	-34°	4.3	7.9	23.2	-23°	4.0	7.9	21.9	-23°	4.0	7.6	21.9	-25°	3.7	7.3	19.8	-24°	2.7	4.9	13.4	-39°
3.0	2.1	3.4	7.6	-56°	2.7	4.9	11.3	-42°	4.6	8.2	21.9	-29°	4.6	7.6	21.0	-28°	4.3	7.6	21.0	-31°	4.0	7.3	18.9	-31°	2.7	4.3	11.6	-48°
3.7	--	--	--	--	2.7	4.3	9.4	-52°	4.9	7.9	21.3	-34°	4.6	7.6	19.8	-34°	4.3	7.3	20.1	-37°	4.3	7.0	17.7	-37°	2.1	3.4	9.1	-58°
4.3	--	--	--	--	--	--	--	--	4.9	7.6	19.8	-40°	4.6	7.3	18.9	-40°	4.3	7.0	18.9	-43°	4.3	6.4	16.5	-43°	--	--	--	--
4.9	--	--	--	--	--	--	--	--	4.6	7.3	18.3	-46°	4.6	7.0	17.1	-46°	4.3	6.4	17.4	-49°	3.7	5.8	14.3	-51°	--	--	--	--
5.5	--	--	--	--	--	--	--	--	4.3	6.7	16.2	-52°	4.3	6.4	15.2	-52°	3.7	5.5	15.5	-56°	3.4	5.2	12.2	-57°	--	--	--	--
		Medium Speed																				33°C Rise						
Size	30				45				60				75				100				125				150			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
1.5	2.1	4.9	13.1	-24°	2.7	6.4	18.3	-15°	3.7	8.5	27.7	-13°	3.4	8.2	25.6	-11°	3.4	8.2	26.2	-13°	3.7	8.8	29.3	-10°	--	--	--	--
2.4	2.7	4.9	11.6	-38°	3.4	7.0	17.4	-26°	4.9	9.1	27.1	-21°	4.6	8.8	25.0	-19°	4.6	8.5	25.3	-21°	4.9	9.4	28.7	-18°	4.0	7.3	22.6	-28°
3.0	2.4	4.3	10.1	-48°	4.0	6.7	16.5	-32°	5.2	9.1	26.2	-26°	4.9	9.1	24.1	-25°	5.2	8.8	24.7	-26°	5.5	9.8	28.0	-23°	4.0	6.7	18.9	-35°
3.7	2.4	3.7	8.5	-56°	4.0	6.4	15.5	-39°	5.5	9.4	25.3	-31°	5.2	9.1	23.5	-30°	5.2	8.8	23.8	-32°	5.8	9.8	27.1	-27°	4.0	6.4	17.4	-42°
4.3	--	--	--	--	3.7	6.1	14.0	-46°	5.5	9.1	24.1	-36°	5.5	8.8	22.6	-34°	5.5	8.8	22.6	-37°	6.1	9.8	26.5	-32°	3.7	5.8	15.5	-49°
4.9	--	--	--	--	3.4	5.2	12.2	-53°	5.8	8.8	22.9	-41°	5.5	8.5	21.3	-39°	5.5	8.2	21.3	-42°	6.1	9.4	25.3	-36°	3.4	4.9	13.1	-57°
5.5	--	--	--	--	--	--	--	--	5.2	8.5	21.0	-46°	5.5	7.9	19.8	-44°	5.2	7.9	19.5	-47°	6.1	9.1	23.8	-40°	--	--	--	--
		High Speed																				25°C Rise						
Size	30				45				60				75				100				125				150			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
1.5	2.4	5.8	15.5	-20°	3.4	8.5	24.7	-11°	4.0	9.1	32.0	-11°	3.7	9.1	29.6	-09°	4.0	9.8	33.5	-10°	4.0	10.1	34.4	-7°	--	--	--	--
2.4	3.0	5.8	14.6	-31°	4.6	8.8	24.1	-19°	5.2	10.1	31.4	-19°	5.2	10.1	29.0	-16°	5.5	10.4	32.9	-17°	5.8	11.0	33.8	-13°	5.5	9.8	32.6	-19°
3.0	3.4	5.8	13.4	-39°	4.9	9.1	23.8	-24°	5.8	10.4	30.5	-23°	5.8	10.1	28.7	-20°	6.1	11.0	32.3	-21°	6.4	11.3	33.2	-17°	5.8	10.4	31.7	-24°
3.7	3.4	5.2	12.2	-46°	5.2	9.1	22.9	-29°	6.4	10.7	29.9	-27°	6.1	10.4	28.0	-25°	6.7	11.0	31.7	-25°	7.0	11.9	32.6	-21°	6.4	10.4	31.1	-28°
4.3	2.7	4.6	10.1	-56°	5.5	9.1	21.9	-34°	6.7	10.4	29.0	-31°	6.4	10.4	27.1	-29°	7.0	11.0	31.1	-29°	7.3	11.9	32.0	-25°	6.7	10.4	29.9	-32°
4.9	--	--	--	--	5.8	8.8	21.0	-39°	7.0	10.1	27.7	-35°	6.7	10.1	26.2	-33°	7.3	11.0	30.2	-33°	7.6	12.2	31.4	-29°	6.7	10.1	28.7	-36°
5.5	--	--	--	--	5.5	8.5	19.5	-44°	6.4	10.1	26.2	-40°	6.7	10.1	25.3	-37°	7.0	11.0	29.0	-37°	7.9	11.9	30.8	-32°	6.4	10.1	27.1	-41°
		42°C Rise																				44°C Rise						
Size	175				200				225				250				300				350				400			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
2.4	3.7	6.7	21.0	-30°	4.0	7.3	23.2	-27°	4.0	7.3	25.0	-29°	4.3	8.2	29.0	-26°	3.7	6.4	21.3	-32°	4.0	7.6	25.0	-27°	4.6	8.5	29.0	-26°
3.0	3.7	6.7	19.8	-37°	4.3	7.3	21.9	-33°	3.7	6.4	20.1	-38°	4.9	8.2	27.7	-31°	3.7	6.4	19.8	-39°	4.3	7.6	23.5	-33°	4.9	8.5	28.0	-31°
3.7	4.0	6.4	18.0	-43°	4.3	7.0	20.7	-39°	3.7	6.1	18.3	-45°	4.9	8.2	26.2	-37°	3.7	5.8	17.7	-47°	4.3	7.3	21.9	-40°	5.2	8.5	26.8	-37°
4.3	3.4	5.8	15.8	-51°	4.3	6.7	18.9	-46°	3.4	5.5	16.2	-52°	4.9	7.6	24.4	-43°	3.0	5.2	15.2	-55°	4.3	6.7	20.1	-46°	5.2	8.2	25.0	-43°
4.9	--	--	--	--	3.7	6.1	16.2	-53°	--	--	--	--	4.9	7.0	22.3	-49°	--	--	--	--	4.0	6.1	17.4	-53°	5.2	7.9	23.2	-49°
5.5	--	--	--	--	--	--	--	--	--	--	--	--	4.3	6.4	19.5	-56°	--	--	--	--	--	--	--	--	4.9	7.3	21.0	-56°
		33°C Rise																				39°C Rise						
Size	175				200				225				250				300				350				400			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
2.4	4.6	8.8	28.0	-22°	4.9	9.4	30.5	-21°	4.9	8.8	30.5	-24°	5.8	10.4	38.7	-20°	4.9	8.5	30.5	-24°	5.5	10.1	36.3	-20°	5.2	9.4	33.8	-21°
3.0	4.9	8.8	27.1	-28°	5.5	9.4	29.6	-25°	4.9	9.1	29.3	-29°	6.1	10.7	37.5	-24°	5.2	8.8	29.3	-29°	5.8	10.4	35.4	-25°	5.5	9.8	32.6	-26°
3.7	5.2	8.8	25.9	-33°	5.8	9.4	28.3	-30°	5.2	9.1	28.0	-34°	6.4	11.0	36.6	-28°	5.5	8.8	28.0	-34°	6.4	10.4	34.4	-29°	5.8	9.8	31.4	-31°
4.3	5.2	8.5	24.4	-38°	6.1	9.1	27.1	-34°	5.5	8.5	26.5	-38°	6.7	10.7	35.4	-32°	5.5	8.5	26.5	-39°	6.7	10.4	33.2	-33°	6.1	9.4	30.2	-35°
4.9	5.2	8.2	22.9	-43°	6.1	8.8	25.6	-39°	5.5	8.2	24.4	-44°	7.0	10.7	33.8	-37°	5.5	8.2	24.7	-44°	6.7	10.1	31.7	-37°	6.1	9.4	28.3	-40°
5.5	5.2	7.6	21.0	-48°	5.8	8.8	24.1	-44°	5.2	7.9	22.6	-49°	7.0	10.4	32.3	-41°	5.2	7.6	22.3	-50°	6.7	9.8	29.9	-41°	6.1	8.8	26.8	-44°
		25°C Rise																				28°C Rise						
Size	175				200				225				250				300				350				400			
Mounting Height	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle	X	Y	Z	Louver Angle
2.4	6.7	12.5	44.5	-15°	7.0	13.1	47.9	-13°	7.0	13.1	51.2	-16°	7.9	14.6	60.4	-14°	6.4	11.9	44.5	-17°	7.3	13.7	51.5	-14°	7.3	13.4	51.5	-14°
3.0	7.3	13.1	43.9	-19°	7.6	14.0	47.2	-17°	7.9	13.7	50.6	-19°	8.8	15.2	59.7	-17°	7.0	12.5	43.6	-21°	7.9	14.3	50.9	-18°	7.9	14.0	50.9	-17°
3.7	7.9	13.1	43.0	-22°	8.2	14.3	46.3	-20°	8.5	13.7	49.7	-22°	9.4	15.8	59.1	-20°	7.6	12.8	42.7	-25°	8.5	14.6	50.3	-21°	8.5	14.6	50.3	-20°
4.3	8.5	13.4	41.8	-25°	8.8	14.6	45.7	-23°	9.1	14.0	48.8	-25°	9.8	16.5	58.2	-22°	7.9	12.8	41.8	-28°	9.1	14.9	49.4	-24°	9.4	14.6	49.4	-23°
4.9	8.8	13.4	40.8	-28°	9.4	14.6	44.8	-26°	9.4	14.3	47.9	-29°	10.4	16.2	57.6	-25°	8.2	12.8	40.5	-31°	9.8	14.6	48.5	-26°	9.8	14.6	48.5	-26°
5.5	8.8	13.4	39.9	-32°	9.4	14.9	43.9	-29°	9.4	14.3	46.6	-32°	10.4	16.5	56.4	-28°	8.5	12.5	39.3	-34°	10.1	14.9	47.5	-29°	9.8	14.9	47.5	-29°

Throw/Floor Coverage (cont'd)

Applies to Model F Sizes 125-400

^H Height measured from the floor to the bottom of the unit heater.

^X Point where heated air from the heater reaches the floor.

^Y Point where heated air tends to rise from the floor.

^Z Point where the air velocity drops below 50 feet per minute (254 mm/sec).

NOTES: Data based on 80°F entering air and 60°F rise through the unit. Standard louvers set at maximum deflection are effective as indicated when ceiling height above heater is not over 4 ft. For higher mounting height or where spot heating is required, choose outlet and mounting height giving coverage to floor. Mounting close to the ceiling provides maximum heat utilization.

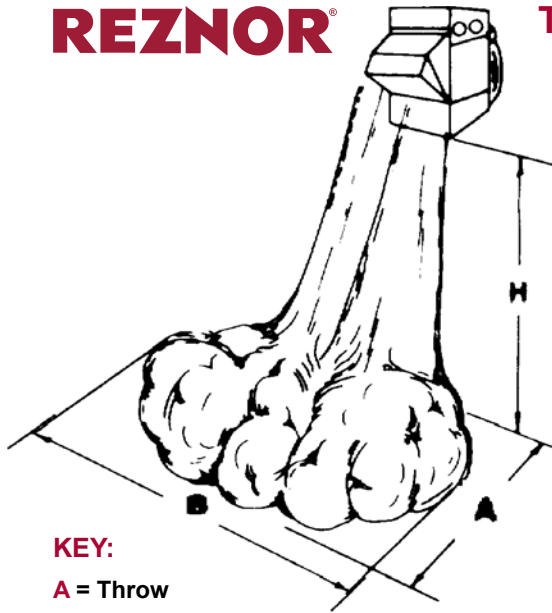
Dimension in feet

With Standard Horizontal Louvers																		
Mounting Height	F125			F165			F200			F250			F300			F400		
	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
8	14	24	65	14	35	75	13	38	83	12	44	94	12	36	105	12	55	118
10	16	22	58	16	32	72	15	36	78	15	40	88	14	38	96	14	53	112
12	18	20	54	18	30	66	17	34	72	17	38	84	16	35	90	16	49	108
14	--	--	--	--	--	--	20	31	68	19	33	77	18	30	85	18	45	100
16	--	--	--	--	--	--	--	--	--	22	30	72	20	27	80	20	40	92
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23	35	85
With Downturn Nozzle with 25-65° Range of Air Deflection (30° Nozzle)																		
Mounting Height	F125			F165			F200			F250			F300			F400		
	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
10	10	22	28	10	24	33	10	31	45	8	40	53	8	38	51	--	--	--
12	13	18	26	12	22	30	12	29	43	10	38	50	10	36	48	10	50	70
14	16	16	22	15	20	25	14	26	40	12	36	47	13	34	44	12	47	66
16	--	--	--	--	--	--	16	23	36	14	33	42	15	31	40	14	43	62
18	--	--	--	--	--	--	18	20	30	16	28	36	18	26	34	16	38	58
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	34	53
22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	30	46
With Downturn Nozzle with 50-90° Range of Air Deflection (60° Nozzle)																		
Mounting Height	F125			F165			F200			F250			F300			F400		
	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	0	8	20	0	8	22	0	8	25	0	12	30	0	10	28	--	--	--
16	0	10	18	0	10	20	0	10	23	0	14	28	0	12	26	0	12	32
20	0	14	16	0	14	18	0	12	21	0	16	26	0	14	24	0	14	30
24	--	--	--	--	--	--	0	14	18	0	18	24	0	16	20	0	16	28
28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	18	26
32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	20	24
36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	22	22

Dimension in metric

With Standard Horizontal Louvers																		
Mounting Height	F125			F165			F200			F250			F300			F400		
	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
2.4	4.3	7.3	19.8	4.3	10.7	22.9	4.0	11.6	25.3	3.7	13.4	28.7	3.7	11.0	32.0	3.7	16.8	36.0
3.0	4.9	6.7	17.7	4.9	9.8	21.9	4.6	11.0	23.8	4.6	12.2	26.8	4.3	11.6	29.3	4.3	16.2	34.1
3.7	5.5	6.1	16.5	5.5	9.1	20.1	5.2	10.4	21.9	5.2	11.6	25.6	4.9	10.7	27.4	4.9	14.9	32.9
4.3	--	--	--	--	--	--	6.1	9.4	20.7	5.8	10.1	23.5	5.5	9.1	25.9	5.5	13.7	30.5
4.9	--	--	--	--	--	--	--	--	--	6.7	9.1	21.9	6.1	8.2	24.4	6.1	12.2	28.0
5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.0	10.7	25.9
With Downturn Nozzle with 25-65° Range of Air Deflection (30° Nozzle)																		
Mounting Height	F125			F165			F200			F250			F300			F400		
	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
3.0	3.0	6.7	8.5	3.0	7.3	10.1	3.0	9.4	13.7	2.4	12.2	16.2	2.4	11.6	15.5	--	--	--
3.7	4.0	5.5	7.9	3.7	6.7	9.1	3.7	8.8	13.1	3.0	11.6	15.2	3.0	11.0	14.6	3.0	15.2	21.3
4.3	4.9	4.9	6.7	4.6	6.1	7.6	4.3	7.9	12.2	3.7	11.0	14.3	4.0	10.4	13.4	3.7	14.3	20.1
4.9	--	--	--	--	--	--	4.9	7.0	11.0	4.3	10.1	12.8	4.6	9.4	12.2	4.3	13.1	18.9
5.5	--	--	--	--	--	--	5.5	6.1	9.1	4.9	8.5	11.0	5.5	7.9	10.4	4.9	11.6	17.7
6.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.5	10.4	16.2
6.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.4	9.1	14.0
With Downturn Nozzle with 50-90° Range of Air Deflection (60° Nozzle)																		
Mounting Height	F125			F165			F200			F250			F300			F400		
	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
3.7	0.0	2.4	6.1	0.0	2.4	6.7	0.0	2.4	7.6	0.0	3.7	9.1	0.0	3.0	8.5	--	--	--
4.9	0.0	3.0	5.5	0.0	3.0	6.1	0.0	3.0	7.0	0.0	4.3	8.5	0.0	3.7	7.9	0.0	3.7	9.8
6.1	0.0	4.3	4.9	0.0	4.3	5.5	0.0	3.7	6.4	0.0	4.9	7.9	0.0	4.3	7.3	0.0	4.3	9.1
7.3	--	--	--	--	--	--	0.0	4.3	5.5	0.0	5.5	7.3	0.0	4.9	6.1	0.0	4.9	8.5
8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	5.5	7.9
9.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	6.1	7.3
11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	6.7	6.7

Applies to Model B Sizes 125-400
Floor Coverage with 50-90 degree
Variable Air Deflection Downturn Nozzle



KEY:

A = Throw

B = Spread (Side to side coverage with standard louvers)

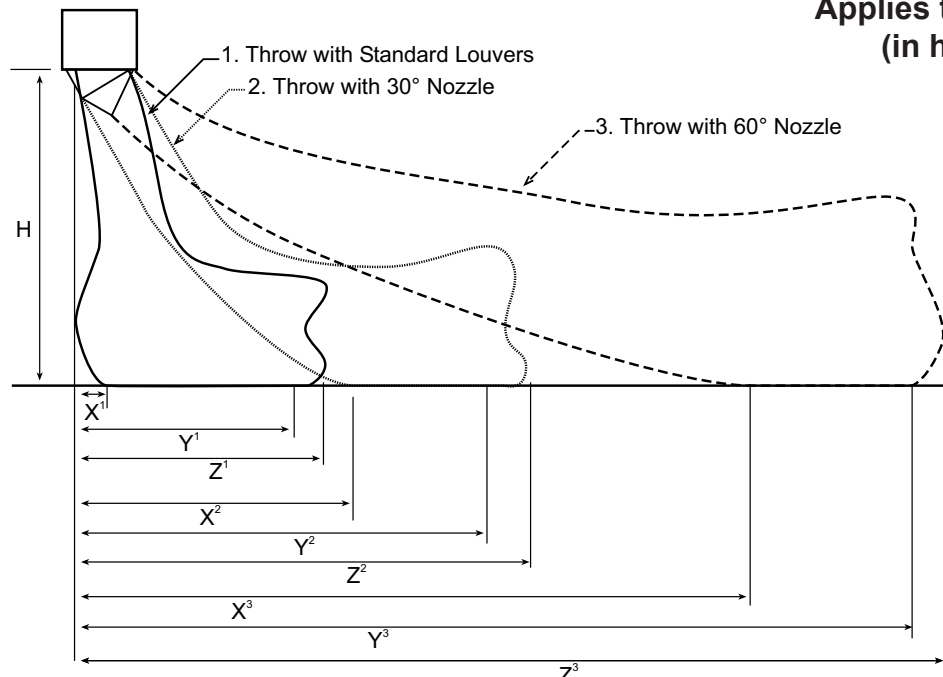
H = Mounting Height

Blower Model	CFM	Mounting Height - H															
		12 ft		16 ft		20 ft		24 ft		28 ft		32 ft		36 ft		40 ft	
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
125	1545	20	22	18	20	16	18	--	--	--	--	--	--	--	--	--	--
165	2090	24	26	22	24	20	22	--	--	--	--	--	--	--	--	--	--
200	2470	--	--	26	28	24	26	20	22	--	--	--	--	--	--	--	--
250	3090	--	--	30	32	28	30	24	26	--	--	--	--	--	--	--	--
300	3710	--	--	--	--	32	34	30	32	28	30	26	28	24	26	--	--
400	4950	--	--	--	--	36	38	34	36	32	34	30	32	28	30	24	26

Blower Model	M ³ /hr	Mounting Height - H															
		3.7M		4.9M		6.1M		7.3M		8.5M		9.8M		11.0M		12.2M	
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
125	2625	6.1	6.7	5.5	6.1	4.9	5.5	--	--	--	--	--	--	--	--	--	--
165	3551	7.3	7.9	6.7	7.3	6.1	6.7	--	--	--	--	--	--	--	--	--	--
200	4196	--	--	7.9	8.5	7.3	7.9	6.1	6.7	--	--	--	--	--	--	--	--
250	5250	--	--	9.1	9.8	8.5	9.1	7.3	7.9	--	--	--	--	--	--	--	--
300	6303	--	--	--	--	9.8	10.4	9.1	9.8	8.5	9.1	7.9	8.5	7.3	7.9	--	--
400	8410	--	--	--	--	11.0	11.6	10.4	11.0	9.8	10.4	9.1	9.8	8.5	9.1	7.3	7.9

NOTES: Data based on 80°F entering air temperature and 60°F rise through the unit. Standard horizontal louver set for maximum down deflection. Table and drawing show approximate floor coverage at various mounting heights. NOTE that throw "A" and sideward spread "B" are increased as mounting height is reduced, due to floor bounce effect. Conversely the floor coverage reduces as mounting height increases. Horizontal louvers can be used to spread throw area "A" forward from the heater, and vertical louvers can be used to increase sideward spread "B". Vertical louvers set at maximum deflection will increase spread "B" approximately 10 feet, but will reduce maximum mounting height 4 feet. EXAMPLE: B200 at 20 ft. mounting height with standard louver setting gives a floor coverage of "A" = 24' x "B" = 26'. Using vertical louvers set at maximum sideward spread, the maximum mounting height would be 16 feet, and the floor coverage would be "A" = 26' and "B" = 28' plus 10' or 38'.

Applies to Model LDAP (in heat mode)



Notes:
"Z" is the point where the air velocity drops below 50 feet (15.2M) per minute. Throws listed are with standard louvers facing one direction and fully open. Throw pattern changes with louver angle, 2-way louver direction, and or optional 4-way louvers.

Mounting Height		Standard Louvers						30° Degree Nozzle						60° Degree Nozzle					
H		X¹		Y¹		Z¹		X²		Y²		Z²		X³		Y³		Z³	
Ft.	M	Ft.	M	Ft.	M	Ft.	M	Ft.	M	Ft.	M	Ft.	M	Ft.	M	Ft.	M	Ft.	M
20	6.1	5	(1.5)	55	(16.8)	134	(40.8)	40	(12.2)	90	(27.4)	146	(44.5)	70	(21.3)	125	(38.1)	158	(48.2)
30	9.1	8	(2.4)	53	(16.2)	121	(36.9)	44	(13.4)	86	(26.2)	133	(40.5)	76	(23.2)	119	(36.3)	145	(44.2)
40	12.2	12	(3.7)	49	(14.9)	109	(33.2)	47	(14.3)	81	(24.7)	120	(36.6)	=	=	=	=	=	=
50	15.2	17	(5.2)	45	(13.7)	96	(29.3)	=	=	=	=	=	=	=	=	=	=	=	=