



Performance Data

Hospital Room Diffusers

Performance Data • Model FRD-2 • 180 Degree Pattern

24 x 24 (600 x 600) Module Size • 8" (203 mm) dia. inlet

Airflow CFM	Pt	Ps	NC	T Spread			T Vertical Throw @ 5° ΔT			T Vertical Throw @ 10° ΔT			T Vertical Throw @ 15° ΔT		
				100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
200	.058	.037	20	1	2	4	1	1	1	1	1	2	1	1	2
300	.131	.082	29	2	3	6	1	2	2	1	2	3	1	2	3
400	.233	.146	36	3	5	7	1	3	4	2	3	4	2	4	5
500	.365	.228	43	4	6	8	2	3	6	2	4	6	3	5	7
600	.525	.329	50	4	7	9	3	4	7	3	5	8	3	7	9

24 x 24 (600 x 600) Module Size • 10" (254 mm) dia. inlet

Airflow CFM	Pt	Ps	NC	T Spread			T Vertical Throw @ 5° ΔT			T Vertical Throw @ 10° ΔT			T Vertical Throw @ 15° ΔT		
				100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
200	.026	.017	20	1	1	2	1	1	1	1	1	2	1	1	2
300	.058	.039	20	1	2	4	1	2	2	1	2	3	1	2	4
400	.104	.068	24	2	3	6	1	3	5	2	3	5	2	4	6
500	.162	.107	29	3	5	8	2	4	6	2	4	7	3	5	8
600	.233	.154	38	4	6	9	3	5	8	3	6	9	4	7	10

48 x 24 (1200 x 600) Module Size • 10" (254 mm) dia. inlet

Airflow CFM	Pt	Ps	NC	T Spread			T Vertical Throw @ 5° ΔT			T Vertical Throw @ 10° ΔT			T Vertical Throw @ 15° ΔT		
				100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
400	.099	.064	20	3	4	7	1	1	2	1	2	2	1	2	3
500	.155	.100	24	4	5	8	1	2	3	1	2	3	1	3	4
600	.223	.144	30	5	6	9	1	2	4	1	2	5	2	4	6
700	.304	.196	38	5	7	9	2	2	5	2	3	6	2	4	6
800	.397	.256	45	6	8	10	2	3	5	2	4	7	3	5	7
900	.502	.324	51	6	9	11	2	4	6	3	5	8	4	6	8

48 x 24 (1200 x 600) Module Size • 12" (305 mm) dia. inlet

Airflow CFM	Pt	Ps	NC	T Spread			T Vertical Throw @ 5° ΔT			T Vertical Throw @ 10° ΔT			T Vertical Throw @ 15° ΔT		
				100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
500	.083	.057	20	2	3	4	1	2	3	1	2	4	2	3	5
600	.119	.082	24	2	3	6	1	2	4	1	2	5	2	3	6
700	.163	.111	29	3	4	8	1	2	5	2	3	6	2	4	7
800	.212	.145	34	3	5	9	2	3	5	2	4	7	3	5	8
900	.269	.183	40	4	6	10	2	4	6	3	5	8	4	6	9
1000	.332	.226	46	4	8	11	3	5	7	4	6	9	4	7	10

CFM - cubic feet per minute

FPM - feet per minute velocity

Pt - total pressure - inches w.g.

Ps - static pressure - inches w.g.

T - throw or spread in feet

NC - Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

1. The radial flow pattern of the **FRD-2** is unlike conventional air distribution devices. The data presented above describes isovels by average terminal velocity in both horizontal and vertical directions.

2. ΔT is the temperature difference between supply and room air.

3. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.