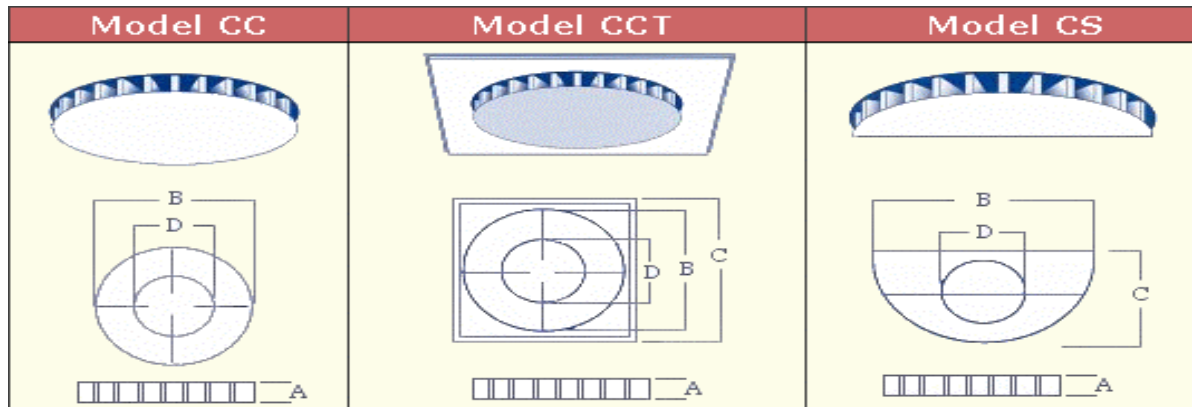




PERIPHERAL'S SOFTAIRE DIFFUSERS



Dimensions Table

MODEL CC			MODEL CCT				MODEL CS			
Size	Height	Diameter	Size	Height	Diameter	Square	Size	Height	Width	Depth
D	A	B	D	A	B	C	D	A	B	C
6	1.1	13.5	6	1.1	13.5	23.75	6	1.5	17.5	11.5
8	1.5	17.5	8	1.5	17.5	23.75	8	2.2	22.75	15.7
10	1.8	21.5	10	1.8	21.5	23.75				
12	2.2	22.75	12	2.2	22.75	23.75				

NC Values:

Peripheral's Softaire Diffusers are very quiet. Sound pressure levels (SPL) never exceed ambient background SPL up through flow rates of 1,000 FPM. At 1,000 FPM the NC value of Softaire was 22. At 1,500 FPM the NC value was 33. These values are consistently quieter than the competitors diffuser tested, which had NC values ranging from 23 at 600 FPM to 44 at 1,500 FPM.

Layout:

Draw throws radius circles uniformly around the diffusers. For high air-change design, the throw patterns may show over-lap and wall interference. For low air-change, there may be space between patterns and walls. This is OK. Do not try to throw to the furthest corner of the room. The kinetic energy supplied by each jet will gently drive the air mixture to the furthest wall. The mixture will hug the ceiling because of the Bernoulli velocity pressure effect, and the zero relative weight of the air at the stabilization temperature.

Field Adjustment:

to find the design velocity of each diffuser, divide design CFM by the outlet area of the desired diffuser (see Performance Table). Read the average diffuser outlet air velocity with an appropriate air velocity meter (like a Dwyer #460). Do not use a volume instrument. Adjust the branch duct damper to obtain the design velocity.



Performance Table

Diffuser Size		Nozzle Velocity, FPM	300	400	500	600	700	800
Duct Size Inches	Inlet & Outlet Area Sq. Ft.	Velocity Press., wc, VP	.006	.010	.016	.022	.030	.040
		CC or CCT; (VPx1.1) = TP	.007	.011	.018	.024	.033	.044
		CS; (VPx2.25) = TP	.014	.023	.036	.050	.068	.090
6	0.196	Flow Rate, CFM	59	79	98	118	137	157
		CC or CCT; Throw, Ft.	3	3	3	3	3	3
		CS; Throw, Ft.	4	4	4	4	4	4
		NC VALUE	-	-	-	-	-	-
8	0.349	Flow Rate, CFM	105	140	175	209	244	279
		CC or CCT; Throw, Ft.	4	4	4	4	4	4
		CS; Throw, Ft.	6	6	6	6	6	6
		NC VALUE	-	-	-	-	-	-
10	0.545	Flow Rate, CFM	164	218	273	327	382	436
		CC or CCT; Throw, Ft.	5	5	5	5	5	5
		NC VALUE	-	-	-	-	-	-
12	0.785	Flow Rate, CFM	236	314	393	471	550	628
		CC or CCT; Throw, Ft.	6	6	6	6	6	6
		NC VALUE	-	-	-	-	-	-

Peripheral’s Softaire Diffusers are induction, or high entrainment, ceiling air diffusers for heating, ventilating, and air conditioning outlets that replace conventional grills. Our innovative design quickly mixes supply air with room air above the occupancy zone. Softaire completely mixes with room air in less than half the distance required by conventional diffusers. The mixture is uniformly distributed eliminating hot and cold spots. Softaire works well with variable air volume control, eliminating air dumping on low velocities.

Energy Efficient:

by mixing supply air with room air in the short distance from the diffuser, the extreme delivery air temperature never strikes the walls or floors. Lower temperature differences at the walls and floor reduce heat transfer and thus energy loss. The total recirculation effect brings the room to temperature quickly, eliminating long lead times on start up. When outside temperatures are the most extreme, Softaire saves the most energy. Tests prove energy savings of 28%.

Quality Performance:

Peripheral’s Softaire Diffusers are made of high quality aluminum with a baked powder coat finish. There are no moving or adjustable parts. Simply install and feel the difference instantly!

- Draft free comfort
- Quiet, gentle air movement
- Uniform room temperature
- Energy savings

• Reduces equipment Wear