

Model HCR diffusers are the most flexible “radial type” air diffusers available in the industry today. While some competitor’s product include stationary, non-adjustable deflectors or screens and other designs simply incorporate individually adjustable blades or vanes (essentially a grille with a screen cover), the HCR diffuser incorporates a unique pattern controller adjustable at the face, from the room side, to perfectly control the air discharge pattern suitable for the application based on the specific supply air flow volume and differential temperature. Radial diffusers require adjustment flexibility when operating at varied conditions for a fixed size to control the discharge pattern.

The HCR air pattern is changed by simply sliding the adjustment mechanism a maximum of 1/4" at a single point on the face plate. The controller changes the effective open area (the round hole, perforated section) for the vertically projecting portion of the jet from 0% to 100% open. The flexibility provided to modify the pattern and the ease of adjustment makes the HCR diffuser the radial diffuser of choice.

Adjustment of the HCR pattern controller serves 2 purposes:

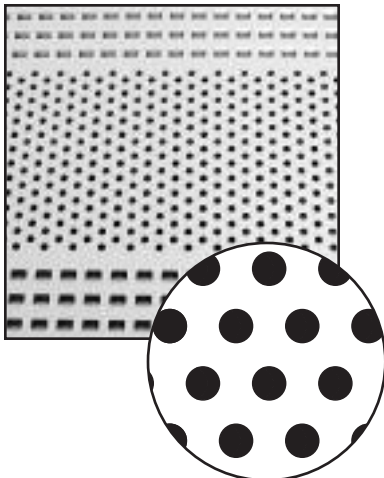
1. Optimize the radial pattern for the design flow rate and temperature differential (pattern is dependent upon velocity and air density)
2. Change the proportion of air vertically and horizontally

100% VERTICAL EFFECTIVE AREA

Typical Design Criteria

Vertical Projection: Maximum
Horizontal Throw : Minimum
Air Flow Rates: High
Differential Temps: 0 - 5° F

RADIAL DIFFUSER

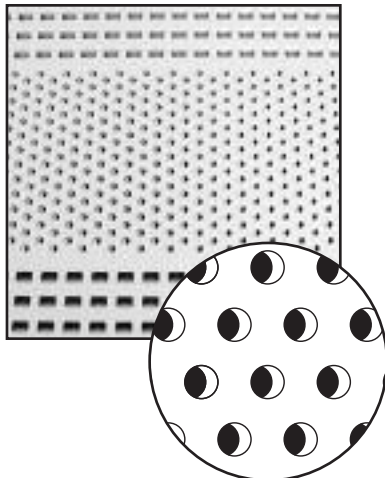


50 % VERTICAL EFFECTIVE AREA

Typical Design Criteria

Vertical Projection: Moderate
Horizontal Throw : Moderate
Air Flow Rates: Moderate
Differential Temps: 10° - 15° F

RADIAL DIFFUSER



0 % VERTICAL EFFECTIVE AREA

Typical Design Criteria

Vertical Projection: Minimum
Horizontal Throw : Maximum
Air Flow Rates: Low
Differential Temps: 20° F

RADIAL DIFFUSER

