



INTRODUCTION

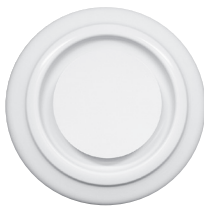
Krueger's round ceiling diffusers are a unique product category that provide architectural appeal with excellent performance in variable air volume systems, heavy duty designs, or high induction applications.

These diffusers are manufactured with a variety of frame styles, materials, adjustability, and airflow. Below is a detailed outline and comparison for how to select the model and configuration that best fits the architectural and performance requirements for your next project.

For questions about round ceiling diffusers, please reach out to Krueger's knowledgeable application engineering team (kruegergrd-spl@krueger-hvac.com).

MODEL TYPE

With the round ceiling diffusers, there are three types: Cone Design, Ring Operated Damper Design, and Swirl Design.



CONE DESIGN

- RM1 SERIES (3 CONES)
- RM2 / RA SERIES (4 CONES)
- RM2PLQ/RM4PLQ (PLAQUE)

The **RM/RA** series utilize the cone design and provide excellent performance in variable air volume systems. These models are manufactured in either three cone, four cone, or plaque design.

RING OPERATOR DESIGN

- R1DBR10

The **R1DBR10** round ceiling diffusers are designed for applications that require heavy duty construction featuring a ring operator which is fully adjustable with a pole operator.

SWIRL DESIGN

- RKSD

The **RKSD** is a high induction swirl diffuser that promotes the rotation of room air, increasing mixing effectiveness.

MATERIAL CONSTRUCTION

Krueger round diffusers have two material options, steel and aluminum. While some models have both aluminum and steel options, there are some that are only available in a single option.

STEEL MODELS

- RM1
- RM2
- RM4
- R1DBR10
- RA2
- RA4
- RM1PLQ
- RM4PLQ

ALUMINUM MODELS

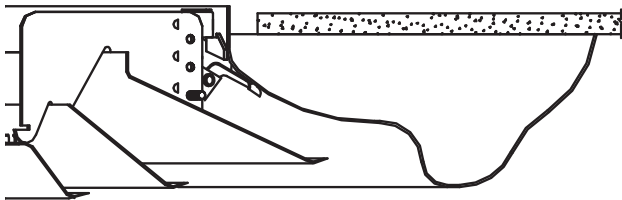
- 5RM1
- 5RM2
- 5RM4
- RKSD

Steel, the most commonly selected material, is used for mild environments with little to no resistance requirements.

Aluminum is the most lightweight option and has increased corrosion resistance. This makes it ideal for environments with higher humidity or structural weight restrictions.

FEATURES

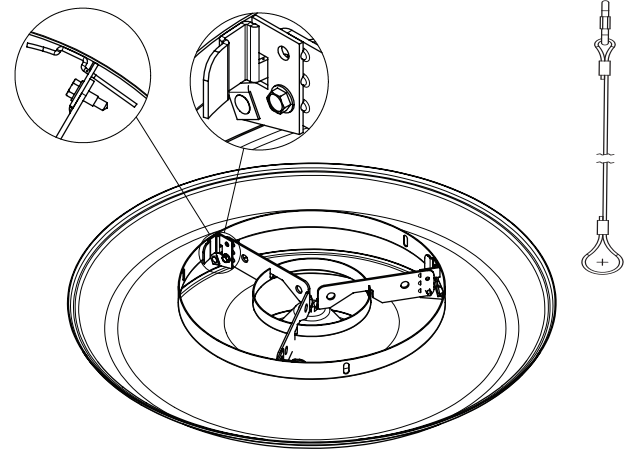
Krueger Round Diffusers come with a couple unique features that are applicable to specific models, including an anti-smudge frame design and a removable spring lock core with a safety chain.



ANTI-SMUDGE DESIGN

- RM4
- 5RM4
- RA4
- RM4PLQ

The **anti-smudge design** helps to prevent the buildup of particles on and around the diffuser.



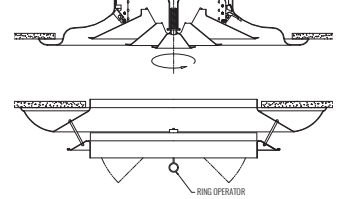
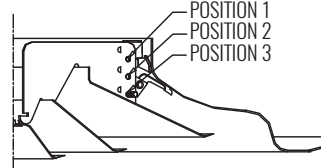
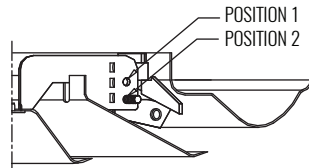
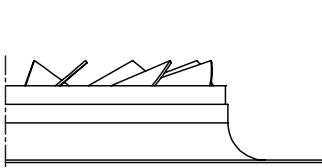
SPRING LOCK CORE

- ALL EXCEPT KSD & R1DBR10

The **removable spring lock core with safety chain** accessory allows the center core to be easily removable for installation and maintenance.

AIR FLOW AND ADJUSTABILITY

Round ceiling diffusers have a variety of airflow patterns and adjustability depending on the selected model. The four main categories are no adjustability, 2-position adjustability, 4-position adjustability, and full adjustability.



NO ADJUSTABILITY

- RKSD

2-POSITION ADJUSTABILITY

- RM1
- 5RM1

3-POSITION ADJUSTABILITY

- RM2
- 5RM2
- RM4
- 5RM4
- RM2PLQ
- RM4PLQ

FULL ADJUSTABILITY

- RA2
- RA4
- R1DBR10

No Adjustability is only applicable to the RKSD where airflow is only available for horizontal distribution.

2-Position Adjustability is used when vertical throw is not needed, but the consumer needs to adjust the room air induction. Position 1 provides max capacity and position 2 provides increased induction.

3-Position Adjustability is used when horizontal and vertical discharge is required. Position 1 provides horizontal max capacity, position 2 provides horizontal increased induction and position 3 provides vertical distribution.

Full Adjustability is used when horizontal and vertical discharge is required with infinite adjustability. Fully open setting provides max capacity horizontal flow and fully closed setting provides max capacity vertical flow.

MODEL PERFORMANCE COMPARISON | SEE HOW THE MODELS RANK IN DIFFERENT PERFORMANCE AREAS

HORIZONTAL ADJUSTMENT		
<p>THROW</p> <ul style="list-style-type: none"> • R1DBR10 (Shortest) • RM2 / RM4 / RA Series • RM2PLQ/RM4PLQ • RM1 Series • RKSD (Longest) 	<p>PRESSURE DROP</p> <ul style="list-style-type: none"> • R1DBR10 (Lowest) • RM2PLQ / RM4PLQ • RM2 / RM4 / RA Series • RM1 Series • RKSD (Highest) 	<p>SOUND (NC)</p> <ul style="list-style-type: none"> • RM2PLQ / RM4PLQ (Lowest) • RM1 SERIES • RM2 / RM4 / RA Series • R1DBR10 • RKSD (Highest)
VERTICAL ADJUSTMENT		
<p>THROW</p> <ul style="list-style-type: none"> • RM2 / RM4 / RA Series (Shortest) • RM2PLQ / RM4PLQ • R1DBR10 (Longest) 	<p>PRESSURE DROP</p> <ul style="list-style-type: none"> • RM2PLQ / RM4PLQ (Lowest) • R1DBR10 • RM2 / RM4 / RA Series (Highest) 	<p>SOUND (NC)</p> <ul style="list-style-type: none"> • RM2PLQ / RM4PLQ (Lowest) • R1DBR10 • RM2 / RM4 / RA Series (Highest)