# D3 DISPLACEMENT VENTILATION

## AFD | Rounded Triangle, Low-Velocity Supply



Excellence in Air Distribution



### Introduction: AFD =

The *Krueger by Halton* AFD provides a 180° discharge pattern making it ideal for auditoriums, classrooms, retail centers, and offices. The triangular design works well where seamless diffuser integration into a sensitive architectural space is required. The detachable face facilitates easy cleaning of the internal baffle.

### MODEL

AFD - Rounded Triangle, Low-Velocity Supply Unit

#### FEATURES

- 20 gage front panel.
- · Horizontal low velocity discharge at floor level.
- Flow pattern at an angle of 180° enables large airflow rates with low residual velocities in the occupied zone.
- Detachable front panel and removable baffle enables cleaning of the unit and duct work.
- Round duct connection with integral gasket on top or bottom.

#### **OPTIONS**

- · Stainless steel (AISI 316) design.
- 16 gage front panel.
- · Duct cover (solid or perforated).
- Installation base (2", 4", 6").
- Vinyl trim in white or black.
- Metal trim (painted to match).

#### **FINISHES**

- Standard is Polyester Painted White (RAL 9010).
- · Custom colors available.



### FUNCTION

Air is discharged into the space through the front panel of the unit, normally at a slightly lower temperature than setpoint.

The supply air flows at floor level and gradually pervades through the occupied space before rising due to the convection of warm surfaces.

The low velocity flow pattern is semi-circular (180°).

NOTES: The flow pattern data has been defined for floor installation. (1) Duct cover is for covering the duct work and is optional. (2) Installation base is used to raise the unit off the floor and is also optional.

### **AFD Application** -

А

F D



DISPLACEMENT VENTILATION D3

AFD | Rounded Triangle, Low-Velocity Supply

1. Fix mounting brackets (4 places) to low velocity unit.

5. Position base against lower flange of the unit.

aluminium coupling flange (C) is needed.

3. Locate unit against wall and secure through mounting

4. Fix duct cover support brackets (A) to wall between unit and

6. After installation of duct work, locate duct cover as follows: Locate duct cover section (F) on top flange (G) of unit and

7. Secure duct cover with screws through cover into support

8. Re-fit trim between duct cover and unit, and between base

firmly push into support brackets fixed to wall (B).

### AFD Installation =

### INSTALLATION EXPLODED VIEW



### DUCT INSTALLATION

## K3 WALL K1 K2 V W1

ØD	W1	K1	K2	K3
4"	7 15/16"	3 5/8"	4 1/2"	1 5/8"
5"	8 7/16"	3 7/8"	4 13/16"	1 7/16"
6"	9 11/16"	4 3/4"	5 1/2"	1 5/8"
8"	10 1/2"	5 1/4"	6"	1 1/4"
10"	12"	6 3/4"	6 13/16"	1 3/4"
12"	14 1/16"	7 7/8"	8"	1 3/4"
16"	16 5/8"	9 5/8"	9 3/4"	1 11/16"
20"	19 11/16"	11 5/8"	11 11/16"	1 3/4"

into groove in flange (G).

INSTALLATION

brackets.

ceiling.

brackets.

Perform the installation in order.

2. Remove trim (E) from unit.

### AFD Service & Maintenance

#### SERVICING

Open the front panel (2) by first removing the trim (1) and unscrewing the screws. Pull out the front panel. If required, the internal baffle (3) can be detached by unscrewing the screws. Pull out the inner structure.

Wipe the parts with a brush or a damp cloth, instead of immersing in water. After cleaning reassemble in reverse order.

Code	Description	
1	Trim	
2	Front Panel	
3	Internal Baffle	
4	Assembly Brackets	
5	Casing	



А F D

**KRUEGER 2012**