

ENGINEERING SPECIFICATION & CONFIGURATION

AFH

Furnish and install Krueger model series AFH (LxW) with the sizes and capacities indicated on the plans and air outlet schedule.

PERFORMANCE DURING COOLING MODE

Air shall be delivered to the space at low noise levels and low velocities that are even across the diffuser face, in all ducting configurations and without the use of nozzles. Diffuser Manufacturer shall provide sound and pressure drop data derived from tests in accordance with ASHRAE Standard 70-2006.

PERFORMANCE DURING HEATING MODE

The diffuser shall be capable of delivering air to the space in either a vertical or horizontal heating pattern. Performance data for Throw at 150 fpm, 100 fpm, 50 fpm (0.76 m/s, 0.51 m/s, 0.25m/s) shall be provided by manufacturer.

CONSTRUCTION

The diffuser shall be constructed with two separate plenums, one for heating operation and one for cooling operation. The cooling section of the heat-cool lay-in displacement diffuser, model AFH, shall be constructed with an equalization baffle behind the operative diffuser faces for uniform, low velocity, distribution of supply air. Both the equalization baffle and faces shall be securely retained in the diffuser frames. The diffuser frames shall be constructed of heavy wall extruded aluminum and shall be welded to ensure rigidity. There shall be no visible fasteners on the front or side panels. The operative face shall be constructed of painted 20 gauge perforated steel. The internal baffling elements shall be constructed of aluminum. The plenum may be galvanized steel. The paint shall be enamel based. Epoxies and their derivatives are unacceptable. Visible non-metallic components are unacceptable.

The linear slot diffuser for the heating section shall utilize heavy wall extruded aluminum air deflector frames. The linear shall be available in 1-slot or 2-slot configurations. The extruded aluminum air pattern controllers shall be fully adjustable, allowing movement from side to side to create various air pattern configurations and shall be fully adjustable to allow shut-off without adding any blank-off devices.

MOUNTING/FASTENING

The diffuser shall integrate into standard lay-in T-bar ceilings and shall have no visible fasteners.

ACTUATOR: ELECTRIC

The diffuser shall use a 24 VAC modulating actuator controlling a damper allowing two separate air flow paths. The actuator shall close the heating section when in cooling mode and close the cooling section while in heating mode. The actuator shall remain accessible from the outside of the diffuser for servicing.

1. **MODEL: (XXX)**
AFH - Flat-Faced, Flush Mount, Lay-in T-bar, Low-Velocity Supply Unit
2. **PANEL SIZE: (XXxXX)**
24x24
48x24
3. **INLET: (XX) ***
12 - 12" x 6"
24 - 24" x 6"
4. **FRAME STYLE: (XXX)**
F22 - Surface Mount **
F23 - Lay-in T-bar
5. **NUMBER OF SLOTS: (X)**
1 - 1-slot
2 - 2-slots
6. **SLOT LOCATION: (XX)**
24 - Locate on short side of unit.
48 - Locate on long side of unit. ***
7. **ACTUATOR: (XX)**
00 - None
01 - Johnson Controls M9104
02 - Siemens GDE131
8. **INSULATION: (X)**
0 - None
W - 1/2" External Foil Faced Insulation
9. **ACCESSORIES: (XX)**
00 - None
P1 - Inlet Airflow Sensor, Inlet Size 12
P2 - Inlet Airflow Sensor, Inlet Size 24
10. **FINISH: (XX)**
44 - British White
07 - Custom

* Inlet size 24 is not available on panel size 24x24. The inlet is always opposite of slot location.

** Frame style F22 includes a separate plaster frame (model 5HCF23), shipped loose for field installation.

*** Slot location 48 is only available with the 24x48 panel size.

SAMPLE CONFIGURATION: AFH - 24x24 - 12 - F23 - 1 - 24 - 01 - W - 00 - 44