

ENGINEERING SPECIFICATION & CONFIGURATION

SECTION 1: GENERAL

1.01 - Section Covers

- A. Drop Box Diffusers

1.02 - Related Requirements

- A. Section Includes:
 - 1. High-Capacity Drop Box Module

1.03 - Submittals

- A. Product Data: For each type of product indicated, include the following:
 - 1. Data Sheet: Indicate materials of construction, finish and mounting details and performance data including throw, static pressure, sound ratings

SECTION 2: PRODUCTS

2.01 - Manufacturer

- A. Manufacturer: Krueger
 - 1. Drop Box Module with DPL Drum Louver Outlets
 - 2. Drop Box Module with 6880-20V Industrial Supply Grilles

2.02 - Drop Box Module with DPL Drum Louver Outlets

- A. Description:
 - 1. Furnish and install Krueger model DBM with drum louver outlets of various sizes indicated on the plans and air distribution schedule
- B. Construction:
 - 1. Dropbox will consist of 0.044" plain steel plenum and DPL outlets will be constructed of aluminum
 - 2. Dropbox diffusers shall consist of an interior baffle pyramid
 - 3. The rectangular inlets shall have a minimum of a 3.75" depth available for duct connection
 - 4. DPL diffusers can be adjusted 30° up and down from the central position and the blades can be individually adjusted for horizontal spread
 - 5. Dropbox shall have a nominal capacity of (select one):
 - a. 4,000 CFM capacity (4-way outlet)
 - b. 5,000 CFM capacity (4-way outlet)
 - c. 7,500 CFM capacity (4-way outlet)
 - d. 10,000 CFM capacity (6-way outlet)
 - e. 12,500 CFM capacity (6-way outlet)
 - f. 15,000 CFM capacity (6-way outlet)
 - g. 17,500 CFM capacity (6-way outlet)
 - h. 20,000 CFM capacity (6-way outlet)
 - i. 22,500 CFM capacity (6-way outlet)
 - j. 25,000 CFM capacity (6-way outlet)

- C. Finish: Standard Finish will be #44 white. Optional finishes shall be available
 - 1. The standard finish will be an electrophoretic enamel paint, baked at 310° F for 30 minutes
 - 2. The paint thickness shall be 1.0 – 1.2 mils
 - 3. The finish shall have a pencil hardness of HB-H per ASTM D3363-92A
 - 4. The paint shall meet the requirements of ASTM D2794-93, with a direct impact resistance greater than 100 inch-pounds and a reverse impact resistance greater than 80 inch-pounds
 - 5. The paint must pass a 100-hour ASTM B117 Corrosive Environments Salt Spray Test without creepage, blistering or deterioration of film
- D. Accessories:
 - 1. Internal 1" Black Fiberglass Insulation
 - 2. Internal 1" Black Fiber Free Insulation

2.03 - Drop Box Module with 6880-20V Industrial Supply Grilles

- A. Description:
 - 1. Furnish and install Krueger model DBM with industrial supply grilles of various sizes indicated on the plans and air distribution schedule
- B. Construction:
 - 1. Dropbox will consist of 0.044" plain steel plenum and 6880-20V industrial double deflection supply grilles will be constructed of steel
 - 2. Dropbox diffusers shall consist of an interior baffle pyramid
 - 3. The rectangular inlets shall have a minimum of a 3.75" depth available for duct connection
 - 4. Dropbox shall have a nominal capacity of (select one):
 - a. 4,000 CFM capacity (4-way outlet)
 - b. 5,000 CFM capacity (4-way outlet)
 - c. 7,500 CFM capacity (4-way outlet)
 - d. 10,000 CFM capacity (6-way outlet)
 - e. 12,500 CFM capacity (6-way outlet)
 - f. 15,000 CFM capacity (6-way outlet)
 - g. 17,500 CFM capacity (6-way outlet)
 - h. 20,000 CFM capacity (6-way outlet)
 - i. 22,500 CFM capacity (6-way outlet)
 - j. 25,000 CFM capacity (6-way outlet)
- C. Finish: Standard Finish will be #44 white. Optional finishes shall be available
 - 1. The standard finish will be an electrophoretic enamel paint, baked at 310° F for 30 minutes
 - 2. The paint thickness shall be 1.0 – 1.2 mils
 - 3. The finish shall have a pencil hardness of HB-H per ASTM D3363-92A

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- 4. The paint shall meet the requirements of ASTM D2794-93, with a direct impact resistance greater than 100 inch-pounds and a reverse impact resistance greater than 80 inch-pounds
 - 5. The paint must pass a 100-hour ASTM B117 Corrosive Environments Salt Spray Test without creepage, blistering or deterioration of film
- D. Accessories:
- 1. Internal 1" Black Fiberglass Insulation
 - 2. Internal 1" Black Fiber Free Insulation

SECTION 3: EXECUTION**3.01 - Examination**

- A. Ensure that all conditions are appropriate before beginning installation
- B. Ensure all field measurements align with the specifications depicted in the drawings
- C. Notify architect of any inadequate preparation if another installer is responsible for installation before proceeding

3.02 - Installation

- A. Install Diffusers level and plumb
- B. Verify diffuser air patterns are as indicated on drawings during installation
- C. Diffusers shall be installed with airtight connection to ducts to allow the service and maintenance of dampers

3.03 - Closeout Activities

- A. After installation, verify diffuser air patterns as directed before starting air balance

- 1. SERIES: (X)**
DBM - Drop Box Module
- 2. NUMBER OF OUTLETS: (X)**
4 - 4 Outlets
6 - 6 Outlets
- 3. CFM: (XXXXXX)**
4,000
5,000
7,500
10,000
12,500
15,000
17,500
20,000
22,500
25,000
- 4. INSULATION: (X)**
H - Fiberglass
Y - Fiber-free
- 5. OUTLET TYPE: (X)**
D - DPL Drum Louver
G - 6880-20V Grille
- 6. FINISH: (XX)**
01 - Mill
07 - Enamel Paint Match
35 - Black
44 - British White