**Application**

High capacity unit with low sound levels, suitable for large spaces where no discharge adjustment is required.

**Standard Features**

- Available in heavy gauge steel or aluminum construction.
- Aluminum available through size 18 only.
- Core is easily removed for installation or maintenance.
- Neck sizes 4” through 36”.
- Neck is sized to fit over duct for minimum air leakage.
- Discharge is fixed horizontal setting.
- Center button is removable for easy access to damper.
- Standard finish is Carnes electrocoat acrylic baked enamel. Other finishes are available upon request.
- The standard color is #11 bright white. Other colors are available on request.

**Optional Features**

- Safety chain (Option S) prevents damage or injury when removing core by connecting the core to the form.
- Gasket (Option G) minimizes air leaks around edge of diffuser.
- Sizes 14” and smaller can be set in a 24”x24” T-bar panel (Option T) for easier installation (p. A21).

**Accessories**

- When specifying damper for sizes 4-24, use opposed blade round damper model KXRA (p. A427).
- When specifying damper for sizes 28-36, use radial deflector damper model KXNA (p. A430).

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**Quick Select Chart**

This shows units with:
- A maximum NC/RC of 35.
- A minimum face velocity of 400 FPM.

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**Model Numbering System**

- **S** - Diffuser
- **E** - Steel Fixed Discharge
- **F** - Aluminum Fixed Discharge
- **A** - Construction
- **M** - Design Series
- **4** - Form 4
- **0** - Core Only
- **11** - Bright White (Default)
- **01** - White
- **04** - Gray
- **04** - 4”
- **10** - 10”
- **12** - 12”
- **14** - 14”
- **16** - 16”
- **18** - 18”
- **20** - 20”
- **G** - Gasket
- **T** - T-bar Panel
## Neck Size (Dimensions In Inches)

<table>
<thead>
<tr>
<th>Dim</th>
<th>Description</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Neck I.D.</td>
<td>4-1/16</td>
<td>5-1/16</td>
<td>6-1/16</td>
<td>8-1/16</td>
<td>10-1/16</td>
<td>12-1/16</td>
<td>14-1/16</td>
</tr>
<tr>
<td>B</td>
<td>Neck O.D.</td>
<td>4-1/8</td>
<td>5-1/8</td>
<td>6-1/8</td>
<td>8-1/8</td>
<td>10-1/8</td>
<td>12-1/8</td>
<td>14-1/8</td>
</tr>
<tr>
<td>C</td>
<td>Frame O.D.</td>
<td>14-1/2</td>
<td>14-1/2</td>
<td>14-1/2</td>
<td>17-9/16</td>
<td>19-13/16</td>
<td>22-1/16</td>
<td>24-1/16</td>
</tr>
<tr>
<td>E</td>
<td>Overall Projection</td>
<td>1-15/16</td>
<td>1-15/16</td>
<td>1-15/16</td>
<td>2-3/8</td>
<td>1-7/8</td>
<td>2-5/16</td>
<td>2-5/16</td>
</tr>
<tr>
<td>F</td>
<td>Rec. Ceiling Opening</td>
<td>7-1/4</td>
<td>7-1/4</td>
<td>7-1/4</td>
<td>9-1/4</td>
<td>11-1/4</td>
<td>13-1/4</td>
<td>15-1/4</td>
</tr>
<tr>
<td>G</td>
<td>Collar Height</td>
<td>3/4</td>
<td>1-3/8</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Notes:
1. The neck is sized to fit over the duct so as to minimize air leakage.
<table>
<thead>
<tr>
<th>Air Flow (CFM)</th>
<th>200</th>
<th>400</th>
<th>600</th>
<th>800</th>
<th>1000</th>
<th>1200</th>
<th>1400</th>
<th>1600</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Velocity Pressure (w.g.)</strong></td>
<td>0.003</td>
<td>0.010</td>
<td>0.022</td>
<td>0.040</td>
<td>0.062</td>
<td>0.090</td>
<td>0.122</td>
<td>0.160</td>
</tr>
<tr>
<td><strong>Air Flow (CFM)</strong></td>
<td>17</td>
<td>35</td>
<td>52</td>
<td>70</td>
<td>87</td>
<td>105</td>
<td>122</td>
<td>140</td>
</tr>
<tr>
<td>4&quot; Total Pressure (w.g.)</td>
<td>0.005</td>
<td>0.02</td>
<td>0.05</td>
<td>0.09</td>
<td>0.14</td>
<td>0.20</td>
<td>0.27</td>
<td>0.36</td>
</tr>
<tr>
<td>Radius of Diffusion (ft.)</td>
<td>1-1.2</td>
<td>1-1.3</td>
<td>2-2.4</td>
<td>2-3.5</td>
<td>3-4.7</td>
<td>4-5.8</td>
<td>5-6.9</td>
<td>6-7.1</td>
</tr>
<tr>
<td><strong>Sound Level (NC/RC)</strong></td>
<td>13</td>
<td>17</td>
<td>15</td>
<td>13</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td><strong>Neck Velocity (FPM)</strong></td>
<td>200</td>
<td>400</td>
<td>600</td>
<td>800</td>
<td>1000</td>
<td>1200</td>
<td>1400</td>
<td>1600</td>
</tr>
<tr>
<td><strong>Performance Data</strong></td>
<td>Fixed Round Diffusers (SSEA, SSFA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes on Performance Data:**
- Performance data is based on tests conducted according to ANSI/ASHRAE E Standard 70-1991.
- Actual performance in the field may vary.
- Testing was conducted in isothermal conditions.
- Sound levels are based on a room absorption of 10db re 10 watts.
- A "-" indicates an NC or RC level less than 10.

**Units of Measurement Used:**
- The duct velocity is given in Feet per Minute (FPM).
- Velocity Pressure and Total Pressure are given in Inches of Water (w.g.).
- Radius of Diffusion values are given in feet for terminal velocities of 150, 100 and 50 FPM, respectively.
- Sound data is given in both NC (Noise Criteria) and RC (Room Criteria). NC is first with RC second, separated by a slash.
Application
Use with Models SSEA and SSDB to result in easier, lower cost, quicker and higher quality installation of round diffusers in suspended ceilings

Features
• Diffuser sizes 14” and smaller can be set in a panel to fit 24” x 24” T-bar ceilings.
• This panel will work with 9/16”, 15/16” or 1-1/2” flat face T-bar.
• Panels to fit other types and sizes of suspended ceilings are available on request.
• Panel construction is steel.

Installation Notes
• Note that the diffuser inlet is still oversized to fit the duct inside. This eliminates air leakage, but requires the use of hard duct connection to the diffuser.

Dimensional Data

<table>
<thead>
<tr>
<th>Model SSEA</th>
<th>4”</th>
<th>5”</th>
<th>6”</th>
<th>8”</th>
<th>10”</th>
<th>12”</th>
<th>14”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upward Projection (A)</td>
<td>1-15/16”</td>
<td>2-9/16”</td>
<td>2-3/16”</td>
<td>2-3/8”</td>
<td>2-3/8”</td>
<td>2-3/8”</td>
<td>2-1/2”</td>
</tr>
<tr>
<td>Downward Projection (B)</td>
<td>3/4”</td>
<td>3/4”</td>
<td>3/4”</td>
<td>1”</td>
<td>1/2”</td>
<td>7/8”</td>
<td>13/16”</td>
</tr>
</tbody>
</table>