

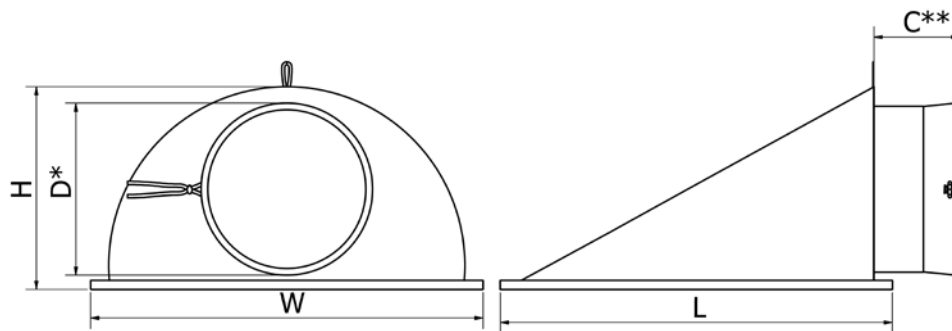
# Technical data

## Extract unit, EPI

The FabricAir EPI is a drop-in unit, suitable for T-profile-based suspended ceiling installations and is used for air extraction. They are quick to install and require no tools. The units can be connected to both solid and flexible ducts. The plenum box – the upper and hidden part of the unit – is insulated. The connection sleeve

is centered on the end or side of the plenum box and it fits duct sizes from 5 in to 10 in by adjusting the strap lock. The flow panel – the lower and visual part – is a fabric with a PerfoFlow™ flow model and is available in alternative colors or printed patterns. This unit is made from FabricAir Combi 80 and Combi 90 fabrics, and it comes with a 10-year warranty.

## Dimensions



## Performance data

| SMI       | W (in) | L (in) | H (in) | D* (in) | C** (in)   |               | m (lbs) |
|-----------|--------|--------|--------|---------|------------|---------------|---------|
|           |        |        |        |         | solid duct | flexible duct |         |
| 24" x 24" | 23¾    | 23¾    | 12     | 10¾     | 8          | 4¾            | 4.0     |
| 24" x 48" | 23¾    | 47¾    | 12     | 10¾     | 8          | 4¾            | 6.4     |
| 48" x 24" | 47¾    | 23¾    | 12     | 10¾     | 8          | 4¾            | 6.4     |

### Notes:

- \* Fits for duct sizes Ø5"-10" by adjusting the strap lock.
- \*\* Length of the connection sleeve when fully extended. Length decreases with the size of the duct when connected. Smaller duct diameter results in a shorter length of the connection sleeve.

**Disclaimer:** Unit flow panels may experience a small amount of curve inwards during operation or sagging at rest after extended use.

## Performance data

Tested in general accordance to ANSI/ASHRAE Standard 70-2006. Tests performed with straight metal duct connection. Actual performance may vary in the field depending on upstream duct layout and when flexible duct is used. To obtain total pressure, add the velocity pressure to the static pressure.

NC values based on octave band 2 to 7 sound power levels minus a room absorption of 10 dB, re 10<sup>-12</sup> Watts. Dash (-) in space denotes an NC value of less than 15. Grey zone indicates airflow which exceeds the working range. Exceeding recommended airflow rates may cause vibrations and performance disturbances.

## Code compliance

|            |        |            |            |            |        |              | Feature        |
|------------|--------|------------|------------|------------|--------|--------------|----------------|
| EN 13501-1 | UL 723 | ULC s102.2 | GOST 30244 | NFP 92:507 | DS 428 | GB 8624      | Anti-microbial |
| B-s1, d0   |        |            | ✓          | M1         | ✓      | B-s1, d0, t1 | ✓              |

## EPI 24" x 24"

### Sound attenuation

Sound attenuation of the diffuser  $\Delta L$  from duct to room in dB.

Dash (-) denotes attenuation was not determined.

| Diffuser  | Connecting duct diameter (in) | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
|-----------|-------------------------------|-------|--------|--------|--------|-------|-------|-------|-------|
| 24" x 24" | 5                             | -     | 0.1    | -      | -      | 1.4   | 0.4   | 2.5   | 3.5   |
|           | 6                             | -     | -      | -      | -      | 3.3   | -     | -     | 3.6   |
|           | 8                             | -     | 0.5    | -      | -      | 5.2   | 1.7   | 3.3   | 3.6   |
|           | 10                            | -     | -      | -      | -      | 3.6   | 3.1   | 3.6   | 3.7   |

### Sizing tables

| Connecting duct diameter (in) | Neck velocity (fpm)            | 200   | 300   | 400   | 500   | 600   | 700   | 800   | 900   | 1000  | 1100  |
|-------------------------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                               | Velocity pressure (in.w.g.)    | 0.002 | 0.006 | 0.010 | 0.016 | 0.022 | 0.031 | 0.040 | 0.051 | 0.062 | 0.076 |
| 5                             | Airflow (cfm)                  | 27    | 41    | 55    | 68    | 82    | 95    | 109   | 123   | 136   | 150   |
|                               | Neg. static pressure (in.w.g.) | 0.010 | 0.023 | 0.040 | 0.063 | 0.091 | 0.123 | 0.161 | 0.204 | 0.252 | 0.304 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | -     | -     | -     | 15    |
| 6                             | Airflow (cfm)                  | 39    | 59    | 79    | 98    | 118   | 137   | 157   | 177   | 196   | 216   |
|                               | Neg. static pressure (in.w.g.) | 0.011 | 0.024 | 0.042 | 0.066 | 0.095 | 0.129 | 0.169 | 0.213 | 0.263 | 0.319 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 8                             | Airflow (cfm)                  | 70    | 105   | 140   | 175   | 209   | 244   | 279   | 314   | 349   | 384   |
|                               | Neg. static pressure (in.w.g.) | 0.015 | 0.033 | 0.059 | 0.092 | 0.133 | 0.181 | 0.236 | 0.298 | 0.368 | 0.446 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | 17    | 20    | 22    | 25    |
| 10                            | Airflow (cfm)                  | 109   | 164   | 218   | 273   | 327   | 382   | 436   | 491   |       |       |
|                               | Neg. static pressure (in.w.g.) | 0.023 | 0.051 | 0.091 | 0.143 | 0.205 | 0.279 | 0.365 | 0.462 |       |       |
|                               | NC                             | -     | -     | 16    | 21    | 26    | 28    | 31    | 34    |       |       |

## EPI 24" x 48"

### Sound attenuation

Sound attenuation of the diffuser  $\Delta L$  from duct to room in dB.

Dash (-) denotes attenuation was not determined.

| Diffuser  | Connecting duct diameter (in) | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
|-----------|-------------------------------|-------|--------|--------|--------|-------|-------|-------|-------|
| 24" x 48" | 5                             | 0.2   | -      | -      | -      | 5.0   | -     | 0.3   | 5.0   |
|           | 6                             | 0.5   | 0.2    | -      | -      | 4.4   | 0.1   | 0.3   | 2.0   |
|           | 8                             | 0.6   | 0.5    | -      | -      | 5.5   | 3.1   | 2.0   | 4.0   |
|           | 10                            | 1.4   | 1.1    | -      | -      | 5.6   | 5.3   | 3.9   | 7.3   |

### Sizing tables

| Connecting duct diameter (in) | Neck velocity (fpm)            | 200   | 300   | 400   | 500   | 600   | 700   | 800   | 900   | 1000  | 1100  |
|-------------------------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                               | Velocity pressure (in.w.g.)    | 0.002 | 0.006 | 0.010 | 0.016 | 0.022 | 0.031 | 0.040 | 0.051 | 0.062 | 0.076 |
| 5                             | Airflow (cfm)                  | 27    | 41    | 55    | 68    | 82    | 95    | 109   | 123   | 136   | 150   |
|                               | Neg. static pressure (in.w.g.) | 0.009 | 0.021 | 0.037 | 0.059 | 0.084 | 0.115 | 0.150 | 0.190 | 0.234 | 0.283 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | -     | -     | -     | 16    |
| 6                             | Airflow (cfm)                  | 39    | 59    | 79    | 98    | 118   | 137   | 157   | 177   | 196   | 216   |
|                               | Neg. static pressure (in.w.g.) | 0.010 | 0.023 | 0.040 | 0.063 | 0.091 | 0.124 | 0.162 | 0.205 | 0.253 | 0.306 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 8                             | Airflow (cfm)                  | 70    | 105   | 140   | 175   | 209   | 244   | 279   | 314   | 349   | 384   |
|                               | Neg. static pressure (in.w.g.) | 0.010 | 0.023 | 0.041 | 0.064 | 0.092 | 0.125 | 0.164 | 0.207 | 0.256 | 0.310 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | -     | -     | -     | 16    |
| 10                            | Airflow (cfm)                  | 109   | 164   | 218   | 273   | 327   | 382   | 436   | 491   | 545   | 600   |
|                               | Neg. static pressure (in.w.g.) | 0.013 | 0.029 | 0.051 | 0.080 | 0.115 | 0.156 | 0.204 | 0.258 | 0.319 | 0.386 |
|                               | NC                             | -     | -     | -     | -     | -     | 16    | 19    | 21    | 22    | 24    |

## EPI 48" x 24"

### Sound attenuation

Sound attenuation of the diffuser  $\Delta L$  from duct to room in dB.

Dash (-) denotes attenuation was not determined.

| Diffuser  | Connecting duct diameter (in) | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
|-----------|-------------------------------|-------|--------|--------|--------|-------|-------|-------|-------|
| 48" x 24" | 5                             | -     | -      | -      | -      | 8.4   | 3.7   | 4.6   | 0.5   |
|           | 6                             | -     | -      | -      | -      | 5.6   | 4.0   | 3.5   | 1.1   |
|           | 8                             | -     | 0.6    | -      | -      | 8.7   | 5.8   | 6.5   | 3.2   |
|           | 10                            | -     | 1.0    | 1.5    | 1.6    | 8.8   | 3.6   | 4.7   | 4.6   |

### Sizing tables

| Connecting duct diameter (in) | Neck velocity (fpm)            | 200   | 300   | 400   | 500   | 600   | 700   | 800   | 900   | 1000  | 1100  |
|-------------------------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                               | Velocity pressure (in.w.g.)    | 0.002 | 0.006 | 0.010 | 0.016 | 0.022 | 0.031 | 0.040 | 0.051 | 0.062 | 0.076 |
| 5                             | Airflow (cfm)                  | 27    | 41    | 55    | 68    | 82    | 95    | 109   | 123   | 136   | 150   |
|                               | Neg. static pressure (in.w.g.) | 0.010 | 0.021 | 0.038 | 0.059 | 0.086 | 0.117 | 0.152 | 0.193 | 0.238 | 0.288 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | -     | -     | 15    | 16    |
| 6                             | Airflow (cfm)                  | 39    | 59    | 79    | 98    | 118   | 137   | 157   | 177   | 196   | 216   |
|                               | Neg. static pressure (in.w.g.) | 0.010 | 0.022 | 0.039 | 0.062 | 0.089 | 0.121 | 0.158 | 0.200 | 0.247 | 0.298 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |
| 8                             | Airflow (cfm)                  | 70    | 105   | 140   | 175   | 209   | 244   | 279   | 314   | 349   | 384   |
|                               | Neg. static pressure (in.w.g.) | 0.011 | 0.025 | 0.045 | 0.070 | 0.101 | 0.138 | 0.180 | 0.228 | 0.281 | 0.340 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | -     | 16    | 19    | 21    |
| 10                            | Airflow (cfm)                  | 109   | 164   | 218   | 273   | 327   | 382   | 436   | 491   | 545   | 600   |
|                               | Neg. static pressure (in.w.g.) | 0.015 | 0.033 | 0.059 | 0.093 | 0.134 | 0.182 | 0.237 | 0.300 | 0.371 | 0.449 |
|                               | NC                             | -     | -     | -     | -     | -     | -     | 16    | 18    | 20    | 21    |