Horizontal Drum Louvres with a fixed outer frame and adjustable cylinder core providing both vertical air direction adjustment and horizontal adjustment.

Cylinder diffusers may be used in both vertical and horizontal applications if required. Also they can be used for heating and cooling applications and are specifically designed for use in large areas such as shopping malls, gymnasiums etc. areas where it is desirable to have a controlled ventilation but with a long throw.

The main cylinder spins on a pivot allowing it to move vertically up or down and the individually adjustable vertical pattern control blades can be altered to any angle to allow a wide spread throw.

**Materials:**
Extruded aluminium frame the cylinder core and adjustable blade are manufactured from aluminium extrusion. The whole of which is fitted with a silicone treated polypropylene seal. The outer frame is mitred and joined by mechanical cleating.

**Finish:**
Standard finish is natural anodised silver, however we can offer an extensive range of painted and polyester powder coated finishes to match RAL or BS colours.
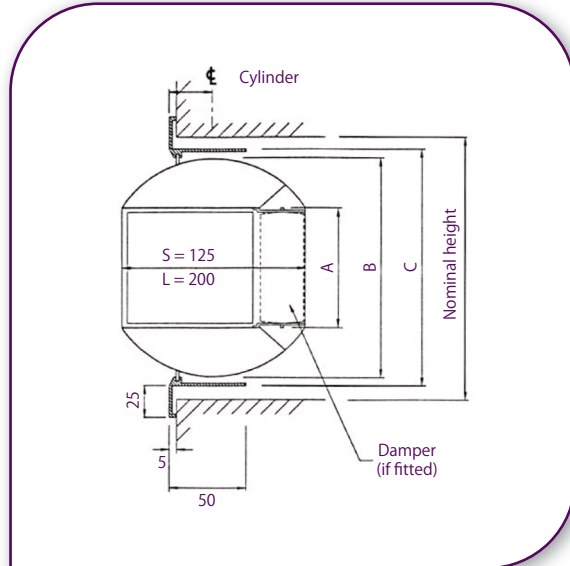
**Fixing:**
As standard the outer frame is provided with countersunk face fixings for screen to ductwork or to structure.

**Dampers:**
The units are available with opposed blade dampers which can be fitted to the rear of the cylinder core for volume balancing.

The cylinders are available to rotate for 360° for cleaning with or without damper fitted.

High Velocity Drum Louvre//
Type **HVCUA**
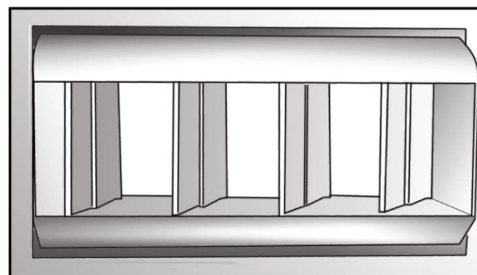
## Table of Standard Sizes

| Type | Size | Nominal Width | Nominal Height | A | B | C | D | No Blades |
|------|------|---------------|----------------|-----|-----|-----|-----|-----------|
| S | 1 | 250 | 175 | 86 | 156 | 166 | 75 | 3 |
| S | 2 | 325 | 175 | 86 | 156 | 166 | 75 | 4 |
| S | 3 | 475 | 175 | 86 | 156 | 166 | 75 | 6 |
| S | 4 | 625 | 175 | 86 | 156 | 166 | 75 | 8 |
| L | 5 | 525 | 275 | 152 | 256 | 266 | 125 | 4 |
| L | 6 | 650 | 275 | 152 | 256 | 266 | 125 | 5 |
| L | 7 | 775 | 275 | 152 | 256 | 266 | 125 | 6 |
| L | 8 | 900 | 275 | 152 | 256 | 266 | 125 | 7 |

Diffusers

# tek limited

| Throw in Metres | Temp in Diff 0°C | L/S Size Stat press Pa dBA | 100 S1 30 22 | 120 S1 40 24 | 140 S1 S2 50 20 27 22 | 165 S1 S2 60 30 31 24 | 190 S1 S2 S3 80 40 20 33 28 23 | 210 S1 S2 S3 100 50 30 36 30 24 | 240 S1 S2 S3 130 60 30 38 32 26 | 260 S1 S2 S3 150 80 40 40 34 29 | 280 S1 S2 S3 S4 180 90 40 20 41 36 30 24 | 310 S1 S2 S3 S4 200 100 50 30 43 37 32 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3** | 5 | Drop | 0.1 | 0.1 | 0.0 0.1 | 0.1 0.1 | 0.1 0.1 0.1 | 0.0 0.0 0.1 | 0.0 0.0 0.0 | 0.0 0.0 0.0 | 0.0 0.0 0.0 0.1 | 0.0 0.0 0.0 0.1 |
|  | 11 | or | 0.2 | 0.1 | 0.1 0.2 | 0.1 0.1 | 0.1 0.1 0.1 | 0.0 0.1 0.1 | 0.0 0.1 0.1 | 0.0 0.0 0.1 | 0.0 0.0 0.1 0.1 | 0.0 0.0 0.1 0.1 |
|  | 16 | rise | 0.2 | 0.1 | 0.1 0.2 | 0.1 0.2 | 0.1 0.1 0.2 | 0.1 0.1 0.2 | 0.0 0.1 0.1 | 0.0 0.1 0.1 | 0.0 0.1 0.1 0.2 | 0.0 0.0 0.1 0.1 |
|  | 22 | in m | 0.3 | 0.2 | 0.2 0.2 | 0.1 0.2 | 0.1 0.2 0.2 | 0.1 0.1 0.2 | 0.1 0.1 0.2 | 0.0 0.1 0.1 | 0.0 0.1 0.1 0.2 | 0.0 0.1 0.1 0.2 |
|  |  | Residual vel m/s | 0.4 | 0.5 | 0.6 0.4 | 0.8 0.6 | 0.9 0.7 0.4 | 1.1 0.8 0.6 | 1.3 0.9 0.6 | 1.5 1.1 0.7 | 1.7 1.3 0.8 0.6 | 1.8 1.3 0.9 0.7 |
| **6** | 5 | Drop | 0.6 | 0.1 | 0.3 0.5 | 0.2 0.5 | 0.2 0.3 0.4 | 0.1 0.2 0.3 | 0.1 0.2 0.3 | 0.1 0.2 0.2 | 0.1 0.1 0.2 0.4 | 0.1 0.1 0.2 0.3 |
|  | 11 | or | 0.2 | 0.1 | 0.1 0.2 | 0.1 0.1 | 0.1 0.1 0.1 | 0.0 0.1 0.1 | 0.0 0.1 0.1 | 0.0 0.0 0.1 | 0.0 0.0 0.1 0.1 | 0.0 0.0 0.1 0.1 |
|  | 16 | rise | 0.2 | 0.1 | 0.1 0.2 | 0.1 0.2 | 0.1 0.1 0.2 | 0.1 0.1 0.2 | 0.0 0.1 0.1 | 0.0 0.1 0.1 | 0.0 0.1 0.1 0.2 | 0.0 0.1 0.1 |
|  | 22 | in m | 0.3 | 0.2 | 0.2 0.2 | 0.1 0.2 | 0.1 0.2 0.2 | 0.1 0.1 0.2 | 0.1 0.1 0.2 | 0.0 0.1 0.1 | 0.0 0.1 0.1 0.2 | 0.0 0.1 0.1 0.2 |
|  |  | Residual vel m/s | 0.2 | 0.3 | 0.4 0.3 | 0.5 0.3 | 0.6 0.4 0.3 | 0.6 0.4 0.3 | 0.7 0.6 0.4 | 0.8 0.6 0.4 | 0.9 0.7 0.5 0.4 | 1.0 0.8 0.5 0.4 |
| **9** | 5 | Drop | 1.8 | 1.2 | 1.0 1.7 | 0.8 1.5 | 0.5 1.0 1.4 | 0.4 0.8 1.2 | 0.3 0.6 1.1 | 0.3 0.5 0.8 | 0.2 0.6 0.7 1.3 | 0.2 0.4 0.6 1.1 |
|  | 11 | or | 3.7 | 2.4 | 1.8 3.4 | 1.2 3.1 | 0.8 1.9 2.8 | 0.8 1.6 2.4 | 0.7 1.2 2.1 | 0.6 1.1 1.7 | 0.5 0.9 1.4 2.4 | 0.4 0.8 1.2 2.2 |
|  | 16 | rise |  | 4.0 | 3.0 5.2 | 2.8 4.3 | 1.8 3.1 4.3 | 1.4 2.4 3.7 | 1.0 2.0 3.4 | 0.8 1.5 2.4 | 0.7 1.3 2.3 4.0 | 0.6 1.1 1.8 3.4 |
|  | 22 | in m |  | 5.2 | 4.3 | 3.0 | 2.1 4.0 5.5 | 1.7 3.1 4.9 | 1.4 2.6 4.6 | 1.1 2.1 3.4 | 1.0 1.7 3.1 5.2 | 0.8 1.4 2.4 4.3 |
|  |  | Residual vel m/s | 0.2 | 0.2 | 0.3 0.2 | 0.4 0.2 | 0.4 0.3 0.2 | 0.5 0.3 0.2 | 0.6 0.4 0.3 | 0.6 0.5 0.3 | 0.7 0.5 0.3 0.3 | 0.8 0.6 0.4 0.3 |
| **12** | 5 | Drop | 4.3 | 3.1 | 2.4 4.1 | 1.8 3.4 | 1.2 2.4 3.4 | 1.1 1.8 3.0 | 0.8 1.5 2.8 | 0.7 1.2 2.0 | 0.6 1.0 1.8 3.1 | 0.5 0.9 1.4 2.6 |
|  | 11 | or |  | 5.5 | 4.3 | 3.1 5.5 | 2.3 4.6 5.5 | 1.8 3.7 5.5 | 1.5 3.1 4.9 | 1.2 2.4 3.7 | 1.1 1.7 3.4 6.1 | 1.0 1.8 2.9 5.2 |
|  | 16 | rise |  |  | 6.8 | 5.2 | 3.7 6.4 | 3.1 5.5 | 2.6 4.3 6.7 | 2.1 3.7 5.5 | 2.0 2.8 5.2 | 1.7 2.6 4.3 |
|  | 22 | in m |  |  |  | 6.4 | 5.2 | 4.0 6.7 | 3.4 5.5 | 2.6 4.9 | 2.3 4.0 6.1 | 2.0 3.7 5.8 |
|  |  | Residual vel m/s | 0.1 | 0.2 | 0.2 0.2 | 0.3 0.2 | 0.3 0.2 0.2 | 0.4 0.3 0.2 | 0.4 0.3 0.2 | 0.5 0.4 0.2 | 0.5 0.4 0.3 0.2 | 0.6 0.4 0.3 0.2 |
| **15** | 5 | Drop | 7.9 | 5.5 | 4.6 7.3 | 3.4 5.5 | 2.4 4.6 5.5 | 2.0 3.7 5.5 | 1.6 2.9 4.9 | 1.3 2.4 4.0 | 1.1 2.0 3.7 5.8 | 1.0 1.7 2.8 5.2 |
|  | 11 | or |  |  | 7.0 | 5.5 | 4.0 | 3.4 6.4 | 2.8 5.5 8.2 | 2.3 4.9 6.7 | 2.0 4.0 6.1 | 1.7 3.4 5.5 |
|  | 16 | rise |  |  |  |  | 6.7 | 5.5 | 4.9 7.6 | 4.0 6.4 | 3.4 5.5 | 2.8 4.9 7.9 |
|  | 22 | in m |  |  |  |  |  | 7.3 | 5.8 | 5.2 | 4.3 7.0 | 4.0 6.1 |
|  |  | Residual vel m/s | 0.1 | 0.1 | 0.2 0.1 | 0.2 0.1 | 0.3 0.2 0.1 | 0.3 0.2 0.2 | 0.4 0.3 0.2 | 0.4 0.3 0.2 | 0.5 0.4 0.2 0.2 | 0.5 0.4 0.3 0.2 |
| **18** | 5 | Drop |  | 9.2 | 7.0 | 5.8 9.5 | 4.3 7.3 9.5 | 3.7 5.8 8.5 | 2.8 4.9 7.3 | 2.2 4.0 6.1 | 2.0 3.4 5.5 8.5 | 1.7 3.1 4.9 7.6 |
|  | 11 | or |  |  |  | 8.2 | 6.7 | 5.8 | 4.6 8.5 | 4.0 7.6 | 3.4 6.1 9.5 | 3.0 5.8 8.9 |
|  | 16 | rise |  |  |  |  |  | 9.5 | 7.6 | 6.1 | 5.5 8.9 | 5.2 7.9 |
|  | 22 | in m |  |  |  |  |  |  | 9.8 | 8.2 | 7.0 | 6.1 |
|  |  | Residual vel m/s | 0.1 | 0.1 | 0.1 0.1 | 0.2 0.1 | 0.2 0.2 0.1 | 0.3 0.2 0.1 | 0.3 0.2 0.1 | 0.4 0.3 0.2 | 0.4 0.3 0.2 0.2 | 0.5 0.3 0.2 0.2 |
| **21** | 5 | Drop |  |  | 11.0 | 8.9 | 5.8 11.3 | 5.5 8.9 | 4.6 7.3 | 3.7 6.1 9.5 | 3.1 5.5 8.2 | 2.7 4.6 7.3 |
|  | 11 | or |  |  |  |  | 9.5 | 7.9 | 6.7 | 5.5 11.0 | 4.9 9.5 | 4.6 8.5 |
|  | 16 | rise |  |  |  |  |  |  |  | 9.5 | 8.2 | 7.3 |
|  | 22 | in m |  |  |  |  |  |  |  |  | 10.7 | 9.2 |
|  |  | Residual vel m/s | 0.1 | 0.1 | 0.1 0.1 | 0.2 0.1 | 0.2 0.1 0.1 | 0.2 0.2 0.1 | 0.3 0.2 0.1 | 0.3 0.2 0.2 | 0.4 0.3 0.2 0.1 | 0.4 0.3 0.2 0.2 |
| **24** | 5 | Drop |  |  |  |  |  |  |  |  |  |  |
|  | 11 | or |  |  |  |  |  |  |  |  |  |  |
|  | 16 | rise |  |  |  |  |  |  |  |  |  |  |
|  | 22 | in m |  |  |  |  |  |  |  |  |  |  |
|  |  | Residual vel m/s |  |  |  |  |  |  |  |  |  |  |

Diffusers

# tek limited

| Throw in Metres | Temp in Diff 0°C | L/S Size Stat press Pa dBA level | 330 S1 S2 S3 S4 240 120 60 40 44 39 33 29 | | | | 380 S2 S3 S4 150 80 40 42 36 31 | | | 425 S2 S3 S4 L5 190 90 50 30 44 38 33 28 | | | | 470 S2 S3 S4 L5 230 110 60 30 46 40 35 31 | | | | 520 S3 S4 L5 L6 140 80 40 30 42 38 32 28 | | | | 570 S3 S4 L5 L6 170 90 50 30 44 39 34 31 | | | | 610 S3 S4 L5 L6 L7 190 100 50 30 30 46 41 35 32 29 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3** | 5 11 16 22 | Drop or rise in m | 0.0 0.0 0.0 0.0 | 0.0 0.0 0.0 0.1 | 0.0 0.0 0.1 0.1 | 0.0 0.0 0.1 0.1 | 0.0 0.0 0.0 | 0.0 0.0 0.1 | 0.0 0.0 0.1 | 0.0 0.0 0.0 0.0 | 0.0 0.0 0.1 0.1 | 0.0 0.0 0.1 0.1 | 0.0 0.1 0.1 0.1 | 0.0 0.0 0.0 0.0 | 0.0 0.0 0.0 0.1 | 0.0 0.0 0.1 0.1 | 0.0 0.0 0.1 0.1 | | | | | | | | | | | | | |
| | | Residual vel m/s | 2.0 1.5 1.0 0.8 | | | | 1.8 1.2 0.9 | | | 2.0 1.5 1.0 0.8 | | | | 2.5 1.6 1.3 0.9 | | | | | | | | | | | | | | | | |
| **6** | 5 11 16 22 | Drop or rise in m | 0.1 0.1 0.2 0.3 | 0.1 0.2 0.3 0.5 | 0.2 0.3 0.5 0.8 | 0.2 0.3 0.6 1.0 | 0.1 0.1 0.2 | 0.2 0.2 0.4 | 0.2 0.4 0.7 | 0.3 0.5 0.9 | 0.1 0.1 0.2 0.3 | 0.1 0.2 0.3 0.5 | 0.2 0.3 0.5 0.8 | 0.3 0.4 0.7 1.1 | 0.1 0.1 0.2 0.2 | 0.1 0.2 0.3 0.4 | 0.2 0.2 0.4 0.6 | 0.2 0.3 0.6 0.9 | 0.1 0.1 0.2 0.2 | 0.1 0.2 0.4 0.5 | 0.2 0.3 0.5 0.7 | 0.2 0.4 0.7 0.9 | 0.1 0.1 0.2 0.2 | 0.1 0.2 0.3 0.4 | 0.2 0.3 0.4 0.6 | 0.2 0.4 0.6 0.8 | 0.0 0.1 0.1 0.2 0.2 | 0.1 0.2 0.2 0.4 0.5 | 0.1 0.2 0.5 0.6 0.7 | 0.2 0.3 0.5 0.8 0.9 |
| | | Residual vel m/s | 1.2 0.9 0.6 0.5 | | | | 1.0 0.7 0.6 | | | 1.3 0.8 0.6 0.4 | | | | 1.5 0.9 0.7 0.5 | | | | 1.0 0.8 0.6 0.4 | | | | 2.5 1.6 1.3 0.9 | | | | 1.3 1.1 0.7 0.6 0.5 | | | |
| **9** | 5 11 16 22 | Drop or rise in m | 0.2 0.3 0.5 0.8 | 0.3 0.5 1.0 1.7 | 0.5 1.0 1.5 2.5 | 0.7 1.3 2.1 3.4 | 0.2 0.4 0.7 | 0.5 0.8 1.4 | 0.8 1.2 2.3 | 1.0 1.6 2.8 | 0.2 0.3 0.6 0.9 | 0.4 0.6 1.1 1.8 | 0.6 0.9 1.8 2.8 | 0.8 1.2 2.4 3.7 | 0.2 0.2 0.5 0.7 | 0.3 0.5 1.0 1.4 | 0.5 0.8 1.4 2.3 | 0.7 1.0 1.9 3.1 | 0.2 0.4 0.6 0.8 | 0.4 0.7 1.5 1.7 | 0.6 1.1 1.8 2.4 | 0.8 1.4 2.4 3.4 | 0.4 0.8 1.2 1.8 | 0.8 1.5 2.4 3.7 | 1.2 2.3 4.0 5.2 | 1.6 3.1 4.9 6.1 | 0.2 0.3 0.5 0.6 0.8 | 0.3 0.6 0.9 1.3 1.6 | 0.4 0.9 1.4 2.0 2.4 | 0.6 1.1 1.8 2.6 3.1 |
| | | Residual vel m/s | 0.9 0.6 0.4 0.4 | | | | 0.7 0.5 0.4 | | | 0.9 0.6 0.5 0.3 | | | | 1.1 0.7 0.6 0.4 | | | | 0.8 0.7 0.4 0.3 | | | | 0.7 0.6 0.4 0.3 | | | | 1.0 0.8 0.5 0.4 0.4 | | | |
| **12** | 5 11 16 22 | Drop or rise in m | 0.4 0.7 1.2 2.0 | 0.8 1.5 2.3 4.0 | 1.4 2.3 3.7 6.1 | 1.7 3.0 4.6 | 0.6 1.0 1.7 | 1.2 1.9 3.4 | 1.7 2.9 5.5 | 2.3 3.7 6.4 | 0.5 0.7 1.4 2.3 | 1.0 1.4 2.8 4.6 | 1.4 2.2 4.0 6.4 | 2.0 2.9 5.5 | 0.4 0.6 1.1 1.8 | 0.8 1.2 2.2 3.4 | 1.2 1.7 3.4 5.5 | 1.6 2.3 4.3 6.4 | 0.5 0.9 1.5 2.0 | 1.0 1.0 3.1 4.0 | 1.5 1.1 4.6 6.1 | 1.9 1.5 6.1 | 0.4 0.8 1.2 1.8 | 0.8 1.5 2.4 3.7 | 1.2 2.3 4.0 5.2 | 1.6 3.1 4.9 6.1 | 0.4 0.7 1.1 1.5 1.8 | 0.7 1.3 2.2 3.1 3.7 | 1.1 1.9 3.4 4.6 5.8 | 1.4 2.5 4.3 5.8 |
| | | Residual vel m/s | 0.7 0.5 0.3 0.3 | | | | 0.6 0.4 0.3 | | | 0.7 0.5 0.4 0.2 | | | | 0.8 0.6 0.4 0.3 | | | | 0.6 0.5 0.3 0.3 | | | | 0.7 0.6 0.4 0.3 | | | | 0.8 0.6 0.4 0.3 0.3 | | | |
| **15** | 5 11 16 22 | Drop or rise in m | 0.9 1.5 2.4 4.0 | 1.5 3.1 4.6 7.0 | 2.6 4.3 6.4 | 3.4 5.8 | 1.1 1.8 3.4 | 2.3 3.7 6.1 | 3.4 5.5 | 4.6 6.7 | 1.0 1.4 2.8 4.3 | 1.9 2.9 5.2 8.2 | 1.5 4.8 7.9 | 3.7 5.5 9.8 | 0.8 1.2 2.3 3.4 | 1.6 2.3 4.3 6.4 | 2.4 3.7 6.4 | 3.1 4.9 7.6 | 1.0 1.7 3.1 4.0 | 1.9 1.7 5.8 7.6 | 2.9 2.5 | 3.2 3.4 | 0.8 1.5 2.4 3.7 | 1.6 2.9 4.9 6.1 | 2.4 4.6 7.0 | 3.1 5.5 8.9 | 0.7 1.3 2.2 3.1 3.7 | 1.4 2.2 4.3 6.1 6.7 | 2.1 4.0 6.1 | 2.8 5.2 8.2 |
| | | Residual vel m/s | 0.6 0.4 0.3 0.2 | | | | 0.5 0.4 0.3 | | | 0.6 0.4 0.3 0.2 | | | | 0.7 0.5 0.4 0.3 | | | | 0.6 0.4 0.3 0.2 | | | | 0.6 0.5 0.3 0.3 | | | | 0.7 0.5 0.4 0.3 0.2 | | | |
| **18** | 5 11 16 22 | Drop or rise in m | 1.6 2.6 4.0 6.1 | 2.5 5.2 7.0 | 4.3 6.7 | 5.8 9.2 | 2.0 3.1 5.8 | 4.0 6.1 9.8 | 5.8 8.5 | 7.6 | 1.7 2.5 4.6 7.0 | 3.4 4.9 7.9 | 2.9 7.0 | 5.8 8.5 | 1.3 2.0 3.7 6.1 | 2.7 4.0 6.7 | 4.0 5.8 | 5.2 7.6 | 1.7 2.9 5.2 6.4 | 3.2 5.8 9.5 | 4.9 8.5 | 6.1 | 1.3 2.6 4.3 5.8 | 2.8 4.9 8.2 | 4.3 7.0 | 5.2 8.5 | 1.2 2.2 3.7 5.5 5.8 | 2.4 4.3 7.3 9.5 | 3.7 6.1 | 4.6 8.2 |
| | | Residual vel m/s | 0.5 0.4 0.3 0.2 | | | | 0.5 0.3 0.2 | | | 0.5 0.4 0.3 0.2 | | | | 0.6 0.4 0.3 0.2 | | | | 0.5 0.4 0.2 0.2 | | | | 0.5 0.4 0.3 0.2 | | | | 0.6 0.5 0.3 0.2 0.2 | | | |
| **21** | 5 11 16 22 | Drop or rise in m | 2.3 4.0 6.1 9.2 | 4.0 7.6 10.7 | 6.4 10.1 | 8.5 | 3.1 5.2 8.2 | 6.1 9.2 | 8.5 | 11.0 | 2.7 4.0 6.7 10.7 | 5.2 7.0 | 6.7 10.7 | 8.5 | 2.1 3.4 5.8 8.9 | 4.3 5.8 10.4 | 6.1 8.5 | 7.9 | 2.8 4.6 7.6 10.1 | 5.2 7.9 | 7.0 | 8.9 | 2.1 4.0 6.4 8.5 | 4.3 6.7 | 6.1 10.7 | 7.9 | 1.9 3.5 5.8 7.9 9.2 | 4.0 6.1 | 5.5 9.8 | 6.7 |
| | | Residual vel m/s | 2.5 0.3 0.2 0.2 | | | | 0.4 0.3 0.2 | | | 0.5 0.3 0.2 0.2 | | | | 0.6 0.4 0.3 0.2 | | | | 0.5 0.3 0.2 0.2 | | | | 0.5 0.4 0.2 0.2 | | | | 0.5 0.4 0.3 0.2 0.2 | | | |
| **24** | 5 11 16 22 | Drop or rise in m | | | | | | | | | | | | | | | | | 4.0 6.1 13.1 7.0 11.9 10.4 | | | | 3.1 5.8 9.5 12.5 6.1 9.8 8.6 10.7 | | | | 3.0 5.2 8.5 11.6 5.5 8.9 7.9 9.8 | | | |
| | | Residual vel m/s | | | | | | | | | | | | | | | | | 0.4 0.3 0.2 0.1 | | | | 0.4 0.3 0.2 0.2 | | | | 0.5 0.4 0.2 0.2 0.2 | | | |

| Throw in Metres | Temp in Diff 0°C | L/S Size / Stat press Pa / dBA level | 660 | | | | | 710 | | | | 760 | | | | | 850 | | | | | 940 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | S3 | S4 | L5 | L6 | L7 | S4 | L5 | L6 | L7 | S4 | L5 | L6 | L7 | L8 | S4 | L5 | L6 | L7 | L8 | S4 | L5 | L6 | L7 | L8 |
| | | | 220 | 120 | 60 | 40 | 30 | 140 | 70 | 40 | 30 | 150 | 80 | 50 | 40 | 30 | 190 | 100 | 60 | 50 | 30 | 230 | 110 | 80 | 60 | 40 |
| | | | 47 | 42 | 37 | 33 | 31 | 43 | 38 | 34 | 32 | 45 | 39 | 36 | 34 | 32 | 47 | 41 | 38 | 36 | 33 | 49 | 43 | 39 | 36 | 35 |
| **6** | 5 | Drop | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | | | | | |
| | 11 | or | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.1 | 0.2 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | | | | | |
| | 16 | rise | 0.1 | 0.2 | 0.3 | 0.5 | 0.7 | 0.2 | 0.3 | 0.4 | 0.5 | 0.2 | 0.2 | 0.4 | 0.4 | 0.7 | 0.1 | 0.2 | 0.2 | 0.4 | 0.5 | | | | | |
| | 22 | in m | 0.2 | 0.3 | 0.5 | 0.6 | 0.8 | 0.2 | 0.4 | 0.6 | 0.7 | 0.2 | 0.3 | 0.5 | 0.6 | 0.9 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | | | | | |
| | | Residual vel m/s | 1.5 | 1.3 | 0.8 | 0.6 | 0.5 | 1.3 | 0.9 | 0.7 | 0.6 | 1.5 | 0.9 | 0.7 | 0.7 | 0.5 | 1.9 | 1.1 | 0.9 | 0.7 | 0.6 | | | | | |
| **9** | 5 | Drop | 0.1 | 0.2 | 0.4 | 0.6 | 0.8 | 0.2 | 0.3 | 0.6 | 0.6 | 0.2 | 0.3 | 0.4 | 0.5 | 0.7 | 0.2 | 0.2 | 0.4 | 0.4 | 0.6 | 0.1 | 0.2 | 0.3 | 0.3 | 0.5 |
| | 11 | or | 0.2 | 0.5 | 0.7 | 1.1 | 1.5 | 0.4 | 0.6 | 1.1 | 1.2 | 0.4 | 0.6 | 0.8 | 1.0 | 1.4 | 0.3 | 0.5 | 0.7 | 0.9 | 1.1 | 0.2 | 0.4 | 0.5 | 0.7 | 0.9 |
| | 16 | rise | 0.4 | 0.7 | 1.1 | 1.7 | 2.1 | 0.6 | 1.0 | 1.6 | 1.7 | 0.6 | 0.9 | 1.3 | 1.5 | 2.1 | 0.5 | 0.7 | 1.0 | 1.3 | 1.6 | 0.4 | 0.6 | 0.8 | 1.0 | 1.4 |
| | 22 | in m | 0.5 | 1.0 | 1.6 | 2.2 | 2.9 | 0.8 | 1.3 | 2.1 | 2.3 | 0.9 | 1.2 | 1.8 | 2.1 | 2.9 | 0.6 | 1.0 | 1.4 | 1.7 | 2.1 | 0.5 | 0.8 | 1.0 | 1.4 | 1.8 |
| | | Residual vel m/s | 1.1 | 0.9 | 0.6 | 0.4 | 0.4 | 0.9 | 0.6 | 0.5 | 0.4 | 1.1 | 0.6 | 0.5 | 0.5 | 0.4 | 1.3 | 0.8 | 0.6 | 0.5 | 0.5 | 1.5 | 0.9 | 0.7 | 0.7 | 0.5 |
| **12** | 5 | Drop | 0.3 | 0.6 | 0.9 | 1.3 | 1.8 | 0.5 | 0.8 | 1.3 | 1.4 | 0.4 | 0.7 | 1.1 | 1.2 | 1.7 | 0.3 | 0.6 | 0.9 | 1.0 | 1.4 | 0.3 | 0.5 | 0.7 | 0.8 | 1.1 |
| | 11 | or | 0.6 | 1.1 | 1.8 | 2.8 | 3.7 | 1.0 | 1.6 | 2.6 | 2.8 | 0.8 | 1.4 | 2.1 | 2.4 | 3.4 | 0.7 | 1.1 | 1.7 | 2.1 | 2.7 | 0.6 | 0.9 | 1.3 | 1.6 | 2.3 |
| | 16 | rise | 0.9 | 1.7 | 2.9 | 4.0 | 5.2 | 1.5 | 2.5 | 3.7 | 4.6 | 1.3 | 2.1 | 3.1 | 3.7 | 5.2 | 1.0 | 1.7 | 2.4 | 3.0 | 4.0 | 0.9 | 1.4 | 1.8 | 2.4 | 3.4 |
| | 2 | in m | 1.2 | 2.4 | 3.4 | 5.5 | 6.1 | 1.9 | 3.4 | 4.9 | 5.8 | 1.7 | 2.9 | 4.3 | 4.9 | 6.4 | 1.4 | 2.3 | 3.4 | 4.0 | 5.5 | 1.1 | 1.8 | 2.6 | 3.4 | 4.6 |
| | | Residual vel m/s | 0.8 | 0.7 | 0.5 | 0.3 | 0.3 | 0.8 | 0.5 | 0.4 | 0.3 | 0.8 | 0.5 | 0.4 | 0.4 | 0.3 | 1.0 | 0.6 | 0.5 | 0.4 | 1.2 | 0.7 | 0.6 | 0.5 | 0.4 | |
| **15** | 5 | Drop | 0.6 | 1.1 | 1.8 | 2.8 | 3.4 | 0.1 | 1.6 | 2.5 | 2.8 | 0.8 | 1.4 | 2.1 | 2.4 | 3.4 | 0.7 | 1.1 | 1.7 | 2.0 | 2.6 | 0.6 | 0.9 | 1.3 | 1.7 | 2.3 |
| | 11 | or | 1.2 | 2.1 | 3.7 | 5.5 | 6.4 | 1.8 | 3.1 | 5.2 | 5.8 | 1.6 | 2.9 | 4.3 | 4.6 | 6.4 | 1.3 | 2.3 | 3.4 | 4.0 | 5.2 | 1.0 | 1.8 | 2.5 | 3.1 | 4.6 |
| | 16 | rise | 1.8 | 3.4 | 5.5 | 7.6 | | 2.8 | 4.9 | 7.0 | 8.2 | 2.4 | 4.3 | 6.1 | 7.0 | | 2.0 | 3.4 | 4.6 | 5.8 | 7.3 | 1.7 | 2.8 | 3.7 | 4.9 | 6.4 |
| | 22 | in m | 2.4 | 4.3 | 6.4 | 9.5 | | 3.7 | 6.1 | | | 3.4 | 5.8 | 7.9 | | | 2.8 | 4.3 | 6.1 | 7.6 | | 2.1 | 3.4 | 4.9 | 6.1 | 8.2 |
| | | Residual vel m/s | 0.7 | 0.6 | 0.4 | 0.3 | 0.2 | 0.7 | 0.5 | 0.3 | 0.3 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.9 | 0.6 | 0.5 | 0.4 | 0.3 |
| **18** | 5 | Drop | 1.1 | 1.9 | 3.4 | 4.6 | 5.8 | 1.6 | 2.8 | 4.3 | 4.9 | 1.4 | 2.4 | 3.7 | 4.3 | 5.8 | 1.2 | 2.0 | 2.8 | 3.4 | 4.3 | 1.0 | 1.6 | 2.2 | 2.8 | 4.0 |
| | 11 | or | 2.1 | 3.7 | 6.1 | 8.5 | | 3.1 | 5.5 | 8.2 | 8.9 | 2.8 | 2.8 | 6.7 | 7.6 | | 2.3 | 4.0 | 5.5 | 6.4 | 8.2 | 1.7 | 3.1 | 4.6 | 5.5 | 7.3 |
| | 16 | rise | 3.1 | 5.8 | 9.5 | | | 4.9 | 8.2 | | | 4.6 | 7.3 | | | | 3.4 | 5.5 | 7.6 | 9.5 | | 2.8 | 4.9 | 6.1 | 7.6 | |
| | 22 | in m | 4.3 | 7.0 | | | | 7.3 | | | | 5.8 | 8.9 | | | | 4.6 | 7.0 | | | | 3.7 | 6.1 | 8.2 | | |
| | | Residual vel m/s | 0.7 | 0.5 | 0.3 | 0.3 | 0.2 | 0.6 | 0.4 | 0.3 | 0.2 | 1.6 | 0.4 | 0.3 | 0.3 | 0.2 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.8 | 0.5 | 0.4 | 0.4 | 0.3 |
| **21** | 5 | Drop | 1.7 | 2.9 | 5.2 | 7.0 | 8.2 | 2.2 | 4.6 | 6.4 | 7.0 | 2.3 | 4.0 | 5.8 | 6.1 | 8.5 | 1.8 | 3.1 | 4.3 | 5.5 | 6.4 | 1.5 | 2.6 | 3.4 | 4.6 | 6.1 |
| | 11 | or | 3.4 | 5.8 | 9.8 | | | 4.9 | 8.2 | | | 4.6 | 7.9 | 10.4 | | | 3.5 | 6.1 | 8.2 | 10.1 | | 2.9 | 5.2 | 6.7 | 8.2 | |
| | 16 | rise | 5.2 | 8.5 | | | | 7.0 | | | | 6.4 | 11.0 | | | | 5.8 | 8.5 | | | | 4.6 | 7.3 | 9.8 | | |
| | 22 | in m | 6.1 | 11.0 | | | | 11.0 | | | | 8.2 | | | | | 6.7 | 11.3 | | | | 5.8 | 8.9 | | | |
| | | Residual vel m/s | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.5 | 0.3 | 0.2 | 0.2 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.7 | 0.4 | 0.3 | 0.3 | 0.2 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 |
| **24** | 5 | Drop | 2.6 | 4.6 | 7.3 | 10.4 | 11.9 | 3.7 | 6.4 | 9.8 | 10.1 | 3.4 | 5.8 | 7.9 | 9.2 | 12.2 | 2.8 | 4.6 | 6.1 | 7.6 | 9.8 | 2.2 | 3.7 | 5.5 | 6.1 | 8.5 |
| | 11 | or | 5.2 | 7.9 | | | | 6.7 | 11.9 | | | 6.1 | 11.0 | | | | 5.2 | 8.6 | 12.2 | | | 4.3 | 7.0 | 10.1 | 11.9 | |
| | 16 | rise | 7.0 | 12.5 | | | | 10.4 | | | | 9.5 | | | | | 7.6 | 12.2 | | | | 6.4 | 10.7 | | | |
| | 22 | in m | 8.9 | | | | | | | | | 11.9 | | | | | 9.5 | | | | | 8.5 | 12.8 | | | |
| | | Residual vel m/s | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.5 | 0.3 | 0.2 | 0.2 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.6 | 0.4 | 0.3 | 0.3 | 0.2 | 0.7 | 0.4 | 0.3 | 0.3 | 0.2 |
| **27** | 5 | Drop | | | | | | | | | | | | | | | | | | | | 3.0 | 5.2 | 7.3 | 8.9 | 11.9 |
| | 11 | or | | | | | | | | | | | | | | | | | | | | 5.8 | 8.9 | 14.0 | | |
| | 16 | rise | | | | | | | | | | | | | | | | | | | | 9.2 | | | | |
| | 22 | in m | | | | | | | | | | | | | | | | | | | | 11.3 | | | | |
| | | Residual vel m/s | | | | | | | | | | | | | | | | | | | | 0.6 | 0.4 | 0.3 | 0.3 | 0.2 |
| **30** | 5 | Drop | | | | | | | | | | | | | | | | | | | | 4.3 | 6.7 | 9.5 | 11.6 | |
| | 11 | or | | | | | | | | | | | | | | | | | | | | 7.6 | 13.7 | | | |
| | 16 | rise | | | | | | | | | | | | | | | | | | | | 12.2 | | | | |
| | 22 | in | | | | | | | | | | | | | | | | | | | | 15.0 | | | | |
| | | Residual vel m/s | | | | | | | | | | | | | | | | | | | | 0.6 | 0.4 | 0.3 | 0.3 | 0.2 |
| **36** | 5 | Drop | | | | | | | | | | | | | | | | | | | | 6.7 | 11.3 | 16.2 | | |
| | 11 | or | | | | | | | | | | | | | | | | | | | | 12.2 | | | | |
| | 16 | rise | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | in | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Residual vel m/s | | | | | | | | | | | | | | | | | | | | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 |

# tek limited

**Diffusers**

| Throw in Metres | Temp in Diff 0°C | L/S Size / Stat press Pa / dBA level | 1040 L5 | 1040 L6 | 1040 L7 | 1040 L8 | 1130 L5 | 1130 L6 | 1130 L7 | 1130 L8 | 1230 L5 | 1230 L6 | 1230 L7 | 1230 L8 | 1320 L5 | 1320 L6 | 1320 L7 | 1320 L8 | 1420 L5 | 1420 L6 | 1420 L7 | 1420 L8 | 1650 L6 | 1650 L7 | 1650 L8 | 1890 L7 | 1890 L8 | 2125 L7 | 2125 L8 | 2360 L8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Stat press Pa | 140 | 90 | 70 | 50 | 170 | 110 | 80 | 60 | 190 | 130 | 90 | 70 | 220 | 140 | 100 | 80 | 250 | 160 | 120 | 80 | 220 | 160 | 110 | 210 | 150 | 250 | 180 | 220 |
| | | dBA level | 47 | 42 | 40 | 37 | 46 | 42 | 40 | 37 | 49 | 46 | 43 | 40 | 46 | 42 | 40 | 37 | 52 | 48 | 46 | 43 | 52 | 49 | 46 | 52 | 49 | 53 | 51 | 54 |
| 6 | 5 | Drop or rise in m | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Residual vel m/s | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 5 | Drop | 0.2 | 0.2 | 0.3 | 0.4 | 0.1 | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |
| | 11 | or | 0.3 | 0.4 | 0.6 | 0.8 | 0.2 | 0.4 | 0.5 | 0.6 | 0.2 | 0.3 | 0.4 | 0.5 | 0.2 | 0.3 | 0.3 | 0.5 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.1 | 0.2 | 0.2 |
| | 16 | rise | 0.5 | 0.7 | 0.9 | 1.1 | 0.4 | 0.6 | 0.7 | 0.9 | 0.3 | 0.5 | 0.6 | 0.7 | 0.3 | 0.4 | 0.5 | 0.7 | 0.2 | 0.3 | 0.5 | 0.6 | 0.2 | 0.3 | 0.3 | 0.6 | 0.8 | 0.2 | 0.3 | 0.2 |
| | 22 | in m | 0.6 | 0.9 | 1.1 | 1.5 | 0.5 | 0.7 | 0.9 | 1.2 | 0.4 | 0.6 | 0.8 | 1.1 | 0.4 | 0.6 | 0.7 | 0.9 | 0.3 | 0.5 | 0.6 | 0.8 | 0.4 | 0.4 | 0.6 | 0.9 | 1.0 | 0.3 | 0.4 | 0.3 |
| | | Residual vel m/s | 1.1 | 0.9 | 0.8 | 0.6 | 1.1 | 0.9 | 0.8 | 0.7 | 1.4 | 1.0 | 0.9 | 0.7 | 1.5 | 1.2 | 1.0 | 0.9 | 1.8 | 1.2 | 1.1 | 0.9 | 1.6 | 1.4 | 1.1 | 1.2 | 1.0 | 1.9 | 1.6 | 1.8 |
| 12 | 5 | Drop | 0.4 | 0.5 | 0.7 | 1.0 | 0.3 | 0.5 | 0.6 | 0.8 | 0.3 | 0.4 | 0.5 | 0.6 | 0.2 | 0.3 | 0.4 | 0.6 | 0.2 | 0.3 | 0.4 | 0.5 | 0.2 | 0.2 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 |
| | 11 | or | 0.7 | 1.1 | 1.4 | 1.9 | 0.6 | 0.9 | 1.1 | 1.5 | 0.5 | 0.8 | 1.0 | 1.3 | 0.4 | 0.6 | 0.8 | 1.1 | 0.4 | 0.6 | 0.7 | 1.0 | 0.4 | 0.5 | 0.7 | 0.5 | 0.5 | 0.3 | 0.4 | 0.3 |
| | 16 | rise | 1.1 | 1.7 | 2.2 | 2.8 | 0.9 | 1.3 | 1.7 | 2.1 | 0.8 | 1.1 | 1.5 | 2.0 | 0.6 | 1.0 | 1.2 | 1.7 | 0.6 | 0.8 | 1.1 | 1.5 | 0.6 | 0.8 | 1.1 | 0.6 | 0.8 | 0.5 | 0.7 | 0.5 |
| | 22 | in m | 1.3 | 2.1 | 2.8 | 3.7 | 1.2 | 1.8 | 2.2 | 2.7 | 1.1 | 1.4 | 2.0 | 2.6 | 0.9 | 1.3 | 1.6 | 2.1 | 0.8 | 1.1 | 1.4 | 2.0 | 0.9 | 1.0 | 1.5 | 0.7 | 1.1 | 0.6 | 0.9 | 0.8 |
| | | Residual vel m/s | 0.9 | 0.7 | 0.6 | 0.5 | 0.9 | 0.7 | 0.6 | 0.5 | 1.1 | 0.9 | 0.7 | 0.6 | 1.2 | 0.9 | 0.8 | 0.7 | 1.3 | 1.0 | 0.9 | 0.7 | 1.2 | 1.0 | 0.9 | 1.1 | 1.0 | 1.5 | 1.2 | 1.4 |
| 15 | 5 | Drop | 0.7 | 1.1 | 1.4 | 1.9 | 0.6 | 0.9 | 1.1 | 1.5 | 0.5 | 0.8 | 1.0 | 1.2 | 0.5 | 0.6 | 0.8 | 1.1 | 0.4 | 0.6 | 0.7 | 1.0 | 0.4 | 0.5 | 0.7 | 0.4 | 0.5 | 0.3 | 0.4 | 0.3 |
| | 11 | or | 1.4 | 2.2 | 2.8 | 3.7 | 0.8 | 1.8 | 2.2 | 3.1 | 1.0 | 1.5 | 2.0 | 2.5 | 0.9 | 1.2 | 1.6 | 2.1 | 0.7 | 1.1 | 1.4 | 2.0 | 0.8 | 1.0 | 1.4 | 0.8 | 1.0 | 0.6 | 0.9 | 0.7 |
| | 16 | rise | 2.3 | 3.1 | 4.0 | 5.8 | 1.8 | 2.7 | 3.4 | 4.6 | 1.6 | 2.2 | 3.0 | 3.7 | 1.3 | 1.9 | 2.4 | 3.4 | 1.1 | 1.6 | 2.1 | 3.1 | 1.2 | 1.5 | 2.1 | 1.2 | 1.7 | 1.0 | 1.4 | 1.1 |
| | 22 | in m | 2.9 | 4.3 | 5.2 | 6.7 | 2.4 | 3.7 | 4.3 | 6.1 | 2.1 | 2.9 | 3.7 | 5.2 | 1.7 | 2.6 | 3.4 | 4.3 | 1.5 | 2.1 | 3.1 | 4.0 | 1.7 | 2.0 | 2.9 | 1.5 | 2.2 | 1.3 | 1.8 | 1.4 |
| | | Residual vel m/s | 0.8 | 0.6 | 0.5 | 0.4 | 0.8 | 0.6 | 0.5 | 0.5 | 0.9 | 0.7 | 0.6 | 0.5 | 1.0 | 0.8 | 0.7 | 0.6 | 1.1 | 0.8 | 0.7 | 0.6 | 1.1 | 0.9 | 0.7 | 0.9 | 0.9 | 1.3 | 1.1 | 1.2 |
| 18 | 5 | Drop | 1.3 | 2.1 | 2.4 | 3.4 | 1.0 | 1.5 | 2.3 | 2.6 | 0.9 | 1.3 | 1.7 | 2.1 | 0.8 | 1.1 | 1.4 | 1.8 | 0.7 | 1.0 | 1.3 | 1.8 | 0.7 | 0.9 | 1.2 | 0.7 | 0.9 | 0.6 | 0.8 | 0.6 |
| | 11 | or | 2.5 | 3.7 | 4.6 | 6.1 | 2.1 | 3.1 | 4.0 | 5.5 | 1.8 | 2.6 | 3.4 | 4.6 | 1.5 | 2.3 | 2.8 | 4.0 | 1.3 | 1.8 | 2.6 | 3.4 | 1.4 | 1.7 | 2.4 | 1.4 | 1.7 | 1.1 | 1.5 | 1.2 |
| | 16 | rise | 3.7 | 5.5 | 6.4 | 9.2 | 3.4 | 4.6 | 5.5 | 7.3 | 2.9 | 4.0 | 4.9 | 6.1 | 2.3 | 3.4 | 4.3 | 5.8 | 2.0 | 2.8 | 3.7 | 5.2 | 2.1 | 2.6 | 3.7 | 2.0 | 2.8 | 1.7 | 2.4 | 1.8 |
| | 22 | in m | 4.9 | 7.0 | 8.2 | | 4.0 | 6.1 | 7.0 | 9.5 | 3.4 | 5.2 | 6.1 | 8.2 | 3.1 | 4.6 | 5.8 | 7.0 | 2.7 | 3.7 | 5.2 | 6.1 | 2.9 | 3.4 | 4.6 | 2.7 | 3.4 | 2.1 | 3.1 | 2.4 |
| | | Residual vel m/s | 0.6 | 0.5 | 0.4 | 0.3 | 0.7 | 0.5 | 0.5 | 0.4 | 0.8 | 0.6 | 0.5 | 0.4 | 0.9 | 0.7 | 0.6 | 0.5 | 0.9 | 0.7 | 0.6 | 0.5 | 0.9 | 0.8 | 0.7 | 1.1 | 1.0 | 1.1 | 0.9 | 1.0 |
| 21 | 5 | Drop | 2.1 | 3.1 | 3.7 | 5.2 | 1.7 | 2.4 | 3.1 | 4.3 | 1.8 | 2.1 | 2.7 | 3.4 | 1.2 | 1.8 | 2.2 | 3.1 | 1.1 | 1.5 | 2.0 | 2.8 | 1.1 | 1.4 | 2.0 | 1.1 | 1.5 | 0.9 | 1.2 | 0.9 |
| | 11 | or | 4.0 | 5.5 | 6.7 | 9.8 | 3.4 | 4.9 | 5.8 | 7.9 | 2.8 | 4.3 | 5.2 | 6.7 | 2.4 | 3.7 | 4.6 | 6.1 | 2.1 | 3.1 | 4.0 | 5.2 | 2.4 | 2.8 | 4.0 | 2.1 | 2.9 | 1.8 | 2.4 | 2.0 |
| | 16 | rise | 5.8 | 8.2 | 10.1 | | 5.2 | 7.0 | 8.5 | 11.0 | 4.6 | 6.1 | 7.6 | 9.5 | 4.0 | 5.5 | 6.4 | 8.5 | 3.4 | 4.6 | 6.1 | 7.6 | 3.4 | 4.0 | 5.8 | 3.4 | 4.6 | 2.8 | 3.7 | 3.0 |
| | 22 | in m | 7.0 | 11.0 | | | 6.1 | 9.5 | 11.0 | | 5.5 | 6.7 | 9.8 | | 4.9 | 6.7 | 8.2 | 10.7 | 4.3 | 5.8 | 7.6 | 9.5 | 4.6 | 5.2 | 7.0 | 4.3 | 5.8 | 3.4 | 4.9 | 4.0 |
| | | Residual vel m/s | 0.6 | 0.4 | 0.4 | 0.3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.5 | 0.5 | 0.4 | 0.8 | 0.6 | 0.5 | 0.4 | 0.8 | 0.6 | 0.5 | 0.4 | 0.8 | 0.7 | 0.6 | 0.7 | 0.7 | 0.9 | 0.8 | 0.9 |
| 24 | 5 | Drop | 3.1 | 4.4 | 5.5 | 7.0 | 2.6 | 3.7 | 4.6 | 6.1 | 2.2 | 3.1 | 4.0 | 5.2 | 1.8 | 2.8 | 3.4 | 4.6 | 1.6 | 2.2 | 3.1 | 4.0 | 1.7 | 2.1 | 2.9 | 1.6 | 2.3 | 1.4 | 1.8 | 1.4 |
| | 11 | or | 5.8 | 8.2 | 10.4 | | 5.2 | 7.0 | 8.5 | 11.3 | 4.3 | 6.1 | 7.3 | 9.8 | 3.8 | 5.5 | 6.4 | 8.9 | 3.1 | 4.6 | 5.8 | 7.3 | 3.4 | 4.3 | 5.8 | 3.4 | 4.6 | 2.8 | 3.7 | 3.0 |
| | 16 | rise | 8.5 | 11.9 | | | 7.3 | 10.1 | 12.5 | | 6.4 | 8.5 | 10.7 | | 5.5 | 7.6 | 9.5 | 12.2 | 5.2 | 6.4 | 8.2 | 10.7 | 5.2 | 6.1 | 8.2 | 4.9 | 6.1 | 4.1 | 5.5 | 4.6 |
| | 22 | in m | 10.4 | | | | 8.9 | | | | 7.6 | 11.0 | | | 7.0 | 9.8 | 12.2 | | 6.1 | 8.2 | 11.0 | | 6.4 | 7.3 | 10.1 | 6.1 | 8.2 | 5.2 | 6.4 | 5.8 |
| | | Residual vel m/s | 0.5 | 0.4 | 0.3 | 0.3 | 0.6 | 0.4 | 0.4 | 0.3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.5 | 0.5 | 0.4 | 0.8 | 0.6 | 0.5 | 0.4 | 0.7 | 0.6 | 0.5 | 0.7 | 0.6 | 0.9 | 0.7 | 0.8 |
| 27 | 5 | Drop | 4.4 | 6.1 | 7.3 | 10.1 | 3.5 | 5.2 | 6.1 | 8.2 | 3.4 | 4.4 | 5.8 | 7.0 | 2.8 | 4.0 | 4.9 | 6.1 | 2.3 | 3.1 | 4.6 | 5.5 | 2.4 | 2.9 | 4.0 | 2.3 | 3.4 | 1.8 | 2.6 | 2.0 |
| | 11 | or | 8.2 | 11.3 | 14.0 | | 6.7 | 9.5 | 11.3 | | 6.1 | 8.2 | 10.4 | 14.0 | 5.2 | 7.3 | 9.2 | 11.9 | 4.6 | 6.1 | 8.2 | 10.4 | 5.2 | 5.8 | 7.9 | 4.7 | 6.1 | 3.8 | 52 | 4.3 |
| | 16 | rise | 12.2 | | | | 10.1 | | | | 9.2 | 12.2 | | | 7.9 | 10.7 | 13.1 | | 6.7 | 9.2 | 11.3 | 15.3 | 7.0 | 8.2 | 11.0 | 6.4 | 8.9 | 5.8 | 7.3 | 6.1 |
| | 22 | in m | | | | | 12.2 | | | | 10.7 | | | | 9.5 | 12.2 | | | 8.5 | 11.3 | | | 9.2 | 10.4 | | 8.2 | 11.0 | 7.0 | 9.5 | 7.9 |
| | | Residual vel m/s | 0.5 | 0.4 | 0.3 | 0.2 | 0.5 | 0.4 | 0.3 | 0.3 | 0.6 | 0.5 | 0.4 | 0.3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.5 | 0.5 | 0.4 | 0.7 | 0.6 | 0.5 | 0.6 | 0.6 | 0.8 | 0.7 | 0.8 |
| 30 | 5 | Drop | 5.8 | 8.2 | 9.8 | 13.4 | 5.2 | 6.4 | 8.2 | 10.7 | 4.4 | 6.1 | 7.3 | 9.5 | 3.8 | 5.3 | 6.1 | 8.2 | 3.2 | 4.0 | 5.8 | 7.3 | 3.4 | 4.1 | 5.5 | 3.4 | 4.3 | 2.7 | 3.4 | 2.8 |
| | 11 | or | 11.3 | 15.3 | | | 9.5 | 13.4 | | | 8.2 | 11.0 | 14.0 | | 7.3 | 9.8 | 12.2 | | 6.1 | 8.2 | 11.0 | 14.3 | 6.4 | 7.6 | 10.4 | 6.1 | 8.2 | 5.5 | 6.4 | 5.8 |
| | 16 | rise | | | | | 14.0 | | | | 11.9 | | | | 10.7 | 14.6 | | | 9.5 | 11.9 | | | 9.5 | 10.7 | 15.6 | 8.9 | 11.9 | 7.3 | 9.8 | 8.2 |
| | 22 | in m | | | | | | | | | 14.3 | | | | 12.8 | | | | 11.6 | | | | 12.2 | 14.3 | | 11.3 | 15.6 | 9.5 | 12.2 | 10.4 |
| | | Residual vel m/s | 0.4 | 0.3 | 0.3 | 0.2 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.6 | 0.5 | 0.4 | 0.3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.5 | 0.4 | 0.6 | 0.5 | 0.7 | 0.6 | 0.7 |
| 36 | 5 | Drop | 9.5 | 13.4 | 16.2 | | 8.2 | 10.7 | 14.3 | | 7.0 | 9.5 | 11.9 | 16.2 | 6.6 | 8.2 | 10.4 | 13.7 | 5.6 | 7.0 | 9.2 | 11.9 | 6.0 | 6.4 | 8.5 | 5.6 | 6.7 | 4.6 | 6.1 | 4.9 |
| | 11 | or | | | | | 15.9 | | | | 13.4 | | | | 11.9 | 16.8 | | | 10.1 | 14.3 | 18.6 | | 11.7 | 12.8 | 18.3 | 10.1 | 14.0 | 8.5 | 11.0 | 9.5 |
| | 16 | rise | | | | | | | | | | | | | 18.3 | | | | 15.9 | 18.3 | | | 15.9 | 18.3 | | 14.6 | | 12.2 | 16.8 | 13.4 |
| | 22 | in m | | | | | | | | | | | | | | | | | 16.2 | | | | | | | | | 16.2 | | 18.3 |
| | | Residual vel m/s | 0.4 | 0.3 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.2 | 0.5 | 0.4 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 |

# tek limited

## Type HVCA Selection Data

| Rise or drop (metres) | Throw (metres) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 31 | 37 |
| 0.14 | 3 | 2 | 1 | | | | | | | | |
| 0.3 | 6 | 3 | 2 | 1 | 1 | 1 | | | | | |
| 0.5 | 11 | 6 | 4 | 3 | 2 | 2 | 2 | | | | |
| 1.1 | | 11 | 8 | 6 | 5 | 4 | 3 | 3 | | | |
| 1.6 | | 16 | 10 | 9 | 7 | 6 | 5 | 4 | 4 | | |
| 2.5 | | 23 | 16 | 12 | 10 | 9 | 8 | 7 | 5 | 5 | |
| 3 | | 27 | 18 | 14 | 11 | 10 | 8 | 7 | 6 | 6 | |
| 4.5 | | | 27 | 21 | 17 | 14 | 12 | 11 | 9 | 9 | 7 |
| 5.5 | | | | 26 | 21 | 17 | 15 | 14 | 12 | 12 | 10 |
| 7.5 | | | | | 26 | 22 | 19 | 16 | 15 | 13 | 11 |
| 9 | | | | | | 26 | 22 | 20 | 19 | 16 | 13 |
| 10.5 | | | | | | | 26 | 23 | 20 | 18 | 15 |
| 12 | | | | | | | | 26 | 23 | 21 | 17 |
| 13.5 | | | | | | | | | 26 | 24 | 20 |
| 15 | | | | | | | | | | 26 | 22 |
| 16.5 | | | | | | | | | | | 24 |
| 18 | | | | | | | | | | | 26 |
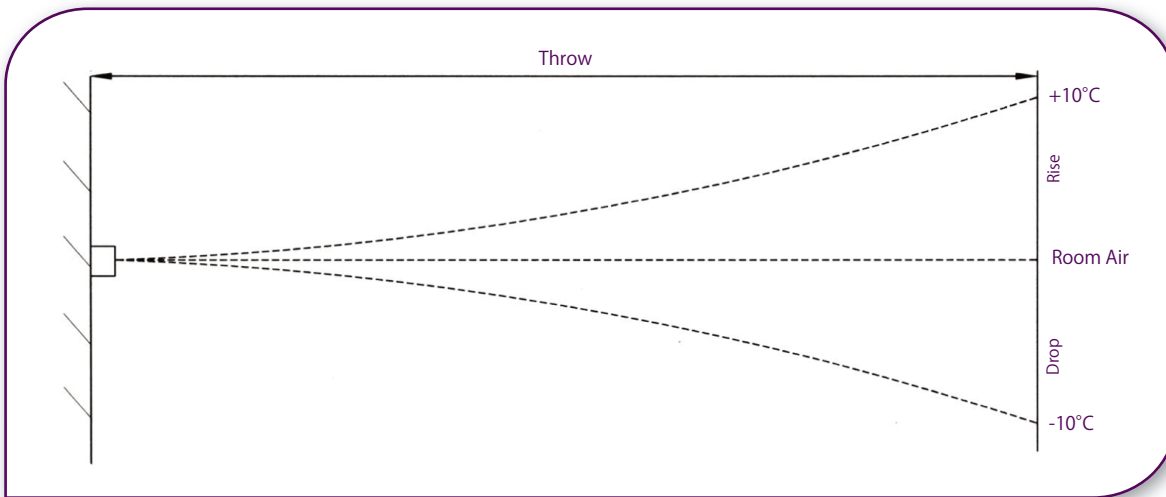


Supply air temperature will affect the throw and air jet will need correction to achieve table throw figures.

**Example:**
From selection table, required throw 15m and air volume 610 l/s, using S4 diffuser @ 11°C gives 2.2m drop/rise, air will need directing up (cooling) 9° or down (heating) 9° (figs by interpolation).

**Decrease in Throw (%) Example:**
A 5° change of blade angle causes a 10% decrease in throw.

### Vertical Vane Angle Setting (°)



Percentage

Diffusers