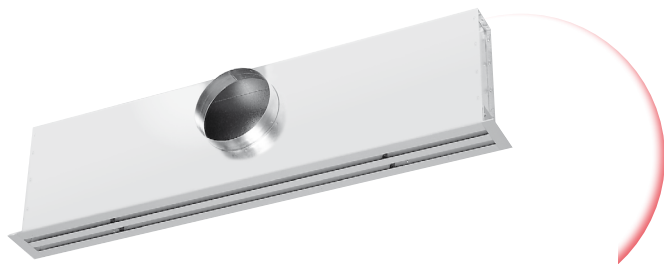


# SROD

Line diffuser

Return

Surface-mounted



## Use

The SROD line diffuser is suitable for air extraction and has the same appearance as the supply diffuser STAD. The diffuser can be fitted in the ceiling or the wall, and is fitted standard with an insulated or uninsulated plenum box. As standard, the plenum box is equipped with 8 mm hanging holes in the edge of the plenum. Pattern blades are not supplied. The diffusers can be connected together to form long lengths by using supplied keys. The spacers are on the underside of the profile, guaranteeing a straight line.

## Version

### Line diffuser

|                 |  |
|-----------------|--|
| frame:          | extruded aluminium                                 |
| post-treatment: | epoxy  |
| colour:         | white RAL 9010, optional RAL colour of your choice |
| pattern blades: | extruded aluminium                                 |
| post-treatment: | black  |

### Plenum box

|                      |                            |
|----------------------|----------------------------|
| material:            | sendzimir galvanised steel |
| internal insulation: | 1/2" duct liner            |
| post-treatment:      | none                       |

### Optional

|             |  |
|-------------|--|
| plenum box: | several connections, oval connection and different heights |
| diffuser:   | blanking plate   |

## SA-Select

[Check SA-select](#) to create extended order codes and selection details online. **NB!** At this moment, SA-Select is only available in Dutch. But it is possible to create extended order codes and selection details online.

## Available types

### Diffuser + plenum box

**S R O D - - -**

- S** line diffuser
- R** return
- O** no pattern blades
- D** surface-mounted
- **End caps**
  - A** no end caps
  - B** one end cap
  - C** two end caps
  - D** two flat end caps, (T-bar mounting)
- **Plenum box**
  - O** none
  - R** assembled, internally insulated plenum box
  - U** assembled, uninsulated plenum box
- **Mounting brackets (supplied separately)**
  - A** diffuser bracket A
  - B** plenum mounting brackets B
  - C** plenum "click-in" bracket C (mount plenum first)
  - D** diffuser/ceiling bracket D
  - O** none

### Plenum box

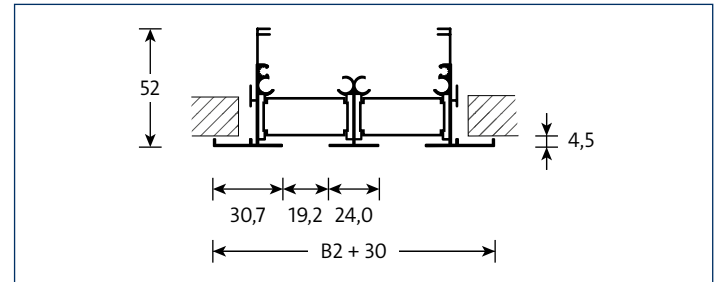
**S O O O - -**

- S** line diffuser
- O** plenum box only
- O** not applicable
- O** not applicable
- **Fitted plenum box**
  - R** internally insulated plenum box
  - U** uninsulated plenum box
- **Mounting bracket preparation**
  - O** none; straight plenum box
  - C** prepared for mounting bracket C; "click-in" plenum box

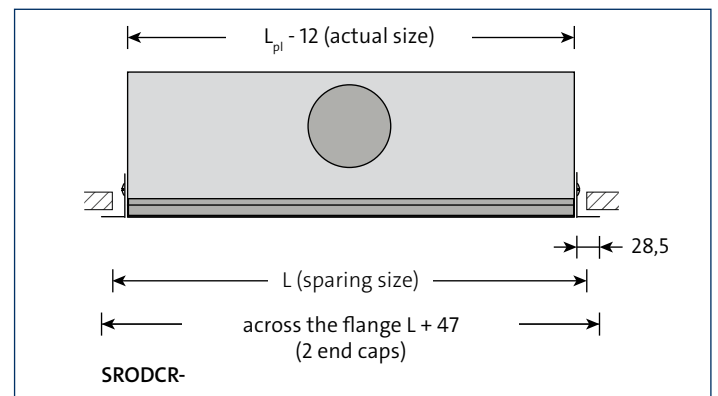
## Note

- The dimensions are in mm.
- If actual or over frame dimensions are required, please state this clearly because otherwise nominal dimensions will be used.
- One-piece diffuser elements up to approx. 2500 mm.
- For large lengths, Solid Air determines the section lengths if they have not been stated specifically. The standard sections are nominal 1800 mm, with an adapter at the start and end of the diffuser to achieve the total required length.
- Standard plenum box lengths  $L_{pl}$  are: 600, 750, 900, 1200, 1500 and 1800 mm.
- Flat-sided plenum boxes are available on request.
- For diffuser brackets C and D, the maximum thickness of the ceiling panel is 35 mm.

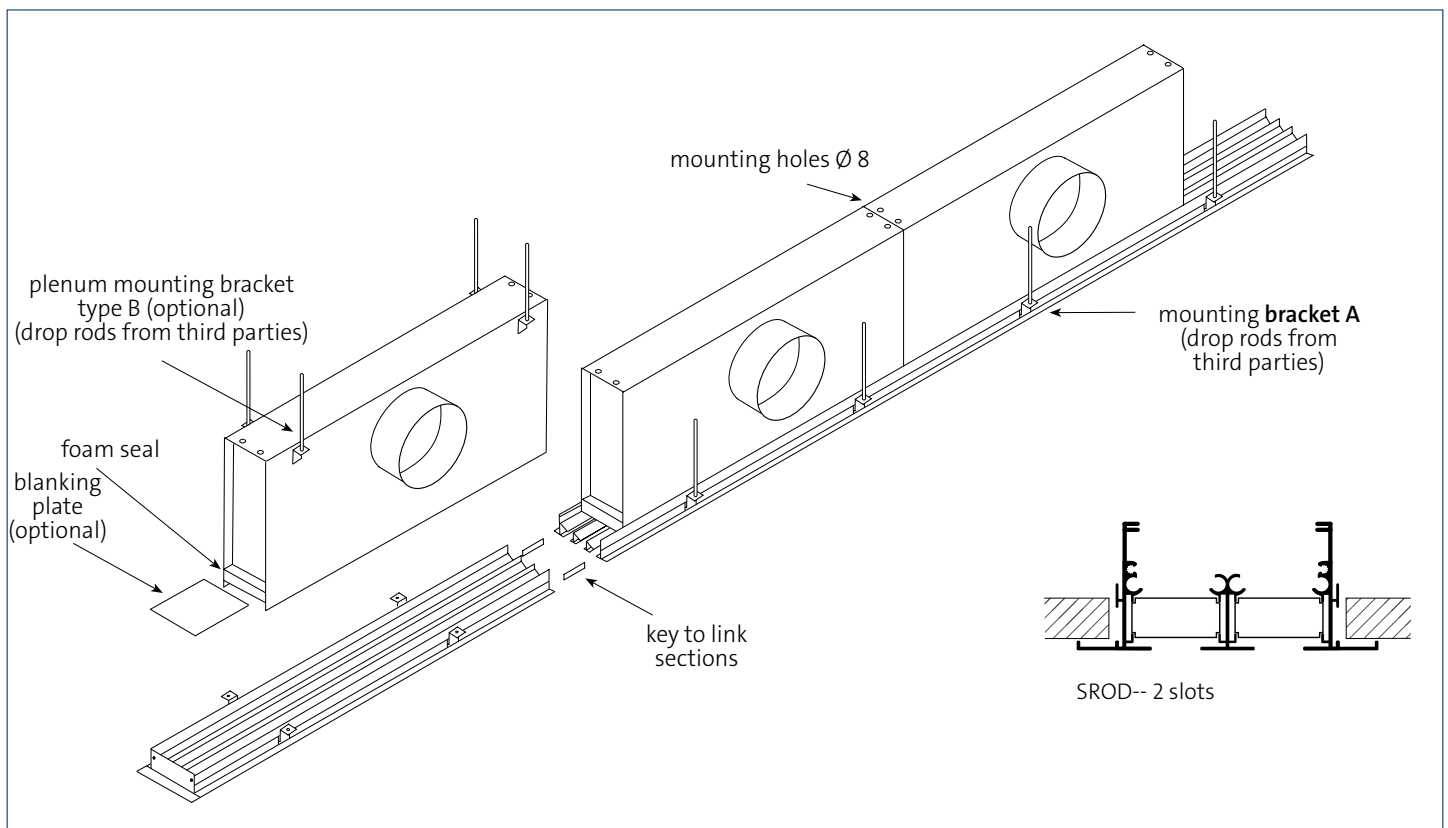
## Cross-section and lengthways view



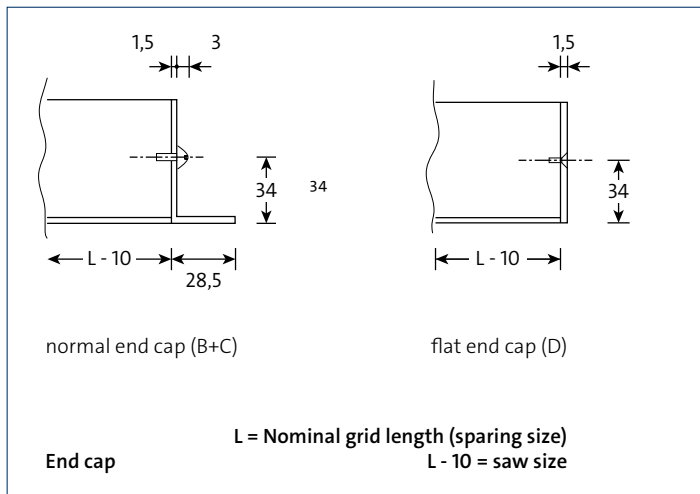
For the explanation of the dimensions, see the table "Available dimensions".



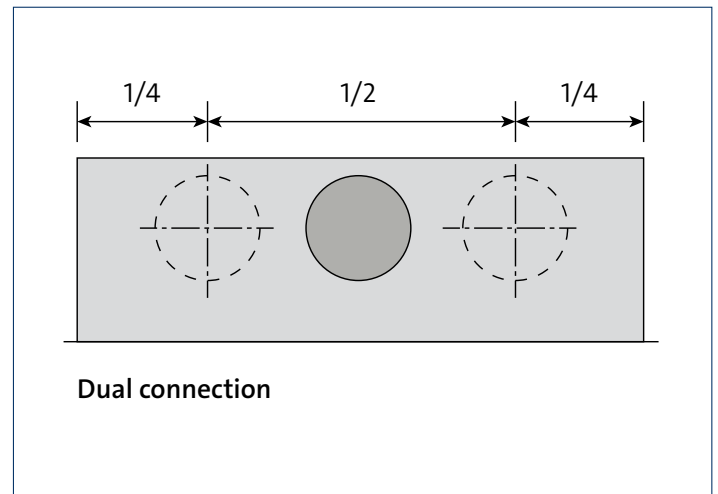
## Fitting a continuous line diffuser with key and plenum box



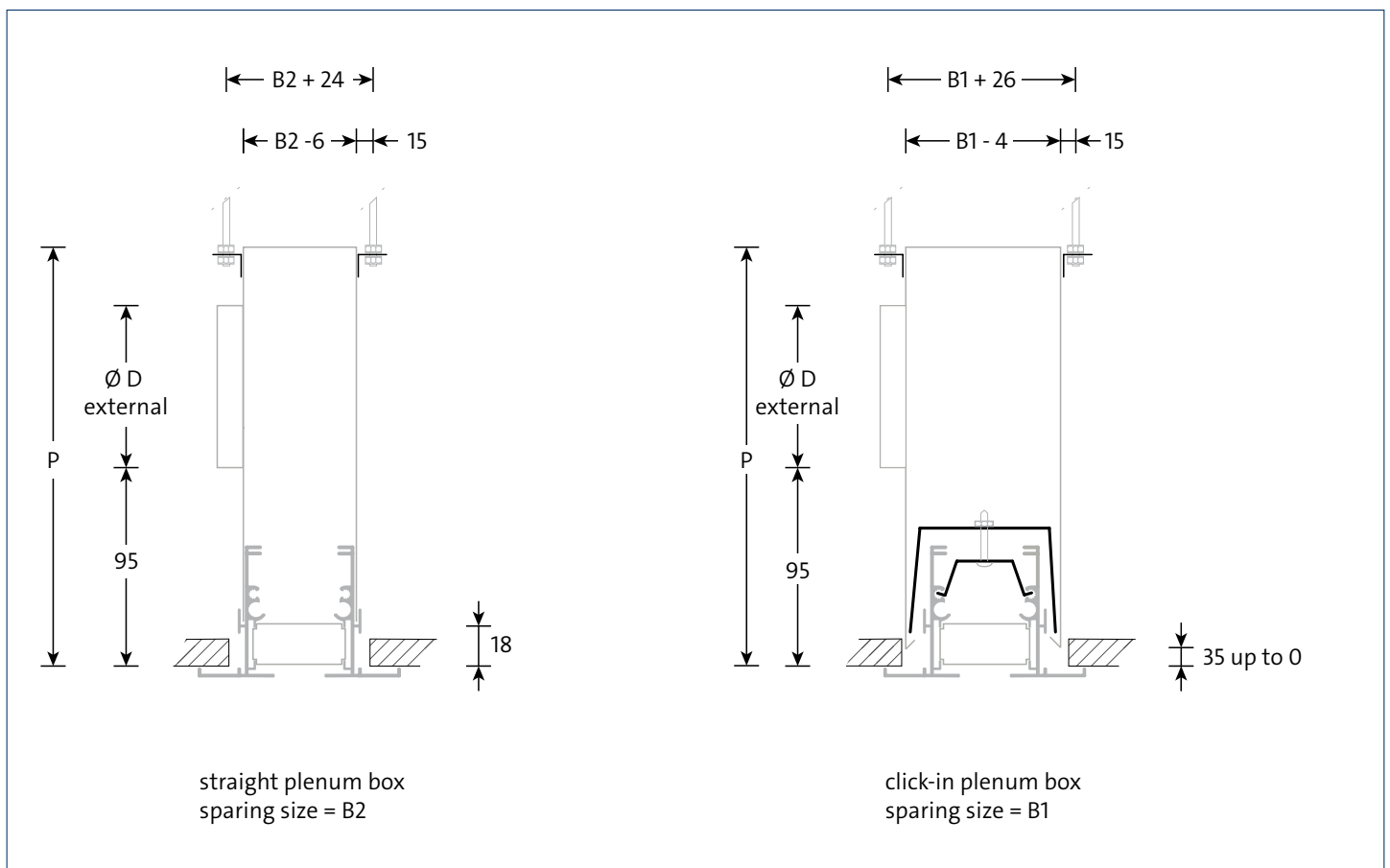
## End caps



## Connections

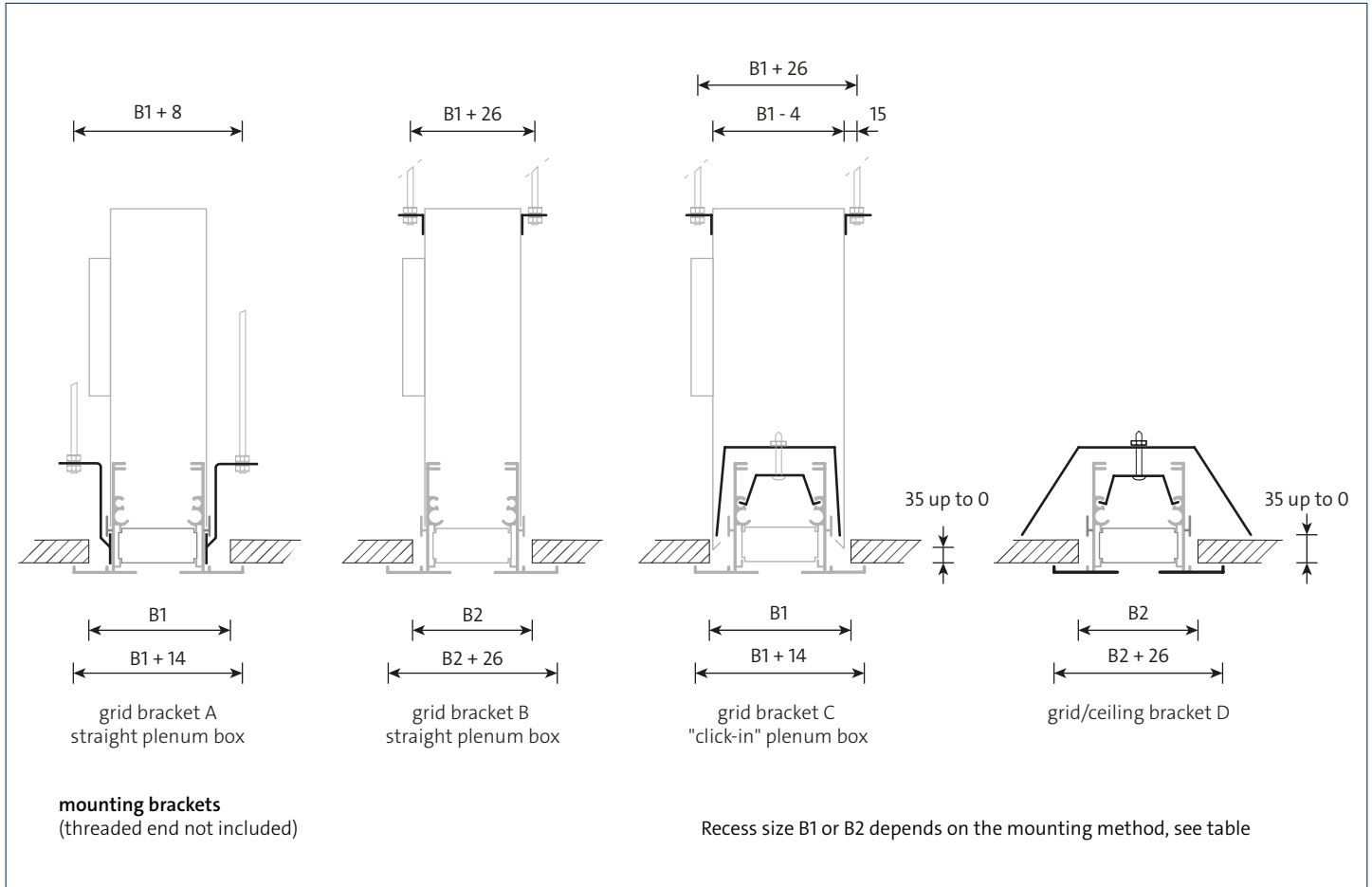


## Plenum boxes



## Note

- The dimensions are in mm.



### Available dimensions, sizes and weights

| number of slots | B1 | B2 | P | D | A | diffuser | plenum |
|-----------------|----|----|---|---|---|----------|--------|
|                 |    |    |   |   |   | kg       | kg     |

| number of slots | B1 | B2 | P | D | A | diffuser | plenum |
|-----------------|----|----|---|---|---|----------|--------|
|                 |    |    |   |   |   | kg       | kg     |

| L = 600 |     |     |     |     |     |     |     |
|---------|-----|-----|-----|-----|-----|-----|-----|
| 1       | 65  | 52  | 245 | 123 | 46  | 0.8 | 2.1 |
| 2       | 108 | 94  | 280 | 158 | 88  | 1.2 | 2.6 |
| 3       | 151 | 137 | 280 | 158 | 131 | 1.6 | 2.7 |
| 4       | 194 | 180 | 320 | 198 | 174 | 2.0 | 3.2 |

| L = 1200 |     |     |     |     |     |     |     |
|----------|-----|-----|-----|-----|-----|-----|-----|
| 1        | 65  | 52  | 280 | 158 | 46  | 1.6 | 4.8 |
| 2        | 108 | 94  | 320 | 198 | 88  | 2.4 | 5.8 |
| 3        | 151 | 137 | 320 | 198 | 131 | 3.2 | 6.1 |
| 4        | 194 | 180 | 370 | 248 | 174 | 4.0 | 7.2 |

| L = 750 |     |     |     |     |     |     |     |
|---------|-----|-----|-----|-----|-----|-----|-----|
| 1       | 65  | 52  | 245 | 123 | 46  | 1.0 | 2.7 |
| 2       | 108 | 94  | 280 | 158 | 88  | 1.5 | 3.2 |
| 3       | 151 | 137 | 280 | 158 | 131 | 2.0 | 3.4 |
| 4       | 194 | 180 | 320 | 198 | 174 | 2.5 | 4.0 |

| L = 1500 |     |     |     |     |     |     |     |
|----------|-----|-----|-----|-----|-----|-----|-----|
| 1        | 65  | 52  | 280 | 158 | 46  | 2.0 | 6.0 |
| 2        | 108 | 94  | 320 | 198 | 88  | 3.0 | 7.2 |
| 3        | 151 | 137 | 370 | 248 | 131 | 4.0 | 8.6 |
| 4        | 194 | 180 | 370 | 248 | 174 | 5.0 | 9.0 |

| L = 900 |     |     |     |     |     |     |     |
|---------|-----|-----|-----|-----|-----|-----|-----|
| 1       | 65  | 52  | 245 | 123 | 46  | 1.2 | 3.2 |
| 2       | 108 | 94  | 280 | 158 | 88  | 1.8 | 3.9 |
| 3       | 151 | 137 | 320 | 198 | 131 | 2.4 | 4.6 |
| 4       | 194 | 180 | 320 | 198 | 174 | 3.0 | 4.8 |

| L = 1800 |     |     |     |     |     |     |      |
|----------|-----|-----|-----|-----|-----|-----|------|
| 1        | 65  | 52  | 320 | 198 | 46  | 2.4 | 8.1  |
| 2        | 108 | 94  | 370 | 248 | 88  | 3.6 | 9.8  |
| 3        | 151 | 137 | 435 | 313 | 131 | 4.8 | 11.8 |
| 4        | 194 | 180 | 435 | 313 | 174 | 6.0 | 12.3 |

### Note

- The dimensions are in mm.

## Selection details

### SROD

| air volume        |                   | number of slots | plenum-box length  |                   |                    |                   |                    |                   |                    |                   |                    |                   |                    |                   |
|-------------------|-------------------|-----------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
|                   |                   |                 | 600                |                   | 750                |                   | 900                |                   | 1200               |                   | 1500               |                   | 1800               |                   |
| m <sup>3</sup> /s | m <sup>3</sup> /h |                 | $\Delta p_s$<br>Pa | $L_{pA}$<br>dB(A) | $\Delta p_s$<br>Pa | $L_{pA}$<br>dB(A) | $\Delta p_s$<br>Pa | $L_{pA}$<br>dB(A) | $\Delta p_s$<br>Pa | $L_{pA}$<br>dB(A) | $\Delta p_s$<br>Pa | $L_{pA}$<br>dB(A) | $\Delta p_s$<br>Pa | $L_{pA}$<br>dB(A) |
| 0.010             | <b>36</b>         | 1               | 1                  | -                 |                    |                   |                    |                   |                    |                   |                    |                   |                    |                   |
| 0.0125            | <b>45</b>         | 1               | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |                    |                   |                    |                   |
| 0.015             | <b>54</b>         | 1               | 3                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |                    |                   |
| 0.020             | <b>72</b>         | 1               | 5                  | -                 | 3                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |
|                   |                   | 2               | 1                  | -                 |                    |                   |                    |                   |                    |                   |                    |                   |                    |                   |
| 0.025             | <b>90</b>         | 1               | 8                  | 10                | 5                  | -                 | 4                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |
|                   |                   | 2               | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |                    |                   |                    |                   |
| 0.030             | <b>108</b>        | 1               | 12                 | 15                | 8                  | 10                | 5                  | -                 | 3                  | -                 | 2                  | -                 | 1                  | -                 |
|                   |                   | 2               | 3                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |                    |                   |
| 0.040             | <b>144</b>        | 1               | 21                 | 22                | 14                 | 18                | 9                  | 14                | 5                  | -                 | 3                  | -                 | 2                  | -                 |
|                   |                   | 2               | 5                  | -                 | 3                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |
|                   |                   | 3               | 2                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |                    |                   |
| 0.050             | <b>180</b>        | 1               | 33                 | 28                | 21                 | 23                | 15                 | 19                | 8                  | 13                | 5                  | -                 | 4                  | -                 |
|                   |                   | 2               | 8                  | 13                | 5                  | -                 | 4                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |
|                   |                   | 3               | 4                  | -                 | 2                  | -                 | 2                  | -                 |                    |                   |                    |                   |                    |                   |
| 0.060             | <b>216</b>        | 1               | 48                 | 33                | 31                 | 28                | 21                 | 24                | 12                 | 18                | 8                  | 13                | 5                  | -                 |
|                   |                   | 2               | 12                 | 18                | 8                  | 13                | 5                  | -                 | 3                  | -                 | 2                  | -                 | 1                  | -                 |
|                   |                   | 3               | 5                  | -                 | 3                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |
|                   |                   | 4               | 3                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |                    |                   |
| 0.080             | <b>288</b>        | 1               |                    |                   | 55                 | 36                | 38                 | 32                | 21                 | 25                | 14                 | 21                | 9                  | 17                |
|                   |                   | 2               | 21                 | 25                | 14                 | 21                | 9                  | 17                | 5                  | 10                | 3                  | -                 | 2                  | -                 |
|                   |                   | 3               | 9                  | 17                | 6                  | 12                | 4                  | -                 | 2                  | -                 | 2                  | -                 | 1                  | -                 |
|                   |                   | 4               | 5                  | 10                | 3                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |                    |                   |
| 0.100             | <b>360</b>        | 2               | 33                 | 31                | 21                 | 26                | 15                 | 22                | 8                  | 16                | 5                  | 11                | 4                  | -                 |
|                   |                   | 3               | 15                 | 22                | 9                  | 18                | 7                  | 14                | 4                  | -                 | 2                  | -                 | 2                  | -                 |
|                   |                   | 4               | 8                  | 16                | 5                  | 11                | 4                  | -                 | 2                  | -                 | 1                  | -                 |                    |                   |
| 0.125             | <b>450</b>        | 2               | 52                 | 37                | 33                 | 32                | 23                 | 28                | 13                 | 22                | 8                  | 17                | 6                  | 13                |
|                   |                   | 3               | 23                 | 28                | 15                 | 23                | 10                 | 19                | 6                  | 13                | 4                  | -                 | 3                  | -                 |
|                   |                   | 4               | 13                 | 22                | 8                  | 17                | 6                  | 13                | 3                  | -                 | 2                  | -                 | 1                  | -                 |
| 0.150             | <b>540</b>        | 2               |                    |                   | 48                 | 37                | 33                 | 33                | 19                 | 27                | 12                 | 22                | 8                  | 18                |
|                   |                   | 3               | 33                 | 33                | 21                 | 28                | 15                 | 24                | 8                  | 18                | 5                  | 13                | 4                  | -                 |
|                   |                   | 4               | 19                 | 27                | 12                 | 22                | 8                  | 18                | 5                  | 12                | 3                  | -                 | 2                  | -                 |
| 0.200             | <b>720</b>        | 3               |                    |                   | 38                 | 36                | 26                 | 32                | 15                 | 25                | 9                  | 21                | 7                  | 17                |
|                   |                   | 4               | 33                 | 34                | 21                 | 29                | 15                 | 25                | 8                  | 19                | 5                  | 14                | 4                  | 10                |
| 0.250             | <b>900</b>        | 4               |                    |                   | 33                 | 35                | 23                 | 31                | 13                 | 25                | 8                  | 20                | 9                  | 16                |
| 0.300             | <b>1080</b>       | 4               |                    |                   | 48                 | 40                | 33                 | 36                | 19                 | 30                | 12                 | 25                | 8                  | 21                |

## General

- The assumed room attenuation is 10 dB.
- It is permitted to interpolate the interim values.