



DESCRIPTION:

BD-S: Circular ceiling diffuser with fixed core

BD-A: Circular ceiling diffuser with removable core.

MATERIAL:

- Standard Production : Metal frame and core
- Optional Production : Aluminum frame and core

APPLICATION:

BD series circular ceiling diffuser used for the supply of cooled and heated air in facilities like offices, shopping rent etc...BD can used for ceiling installation

FINISHING:

- Powder coated in RAL 9010 colour as standard
- Other colours on request

INSTALLATION:

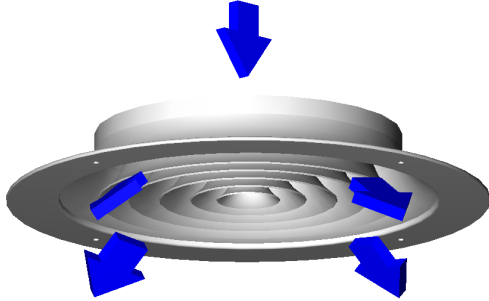
- Screw {Standard}
- Bridge
- No fixing

ACCESSORIES:

- If desired, it is possible to add a damper to adjust the amount of air to be collected.
KD: Butterfly Damper
HKD: Hit and Miss Damper
- PK: Plenum Box
- KS: Mounting Frame



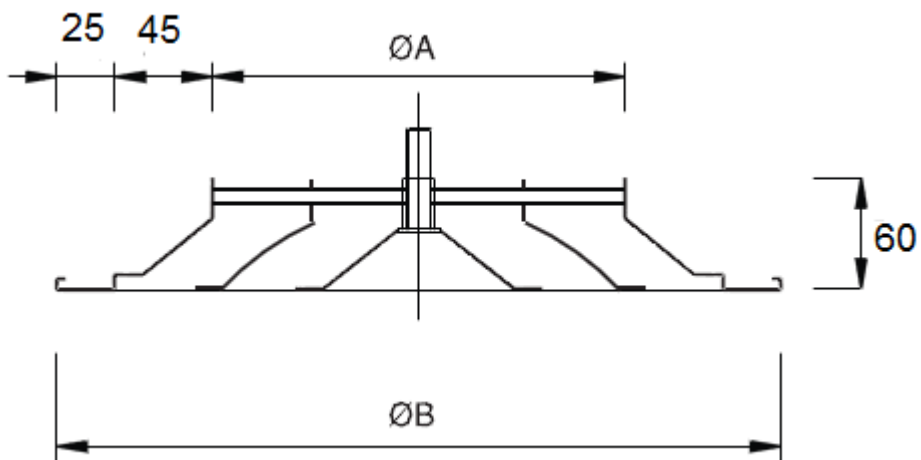
STANDARD SIZES (mm):



| | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Dimensions | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 |
| ØA | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 |
| ØB | 290 | 340 | 390 | 440 | 490 | 540 | 590 | 640 | 690 |

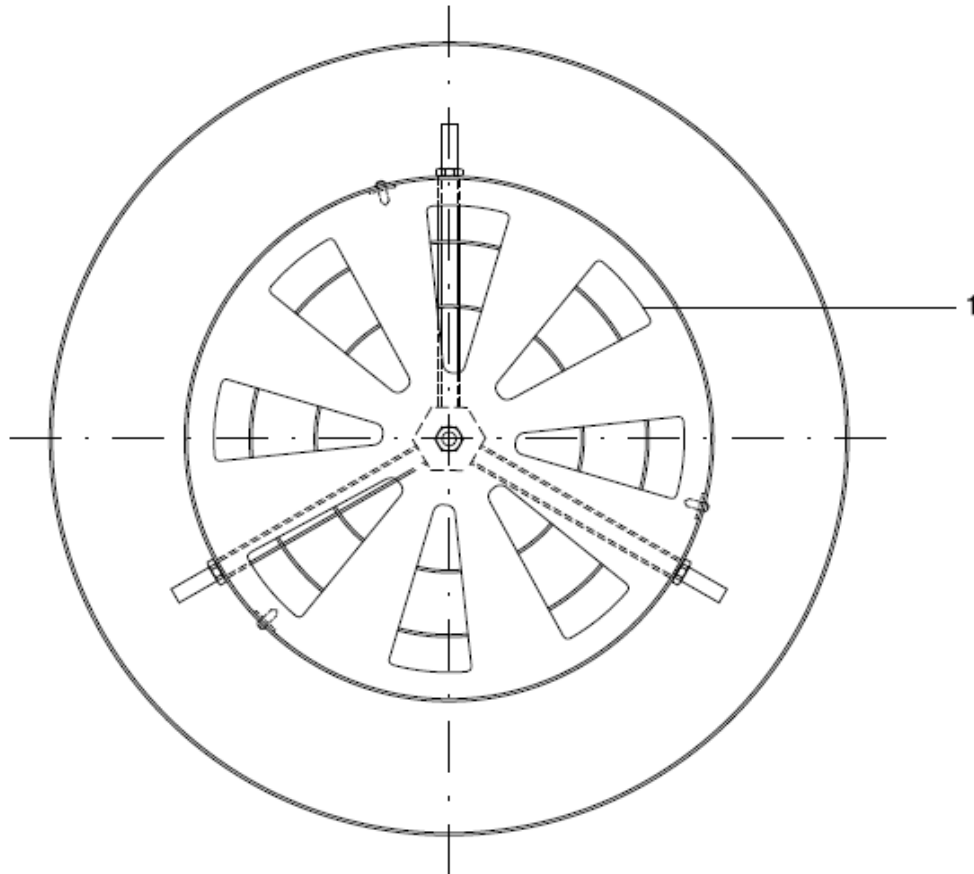
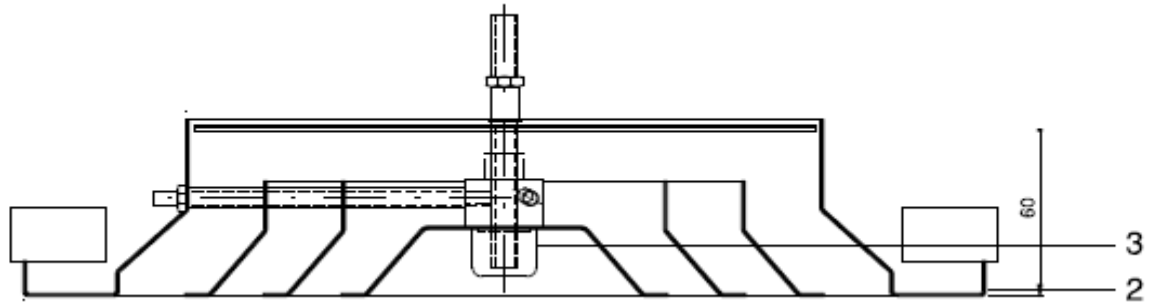
* Any combination of these sizes

TECHNICAL DRAWINGS:





CIRCULAR CEILING DIFFUSERS WITH STAGGERED DAMPER



- 1 - Hit and Miss Damper
- 2 - Circular Ceiling Diffuser
- 3 - Damper Lever



EFFECTIVE AREA Ak(m2)

SELECTION TABLE

| Standard sizes ø A (mm) | ø B | Efective area (m ²) | Air volume(m ³ /h) | Throw max.(m) |
|----------------------------|-----|---------------------------------|-------------------------------|---------------|
| 150 | 290 | 0,015 | 135 | |
| 200 | 340 | 0,027 | 243 | 1,3 |
| 250 | 390 | 0,040 | 360 | 1,55 |
| 300 | 440 | 0,056 | 504 | 1,8 |
| 350 | 490 | 0,074 | 666 | 2,2 |
| 400 | 540 | 0,090 | 810 | 2,4 |
| 450 | 590 | 0,112 | 1048 | 2,7 |
| 500 | 640 | 0,135 | 1215 | 2,9 |
| 550 | 690 | 0,192 | 1728 | 3,6 |

Datas was chosen when the air velocity is 2,5 m/s and the velocity at throw distance is 0,25m/s.

Table-1

QUICK SELECTION TABLE

| Neck Diameter ØDmm | Effective Area m ² | AIR VELOCITY m/s | | | | | | | | |
|-----------------------|----------------------------------|------------------|------|------|------|------|------|------|------|------|
| | | 1,5 | 2,0 | 2,5 | 3,0 | 4,0 | 5,0 | 6,0 | 7,0 | 8,0 |
| 150 | 0,015 | 81 | 108 | 135 | 162 | 216 | 270 | 324 | 378 | 432 |
| 200 | 0,027 | 146 | 194 | 243 | 292 | 389 | 486 | 583 | 680 | 778 |
| 250 | 0,040 | 216 | 288 | 360 | 432 | 576 | 720 | 864 | 1008 | 1152 |
| 300 | 0,056 | 302 | 403 | 504 | 605 | 806 | 1008 | 1210 | 1411 | 1613 |
| 350 | 0,074 | 400 | 533 | 666 | 799 | 1066 | 1332 | 1598 | 1865 | 2131 |
| 400 | 0,090 | 486 | 648 | 810 | 972 | 1296 | 1620 | 1944 | 2268 | 2592 |
| 450 | 0,112 | 605 | 806 | 1008 | 1210 | 1613 | 2016 | 2419 | 2822 | 3226 |
| 500 | 0,135 | 729 | 972 | 1215 | 1458 | 1944 | 2430 | 2916 | 3402 | 3888 |
| 550 | 0,192 | 1037 | 1382 | 1728 | 2074 | 2765 | 3456 | 4147 | 4838 | 5530 |

Not: Flow Rate m³/h

Table-2



SELECTION TABLE FOR CIRCULAR CEILING DIFFUSER

| SIZE | AREA m ² | | AIR VOLUME (m ³ /h) | | | | | | | | | | | | | |
|------|---------------------|----------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| | | | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1400 | 2000 | 2500 | 3000 | |
| 150 | 0,015 | Vk (m/s) | 3,7 | 5,8 | 7,8 | - | - | - | - | - | - | - | - | - | - | |
| | | Pt (Pa) | 15 | 36 | 63 | - | - | - | - | - | - | - | - | - | - | |
| | | Lt (m) | 0,7 | 1,15 | 1,4 | - | - | - | - | - | - | - | - | - | - | |
| | | NR | 25 | 38 | 48 | - | - | - | - | - | - | - | - | - | - | |
| 200 | 0,027 | Vk (m/s) | 2,1 | 3,2 | 4,2 | 5,2 | 6,1 | 7,3 | - | - | - | - | - | - | - | |
| | | Pt (Pa) | 4,7 | 10 | 19 | 29 | 40 | 66 | - | - | - | - | - | - | - | |
| | | Lt (m) | - | 0,8 | 1,15 | 1,35 | 1,7 | 1,9 | - | - | - | - | - | - | - | |
| | | NR | - | 22 | 31 | 38 | 45 | 52 | - | - | - | - | - | - | - | |
| 250 | 0,040 | Vk (m/s) | - | 2,2 | 2,8 | 3,5 | 4,2 | 4,9 | 5,6 | 6,2 | 7,2 | - | - | - | - | |
| | | Pt (Pa) | - | 5,1 | 7,9 | 13 | 19 | 26 | 25 | 43 | 53 | - | - | - | - | |
| | | Lt (m) | - | 0,65 | 0,85 | 1,15 | 1,4 | 1,6 | 1,8 | 2,1 | 2,4 | - | - | - | - | |
| | | NR | - | - | 21 | 27 | 33 | 38 | 44 | 47 | 50 | - | - | - | - | |
| 300 | 0,056 | Vk (m/s) | - | - | 2,0 | 2,5 | 3,0 | 3,5 | 4,0 | 4,5 | 5,0 | 7,0 | - | - | - | |
| | | Pt (Pa) | - | - | 4,2 | 6,5 | 9 | 13 | 17 | 22 | 26 | 51 | - | - | - | |
| | | Lt (m) | - | - | 0,72 | 0,92 | 1,1 | 1,35 | 1,5 | 1,7 | 1,8 | 2,7 | - | - | - | |
| | | NR | - | - | - | - | 24 | 29 | 34 | 37 | 42 | - | - | - | - | |
| 350 | 0,074 | Vk (m/s) | - | - | - | - | 2,2 | 2,6 | 3,0 | 3,4 | 3,7 | 5,2 | - | - | - | |
| | | Pt (Pa) | - | - | - | - | 5,1 | 7,3 | 9 | 12 | 15 | 29 | 7,5 | - | - | |
| | | Lt (m) | - | - | - | - | 0,94 | 0,92 | 1,35 | 1,45 | 1,6 | 2,4 | 5,9 | - | - | |
| | | NR | - | - | - | - | - | - | 26 | 30 | 37 | 45 | 3,5 | - | - | |
| 400 | 0,090 | Vk (m/s) | - | - | - | - | - | 2,2 | 2,4 | 2,8 | 3,1 | 4,3 | 5,0 | 6,2 | - | |
| | | Pt (Pa) | - | - | - | - | - | 5,1 | 6,1 | 7,9 | 9,5 | 21 | 26 | 43 | - | |
| | | Lt (m) | - | - | - | - | - | 1,0 | 1,2 | 1,35 | 1,4 | 2,2 | 2,7 | 3,5 | - | |
| | | NR | - | - | - | - | - | - | 21 | 24 | 28 | 38 | 45 | 51 | - | |
| 450 | 0,112 | Vk (m/s) | - | - | - | - | - | - | - | - | 2,3 | 2,4 | 3,5 | 5,0 | 6,0 | 7,5 |
| | | Pt (Pa) | - | - | - | - | - | - | - | - | 5,4 | 6,1 | 13 | 26 | 38 | 59 |
| | | Lt (m) | - | - | - | - | - | - | - | - | 1,2 | 1,3 | 1,8 | 2,8 | 3,4 | 4,2 |
| | | NR | - | - | - | - | - | - | - | - | - | 22 | 32 | 47 | 52 | - |
| 500 | 0,135 | Vk (m/s) | - | - | - | - | - | - | - | - | - | 2,1 | 2,8 | 4,1 | 5,0 | 6,0 |
| | | Pt (Pa) | - | - | - | - | - | - | - | - | - | 4,7 | 7,9 | 18 | 26 | 38 |
| | | Lt (m) | - | - | - | - | - | - | - | - | - | 1,2 | 1,8 | 2,4 | 3,0 | 3,8 |
| | | NR | - | - | - | - | - | - | - | - | - | - | 27 | 38 | 46 | 52 |
| 550 | 0,192 | Vk (m/s) | - | - | - | - | - | - | - | - | - | - | 2,0 | 2,8 | 3,7 | 4,5 |
| | | Pt (Pa) | - | - | - | - | - | - | - | - | - | - | 4,2 | 7,9 | 14 | 22 |
| | | Lt (m) | - | - | - | - | - | - | - | - | - | - | 1,4 | 2,1 | 1,6 | 3,1 |
| | | NR | - | - | - | - | - | - | - | - | - | - | 29 | 36 | 43 | 43 |

Table-3

SELECTION CRITERIAS

Ceiling Height H(m)=3±05

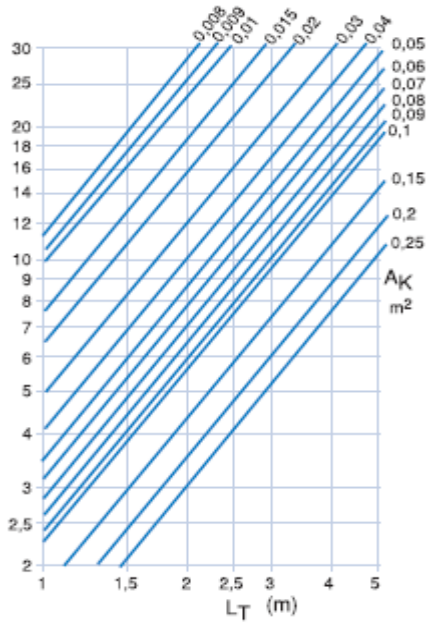
With ceiling effect

Damper %100 open

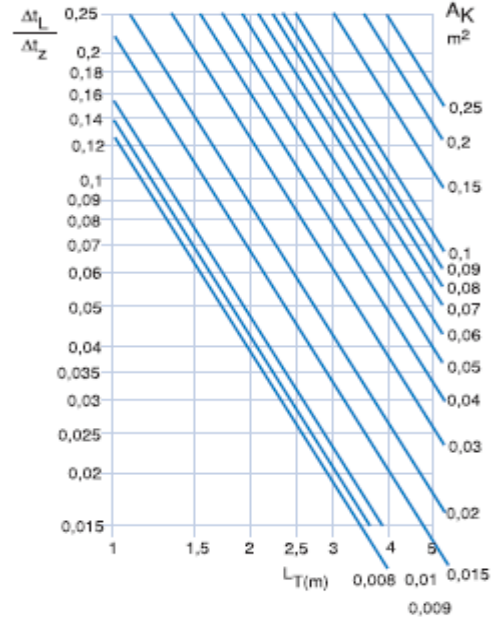


TEMPERATURE VARIABLES

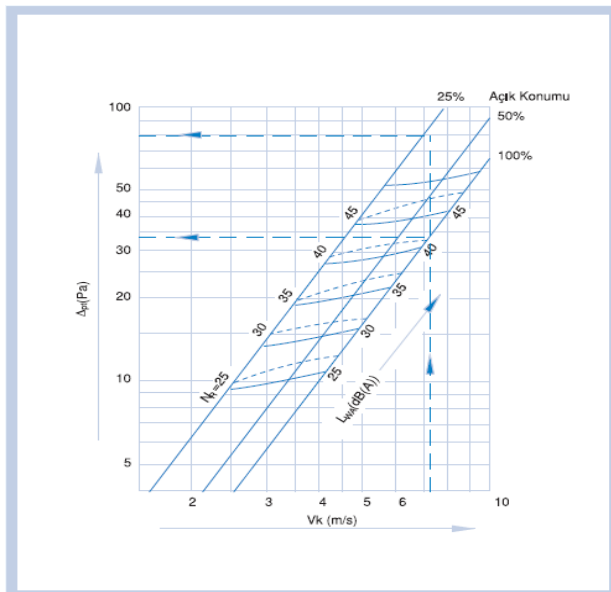
INDUCTION SELECTION DIAGRAM



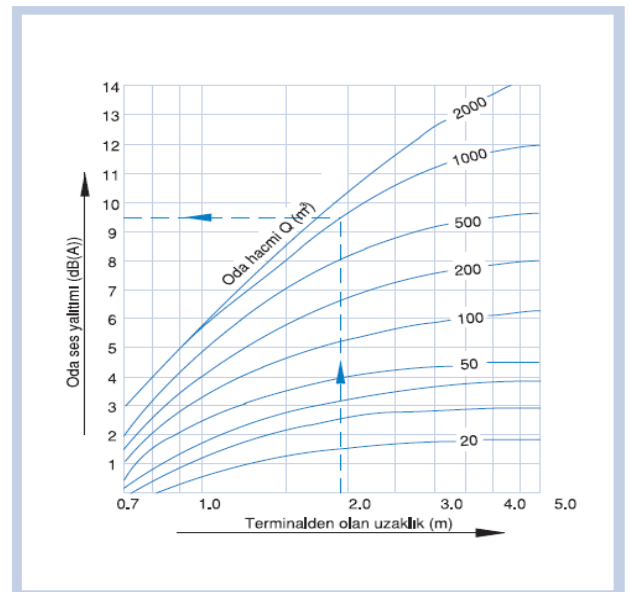
TEMPERATURE VARIABLE SELECTION



SOUND LEVEL AND PRESSURE LOSS DIAGRAM (BUTTERFLY DAMPER)



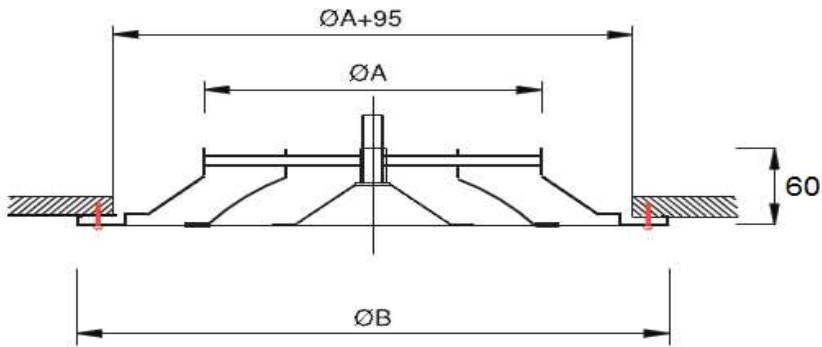
ROOM VOICE DELIVERY DIAGRAM





MOUNTING DETAILS

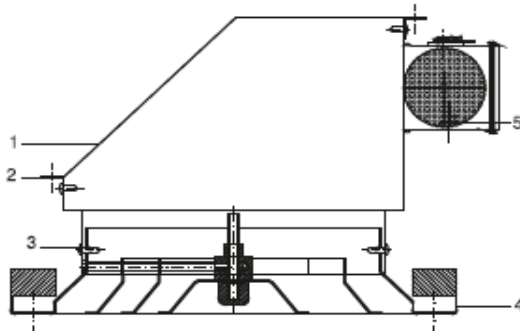
1- Screw Mounting Details



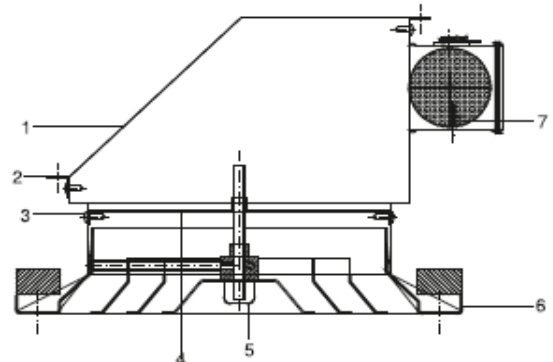
PLENUM BOX STANDARD MOUNTING



**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD SCREW MOUNTING (without insulation)**

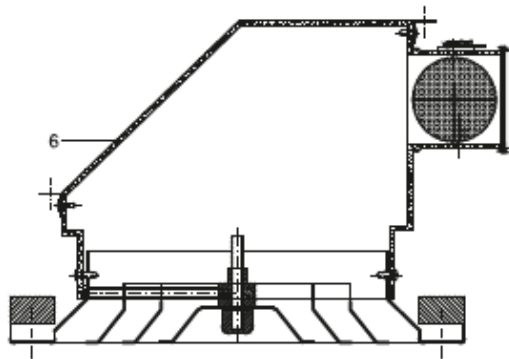


**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD BRIDGE MOUNTING (without insulation)**



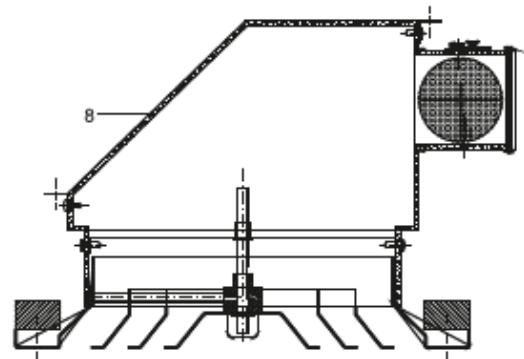


**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD SCREW MOUNTING (with instulation)**



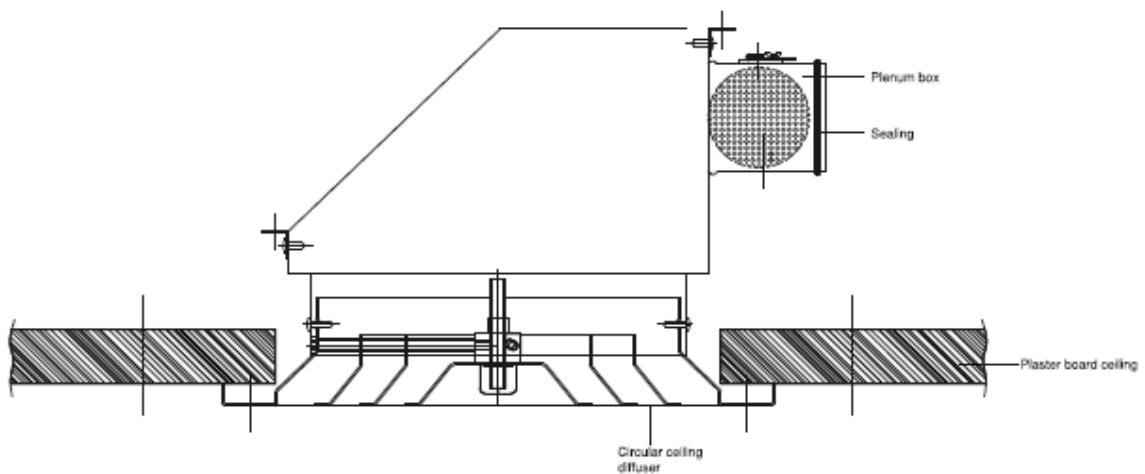
- 1-Plenum box
- 2-L Profile
- 3-Screw
- 4-Circular ceiling diffuser
- 5-Air control damper
- 6-Instulation

**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD BRIDGE MOUNTING (with instulation)**



- 1-Plenum box
- 2-L Profile
- 3-Screw
- 4-Plenum box
- 5-Circular diffuser
- 6-Circular ceiling diffuser
- 7-Air control damper
- 8-Instulation

SPECIAL CEILING INSTALLATION DETAILS





ORDER CODES:

| | | | | | | |
|---|---|---|----|---|----|---|
| BD | S | M | xx | RAL9010 | VD | W Ø300 |
| S : Fixed core A : Removable core | | Metal frame and core : M Aluminum frame and core : A | | XX: without Mounting VD: Screw Mounting KP: Bridge Mounting KS: Mounting Frame | | W: Neck Size C: Frame Size |
| XX: WITHOUT DAMPER KD: BUTTERFLY DAMPER CD: HIT AND MISS DAMPER | | | | | | 00: without coating EL: Anodic Aluminium RAL----: Powder Coated RAL |



DESCRIPTION:

CAD: Circular ceiling diffuser with fixed core

MATERIAL:

Standard Production: Metal frame and core

APPLICATION:

CAD series circular ceiling diffuser used for the supply of cooled and heated air in facilities like offices, shopping rent etc. CAD can used for ceiling installation

FINISHING:

Powder coated in RAL 9016 (white) colour as standard

Other colours on request

INSTALLATION:

Screw {Standard}

No fixing

ACCESSORIES:

If desired, it is possible to add a damper to adjust the amount of air to be collected.

Butterfly Damper



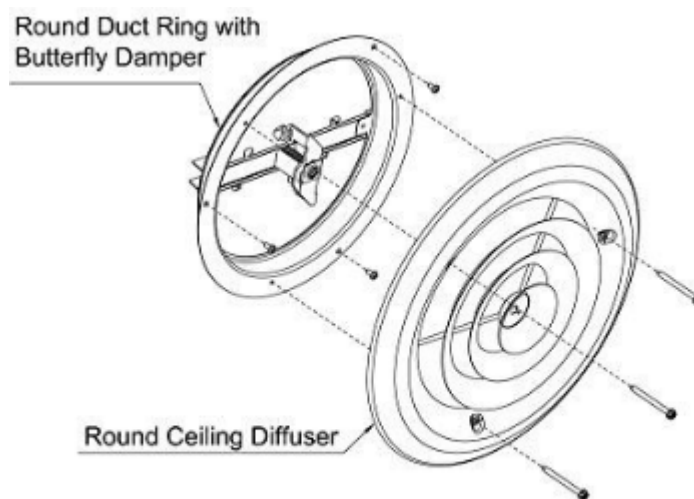
STANDARD SIZES (in):



AVAILABLE SIZES (in.)

NECK DIAMETER

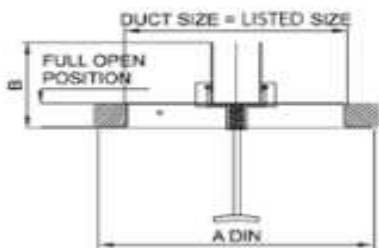
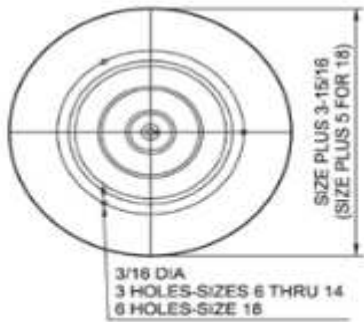
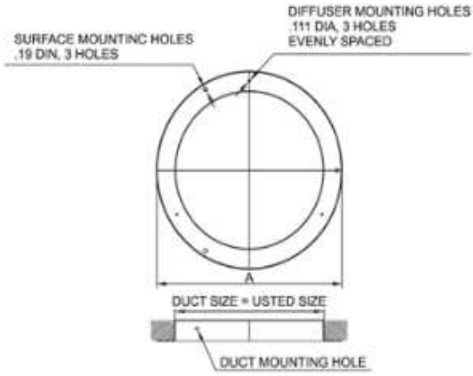
| 6" | 8" | 10" | 12" |
|----|----|-----|-----|
| X | X | X | X |



Use small screw holes for attaching damper to diffuser.
Larger screw holes can be used to attach damper to ductwork (optional)



OVERALL DIMENSION:





ORDER CODES:

| CAD | S | A | xx | RAL9010 | VD | D Ø 8" |
|----------------|---|--------------------------------|----|--|----|---|
| S : Fixed core | | Sheet Metal frame and core : S | | XX: WITHOUT DAMPER DD: WITH DAMPER | | D: Listed Size C: Frame Size |
| | | | | XX: without Mounting VD: Screw Mounting | | 00: without coating EL: Anodic Aluminium RAL----: Powder Coated RAL |



DESCRIPTION:

CD: Circular ceiling diffuser with removable core.

MATERIAL:

- Standard Production : Aluminum frame and core

APPLICATION:

CD series circular ceiling diffuser used for the supply of cooled and heated air in facilities like offices, shopping rent etc...CD can used for ceiling installation

FINISHING:

- Powder coated in RAL 9010 colour as standard
- Other colours on request

INSTALLATION:

- Screw {Standard}
- Bridge
- No fixing

ACCESSORIES:

- If desired, it is possible to add a damper to adjust the amount of air to be collected.
KD: Butterfly Damper
HKD: Hit and Miss Damper
- PK: Plenum Box
- KS: Mounting Frame

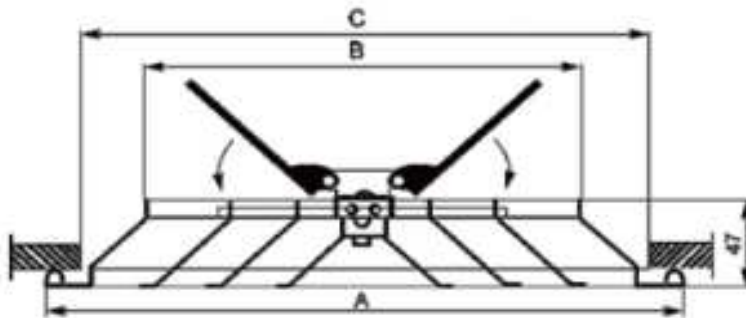


STANDARD SIZES (mm):

| CD-RA | A | B | C |
|-------|-----|-----|-----|
| 150 | 257 | 149 | 225 |
| 200 | 307 | 199 | 275 |
| 250 | 357 | 249 | 325 |
| 300 | 407 | 299 | 375 |
| 350 | 457 | 349 | 425 |

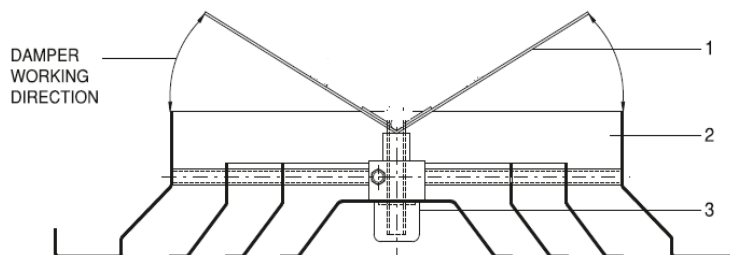
* Any combination of these sizes

TECHNICAL DRAWINGS:



CIRCULAR CEILING DIFFUSERS WITH BUTTERFLY DAMPER

- 1-BUTTERFLY DAMPER
- 2-CIRCULAR CEILING DIFFUSER
- 3-DAMPER ADJUST CATCH





EFFECTIVE AREA Ak(m2)

| Neck Diameter ØDmm | Effective Area m ² |
|-----------------------|----------------------------------|
| 150 | 0,0160 |
| 200 | 0,0280 |
| 250 | 0,0420 |
| 300 | 0,0580 |
| 350 | 0,0735 |

SELECTION TABLE

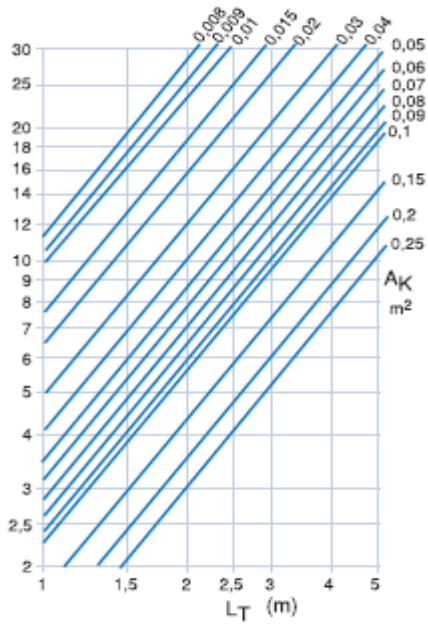
| Neck Diameter ØDmm | Effective Area m ² | AIR VELOCITY m/s | | | | | | | | |
|-----------------------|----------------------------------|------------------|-----|-----|-----|------|------|------|------|------|
| | | 1,5 | 2,0 | 2,5 | 3,0 | 4,0 | 5,0 | 6,0 | 7,0 | 8,0 |
| 150 | 0,0160 | 86 | 115 | 144 | 173 | 230 | 288 | 346 | 403 | 461 |
| 200 | 0,0280 | 151 | 202 | 252 | 302 | 403 | 504 | 605 | 706 | 806 |
| 250 | 0,0420 | 227 | 302 | 378 | 454 | 605 | 756 | 907 | 1058 | 1210 |
| 300 | 0,0580 | 313 | 418 | 522 | 626 | 835 | 1044 | 1253 | 1462 | 1670 |
| 350 | 0,0735 | 397 | 529 | 662 | 794 | 1058 | 1323 | 1588 | 1852 | 2117 |

Flow Rate m³/h

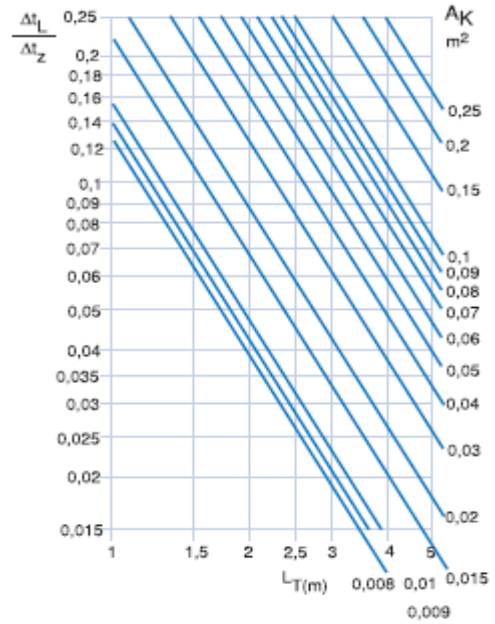


TEMPERATURE VARIABLES

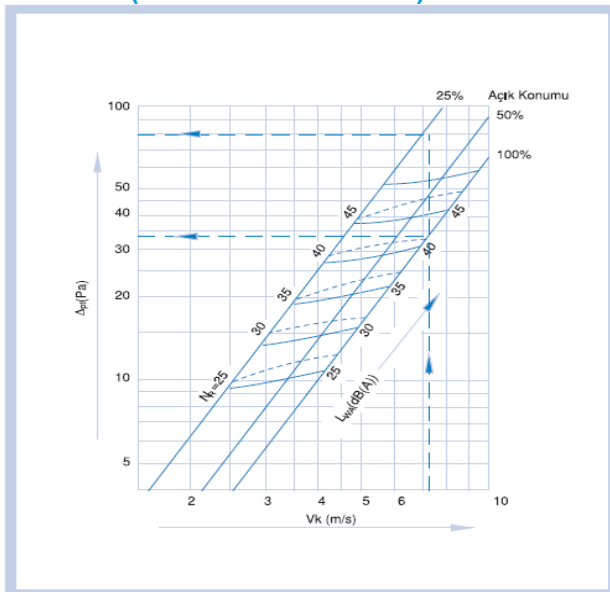
INDUCTION SELECTION DIAGRAM



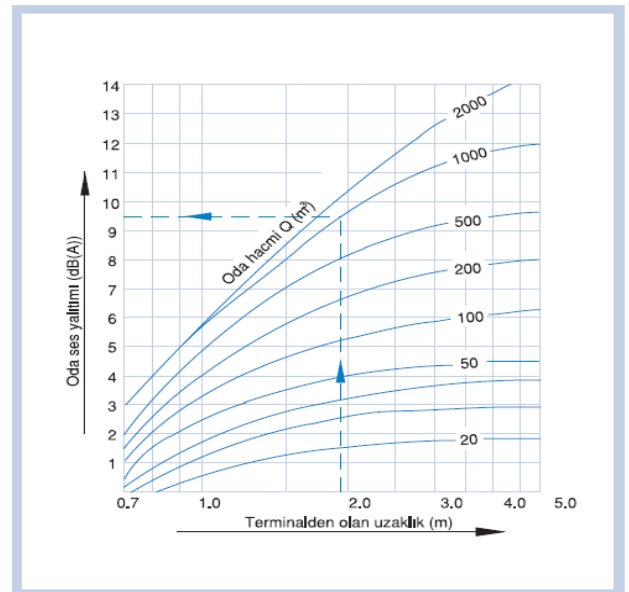
TEMPERATURE VARIABLE SELECTION



SOUND LEVEL AND PRESSURE LOSS DIAGRAM (BUTTERFLY DAMPER)



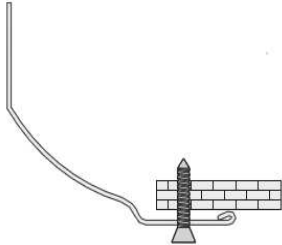
ROOM VOICE DELIVERY DIAGRAM





MOUNTING DETAILS

Screw Mounting Details

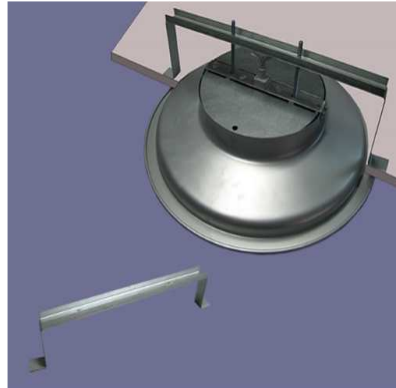
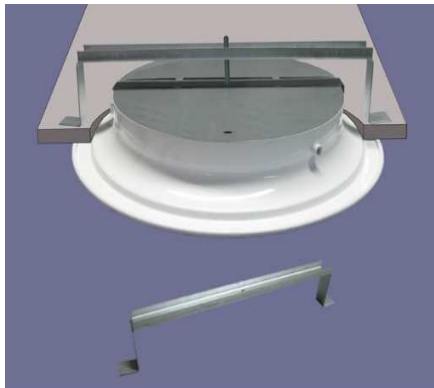


Frame Screw Mounting Type



Circular Duct type Mounting type

Bridged Mounting Details

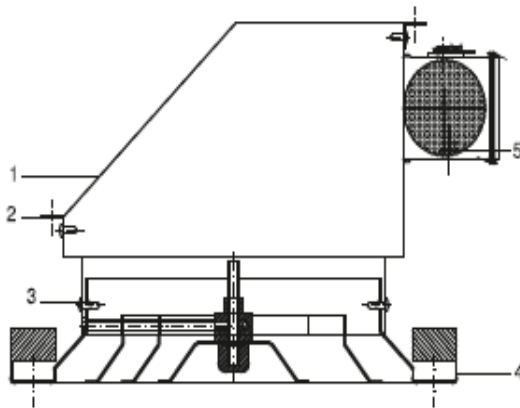




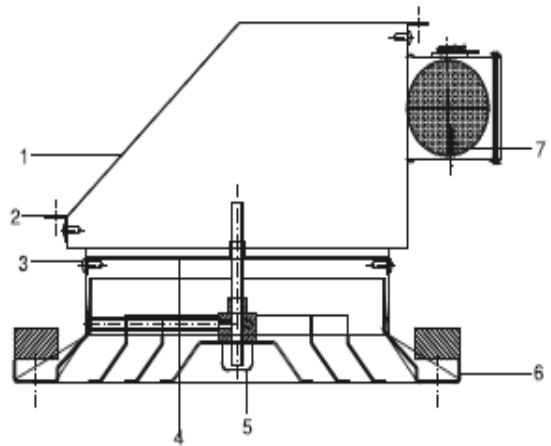
PLENUM BOX STANDARD MOUNTING



YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD SCREW MOUNTING (without installation)

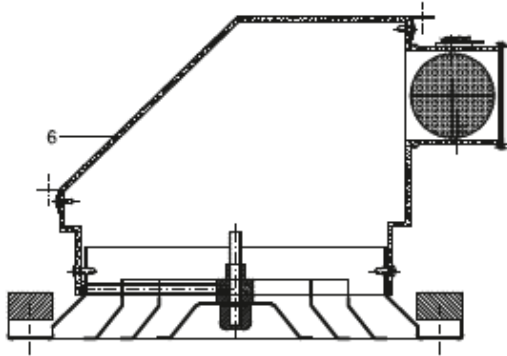


YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD BRIDGE MOUNTING (without installation)



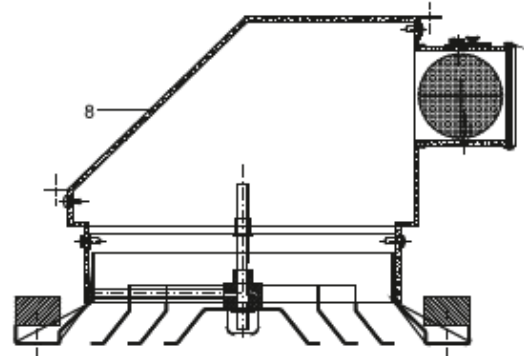


**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD SCREW MOUNTING (with insulation)**



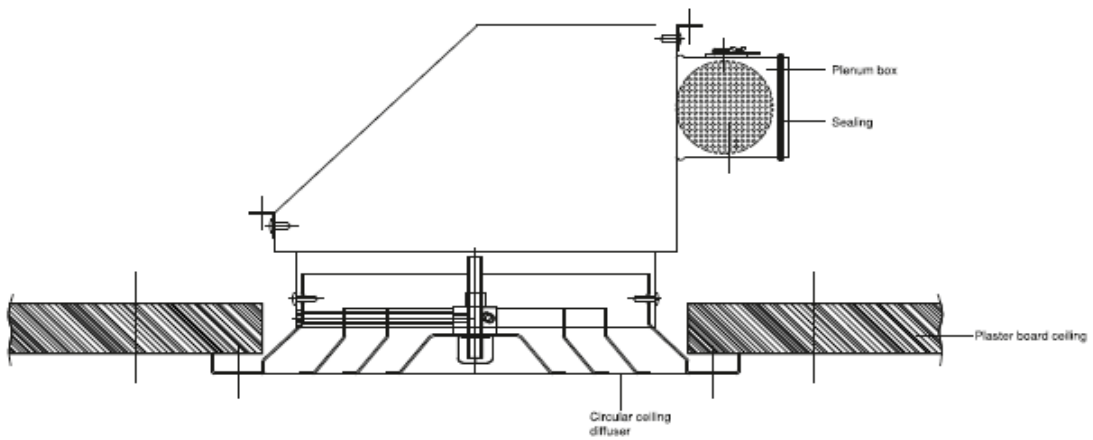
- 1-Plenum box
- 2-L Profile
- 3-Screw
- 4-Circular ceiling diffuser
- 5-Air control damper
- 6-Insulation

**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD BRIDGE MOUNTING (with insulation)**



- 1-Plenum box
- 2-L Profile
- 3-Screw
- 4-Plenum box
- 5-Circular diffuser
- 6-Circular ceiling diffuser
- 7-Air control damper
- 8-Insulation

SPECIAL CEILING INSTALLATION DETAILS





ORDER CODES:

| YTA | CD | A | xx | RAL9010 | VD | W Ø300 |
|---------------------|----|--|----|---------|----|---|
| | | | | | | |
| CD : Removable core | | | | | | W: Neck Size C: Frame Size |
| | | Aluminum frame and core : A | | | | XX: without Mounting VD: Screw Mounting KP: Bridge Mounting KS: Mounting Frame |
| | | XX: WITHOUT DAMPER KD: BUTTERFLY DAMPER | | | | 00: without coating EL: Anodic Aluminium RAL----: Powder Coated RAL |



DESCRIPTION:

YTA-S: Circular ceiling diffuser with fixed core

YTA-A: Circular ceiling diffuser with removable core.

MATERIAL:

- Standard Production : Metal frame and core
- Optional Production : Aluminum frame and core

APPLICATION:

YTA series circular ceiling diffuser used for the supply of cooled and heated air in facilities like offices, shopping rent etc...YTA can used for ceiling installation

FINISHING:

- Powder coated in RAL 9010 colour as standard
- Other colours on request

INSTALLATION:

- Screw {Standard}
- Bridge
- No fixing

ACCESSORIES:

- If desired, it is possible to add a damper to adjust the amount of air to be collected.
KD: Butterfly Damper
HKD: Hit and Miss Damper
- PK: Plenum Box
- KS: Mounting Frame

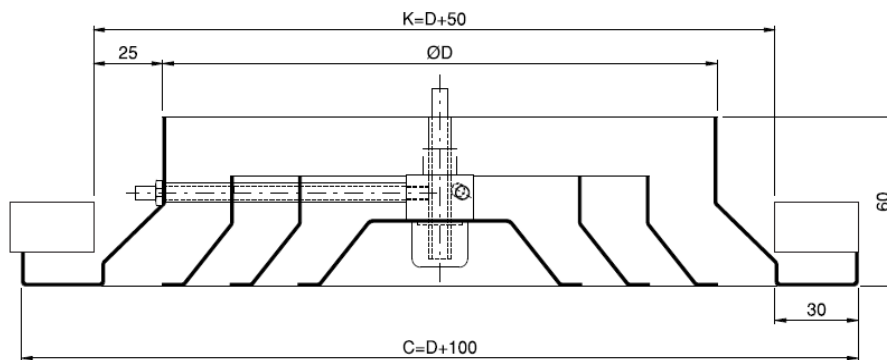


STANDARD SIZES (mm):

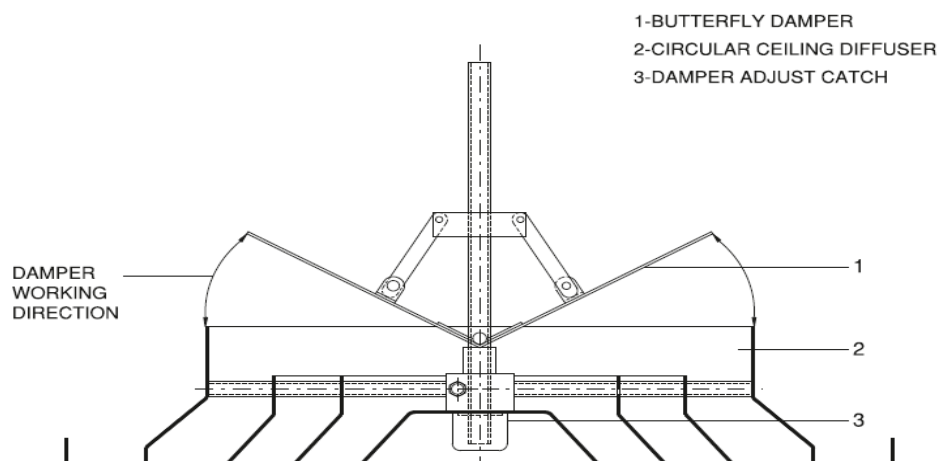
| | | | | | | | | | |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| D | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
| K | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 |
| C | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |

* Any combination of these sizes

TECHNICAL DRAWINGS:

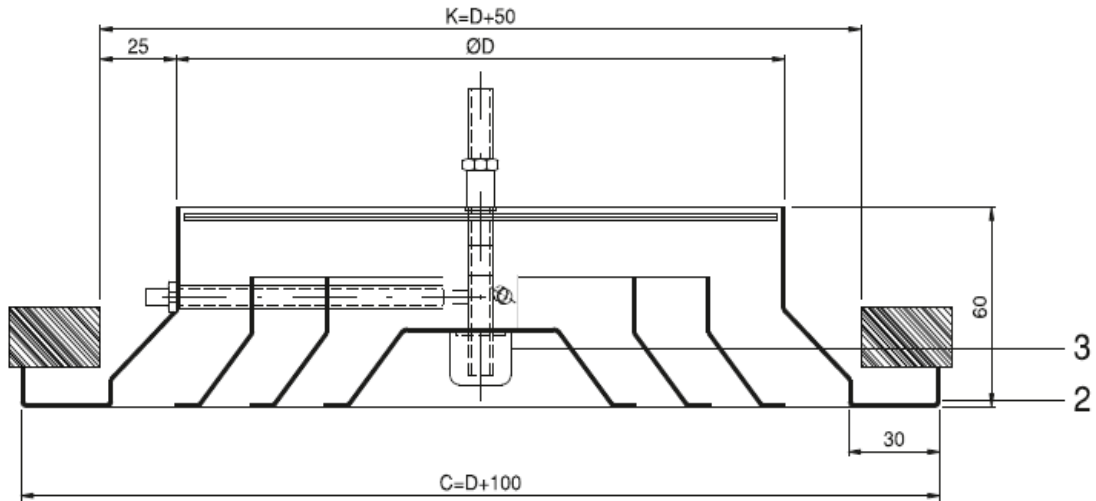


CIRCULAR CEILING DIFFUSERS WITH BUTTERFLY DAMPER

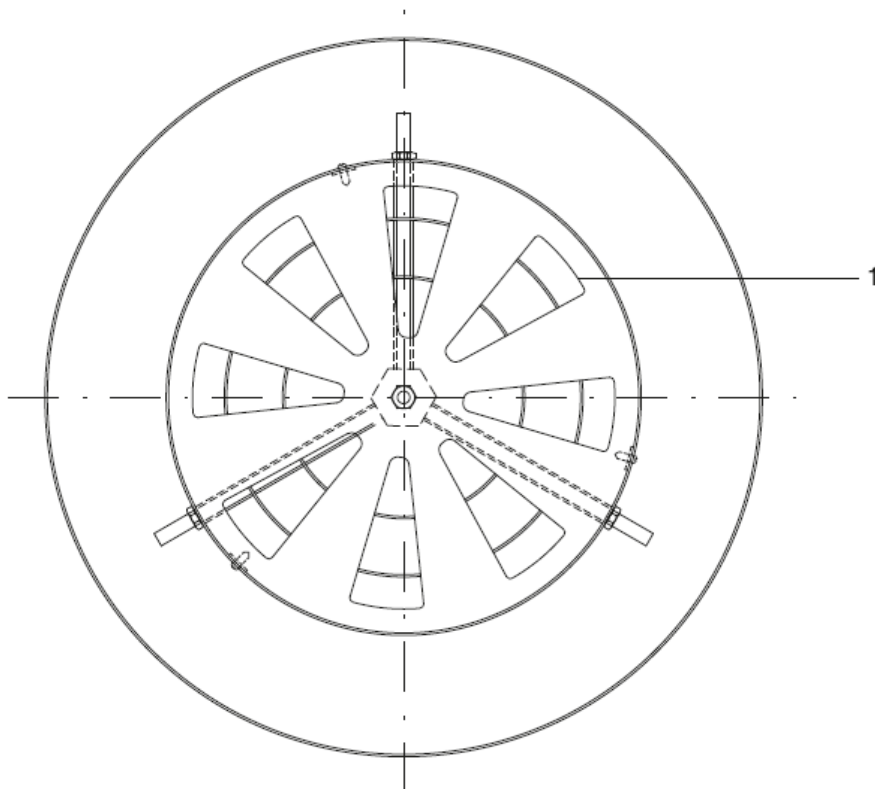




CIRCULAR CEILING DIFFUSERS WITH HIT AND MISS DAMPER



- 1-HIT AND MISS DAMPER
- 2-CIRCULAR CEILING DIFFUSER
- 3-DAMPER LEVER



EFFECTIVE AREA Ak(m²)

| mm | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Ak (m ²) | 0,0040 | 0,0085 | 0,0157 | 0,0257 | 0,0381 | 0,0536 | 0,0730 | 0,0955 | 0,1150 |

CIRCULAR CEILING DIFFUSER QUICK SELECTION

| Qv(m ³ /h) | ØD(mm) | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|-----------------------|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | A (m ²) | 0,0040 | 0,0085 | 0,0157 | 0,0257 | 0,0381 | 0,0536 | 0,0730 | 0,0955 | 0,1150 |
| 150 | Lt (m) | 1,0 | 0,6 | | | | | | | |
| | NR | 48 | 32 | | | | | | | |
| | Pt (Pa) | 54,0 | 18,0 | | | | | | | |
| | Vk (m/s) | 9,0 | 5,4 | | | | | | | |
| 200 | Lt (m) | 1,3 | 1,0 | 0,5 | | | | | | |
| | NR | >50 | 40 | 22 | | | | | | |
| | Pt (Pa) | >70 | 32,0 | 9,4 | | | | | | |
| | Vk (m/s) | 12,2 | 7,0 | 3,8 | | | | | | |
| 250 | Lt (m) | | 1,2 | 0,8 | 0,5 | | | | | |
| | NR | | 45 | 27 | <20 | | | | | |
| | Pt (Pa) | | 48,0 | 13,4 | 5,0 | | | | | |
| | Vk (m/s) | | 8,8 | 4,6 | 2,8 | | | | | |
| 300 | Lt (m) | | 1,8 | 1,1 | 0,7 | | | | | |
| | NR | | >50 | 33 | 20 | | | | | |
| | Pt (Pa) | | >70 | 19,6 | 8,0 | | | | | |
| | Vk (m/s) | | 10,8 | 5,7 | 3,5 | | | | | |
| 400 | Lt (m) | | | 1,4 | 1,1 | 0,8 | 0,5 | | | |
| | NR | | | 42 | 25 | <20 | <20 | | | |
| | Pt (Pa) | | | 38,0 | 12,2 | 6,0 | <5 | | | |
| | Vk (m/s) | | | 7,6 | 4,5 | 3,1 | 2,2 | | | |
| 500 | Lt (m) | | | 1,6 | 1,3 | 1,1 | 0,9 | 0,6 | | |
| | NR | | | 50 | 34 | 23 | <20 | <20 | | |
| | Pt (Pa) | | | 58,0 | 21,0 | 9,6 | <5 | <5 | | |
| | Vk (m/s) | | | 9,4 | 5,8 | 3,9 | 2,7 | 2,0 | | |
| 600 | Lt (m) | | | | 1,6 | 1,3 | 1,1 | 0,9 | 0,6 | |
| | NR | | | | 40 | 27 | <20 | <20 | <20 | |
| | Pt (Pa) | | | | 30,0 | 13,6 | 6,4 | <5 | <5 | |
| | Vk (m/s) | | | | 6,9 | 4,6 | 3,3 | 2,4 | 1,8 | |
| 800 | Lt (m) | | | | 2,0 | 1,7 | 1,4 | 1,3 | 1,1 | 1,0 |
| | NR | | | | 48 | 35 | 25 | <20 | <20 | <20 |
| | Pt (Pa) | | | | 56,0 | 25,0 | 12,0 | 6,2 | <5 | <5 |
| | Vk (m/s) | | | | 9,2 | 6,2 | 4,4 | 3,2 | 2,4 | 2,0 |
| 1000 | Lt (m) | | | | | 2,0 | 1,7 | 1,5 | 1,3 | 1,2 |
| | NR | | | | | 43 | 32 | 23 | <20 | <20 |
| | Pt (Pa) | | | | | 39,0 | 19,0 | 10,0 | 5,6 | <5 |
| | Vk (m/s) | | | | | 7,8 | 5,6 | 4,0 | 3,0 | 2,4 |
| 1500 | Lt (m) | | | | | | 2,5 | 2,2 | 1,9 | 1,7 |
| | NR | | | | | | 46 | 35 | 27 | 22 |
| | Pt (Pa) | | | | | | 49,2 | 24,0 | 13,6 | 8,8 |
| | Vk (m/s) | | | | | | 8,4 | 6,1 | 4,6 | 3,7 |
| 2000 | Lt (m) | | | | | | | 2,8 | 2,5 | 2,2 |
| | NR | | | | | | | 44 | 35 | 30 |
| | Pt (Pa) | | | | | | | 41,8 | 24,0 | 16,0 |
| | Vk (m/s) | | | | | | | 8,0 | 6,1 | 5,0 |
| 3000 | Lt (m) | | | | | | | | 3,5 | 3,2 |
| | NR | | | | | | | | 48 | 42 |
| | Pt (Pa) | | | | | | | | 50,2 | 37,0 |
| | Vk (m/s) | | | | | | | | 9,1 | 7,5 |

SELECTION CRITERIAS

Ceiling Height H(m)=3±05

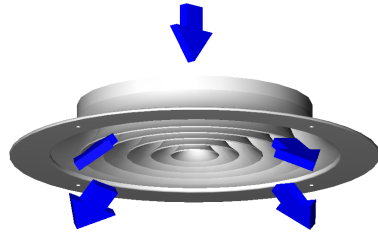
With ceiling effect

Damper %100 open

Table-1



CIRCULAR CEILING DIFFUSER SELECTION

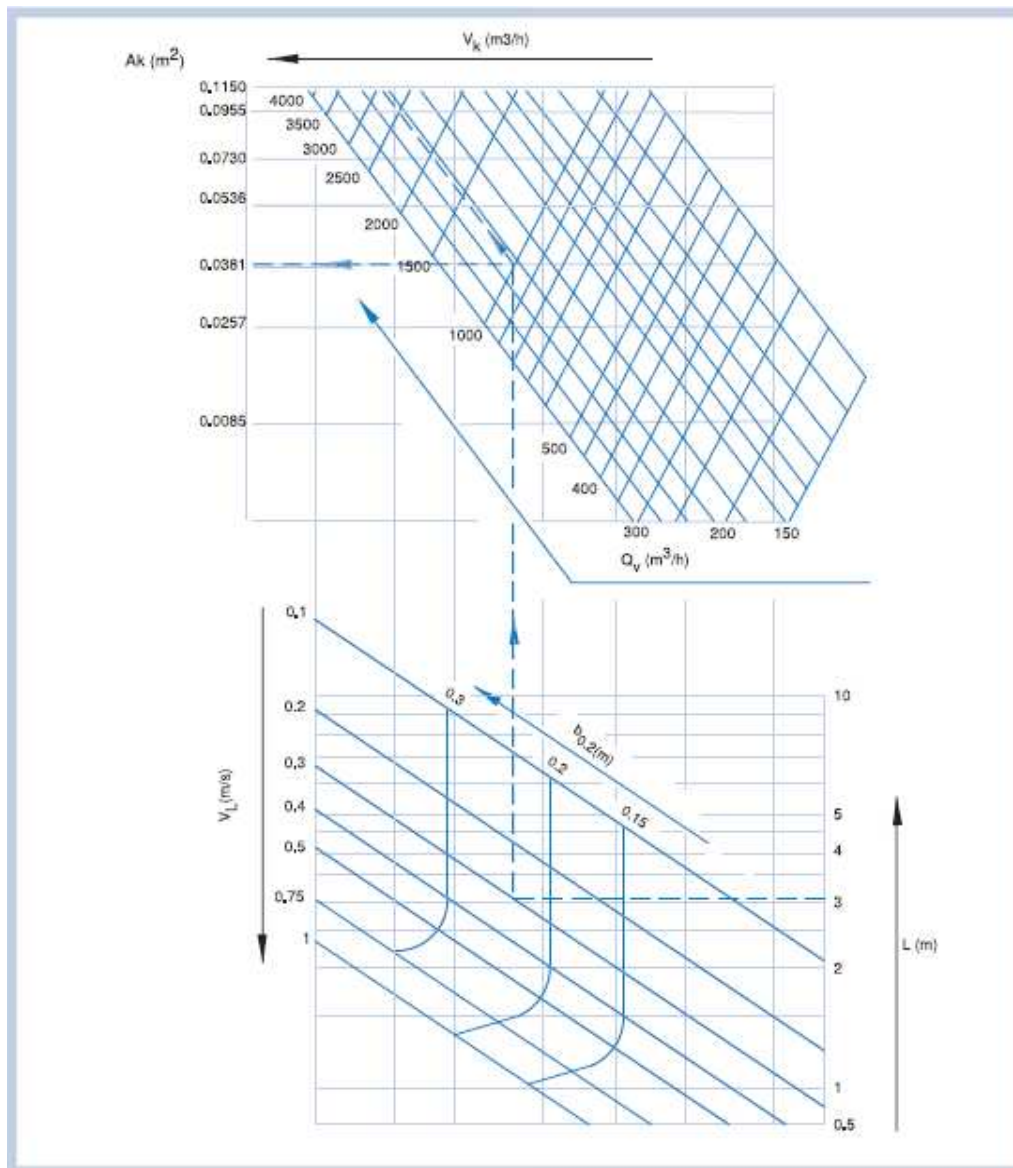


| Neck Size Dimension ØDmm | Effective Area m ² | AIR VELOCITY m/s | | | | | | | | | | | | | | | | | | | |
|--------------------------------|----------------------------------|------------------|-------------------|-------|-----|---------|-------------------|-------|-----|---------|-------------------|--------|-----|---------|-------------------|--------|-----|---------|-------------------|--------|-----|
| | | 1,5 | | | 2,0 | | | 2,5 | | | 3,0 | | | 4,0 | | | | | | | |
| 150 | 0,0085 | 45,90 | m ³ /h | 27,0 | cfm | 61,20 | m ³ /h | 36,0 | cfm | 76,50 | m ³ /h | 45,0 | cfm | 91,80 | m ³ /h | 54,0 | cfm | 122,40 | m ³ /h | 72,0 | cfm |
| 200 | 0,0157 | 84,78 | m ³ /h | 49,9 | cfm | 113,04 | m ³ /h | 66,5 | cfm | 141,30 | m ³ /h | 83,2 | cfm | 169,56 | m ³ /h | 99,8 | cfm | 226,08 | m ³ /h | 133,0 | cfm |
| 250 | 0,0257 | 138,78 | m ³ /h | 81,7 | cfm | 185,04 | m ³ /h | 108,9 | cfm | 231,30 | m ³ /h | 136,1 | cfm | 277,56 | m ³ /h | 163,3 | cfm | 370,08 | m ³ /h | 217,8 | cfm |
| 300 | 0,0381 | 205,74 | m ³ /h | 121,1 | cfm | 274,32 | m ³ /h | 161,4 | cfm | 342,90 | m ³ /h | 201,8 | cfm | 411,48 | m ³ /h | 242,2 | cfm | 548,64 | m ³ /h | 322,9 | cfm |
| 350 | 0,0536 | 289,44 | m ³ /h | 170,3 | cfm | 385,92 | m ³ /h | 227,1 | cfm | 482,40 | m ³ /h | 283,9 | cfm | 578,88 | m ³ /h | 340,7 | cfm | 771,84 | m ³ /h | 454,2 | cfm |
| 400 | 0,0730 | 394,20 | m ³ /h | 232,0 | cfm | 525,60 | m ³ /h | 309,3 | cfm | 657,00 | m ³ /h | 386,6 | cfm | 788,40 | m ³ /h | 464,0 | cfm | 1051,20 | m ³ /h | 618,6 | cfm |
| 450 | 0,0955 | 515,70 | m ³ /h | 303,5 | cfm | 687,60 | m ³ /h | 404,7 | cfm | 859,50 | m ³ /h | 505,8 | cfm | 1031,40 | m ³ /h | 607,0 | cfm | 1375,20 | m ³ /h | 809,3 | cfm |
| 500 | 0,1150 | 621,00 | m ³ /h | 365,5 | cfm | 828,00 | m ³ /h | 487,3 | cfm | 1035,00 | m ³ /h | 609,1 | cfm | 1242,00 | m ³ /h | 730,9 | cfm | 1656,00 | m ³ /h | 974,6 | cfm |
| 550 | 0,1920 | 1036,80 | m ³ /h | 610,2 | cfm | 1382,40 | m ³ /h | 813,5 | cfm | 1728,00 | m ³ /h | 1016,9 | cfm | 2073,60 | m ³ /h | 1220,3 | cfm | 2764,80 | m ³ /h | 1627,1 | cfm |

Table-2



SELECTION DIAGRAM



SELECTION CRITERIAS

Ceiling Height $H(m) = 3 \pm 0.5$

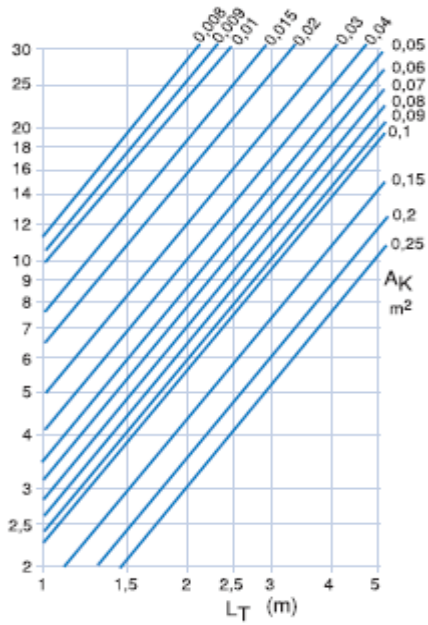
With ceiling effect

Damper %100 open

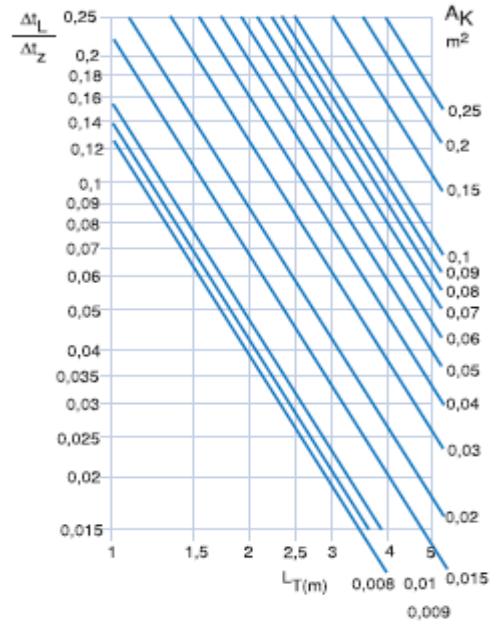


TEMPERATURE VARIABLES

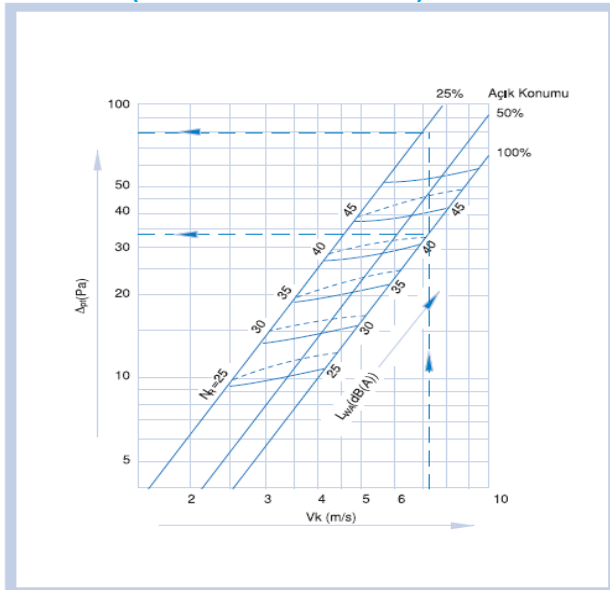
INDUCTION SELECTION DIAGRAM



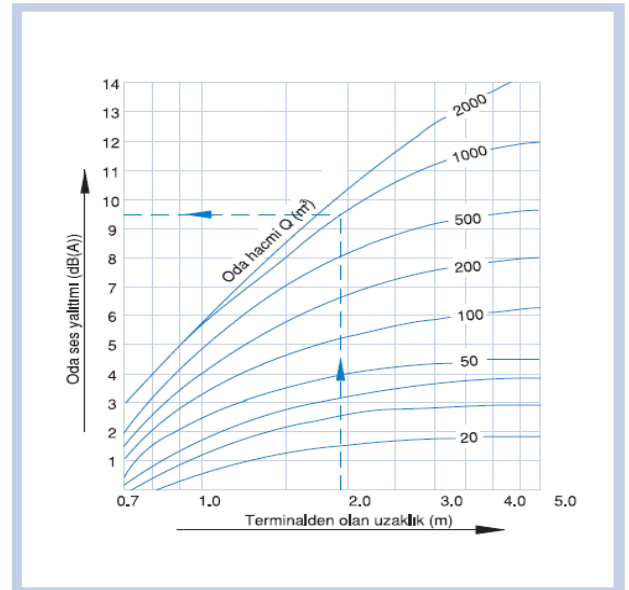
TEMPERATURE VARIABLE SELECTION



SOUND LEVEL AND PRESSURE LOSS DIAGRAM (BUTTERFLY DAMPER)



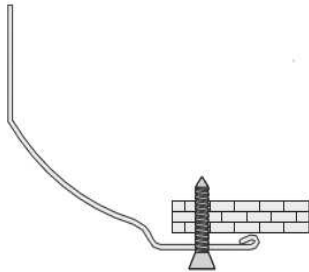
ROOM VOICE DELIVERY DIAGRAM





MOUNTING DETAILS

Screw Mounting Details



Frame Screw Mounting Type

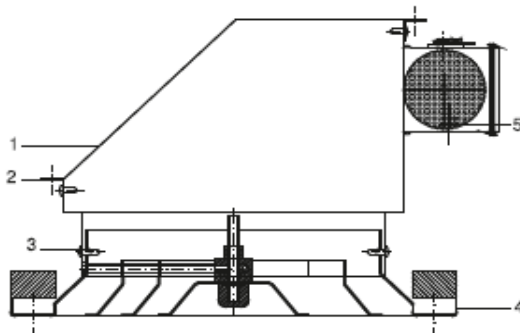


Circular Duct type Mounting Type

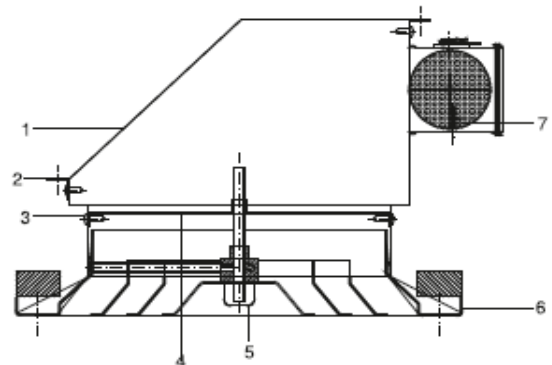
PLENUM BOX STANDARD MOUNTING



**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD SCREW MOUNTING (without instulation)**

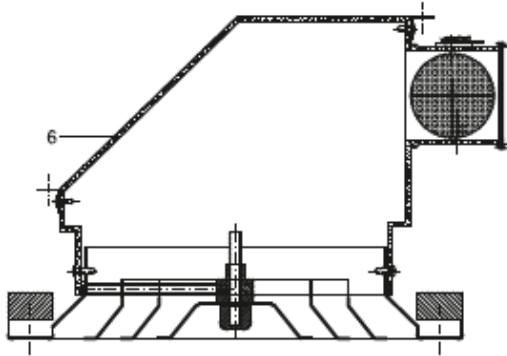


**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD BRIDGE MOUNTING (without instulation)**



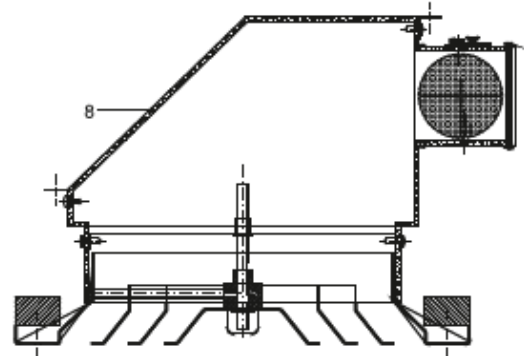


**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD SCREW MOUNTING (with instulation)**



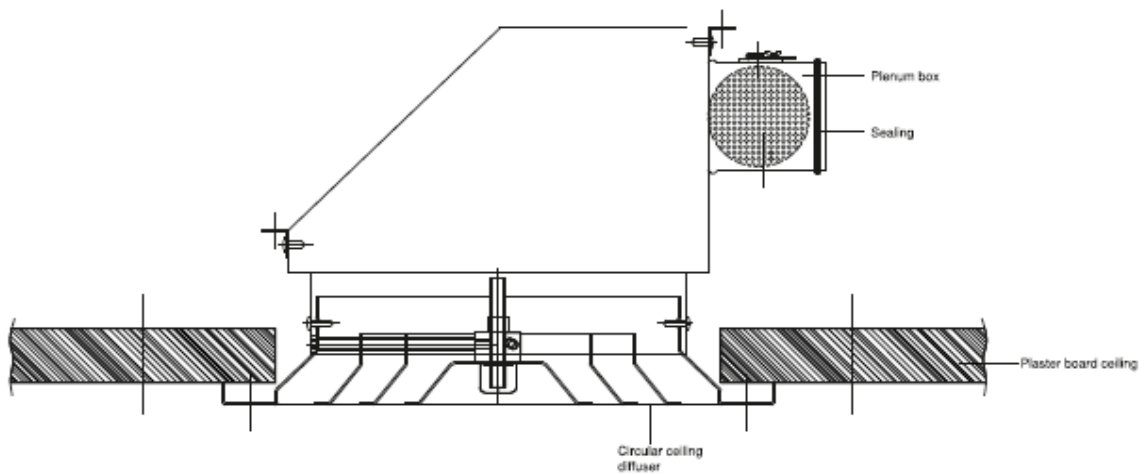
- 1-Plenum box
- 2-L Profile
- 3-Screw
- 4-Circular ceiling diffuser
- 5-Air control damper
- 6-Instulation

**YTA-CIRCULAR CEILING DIFFUSER
+ PLENUM BOX
STANDARD BRIDGE MOUNTING (with instulation)**



- 1-Plenum box
- 2-L Profile
- 3-Screw
- 4-Plenum box
- 5-Circular diffuser
- 6-Circular ceiling diffuser
- 7-Air control damper
- 8-Instulation

SPECIAL CEILING INSTALLATION DETAILS





ORDER CODES:

| YTA | A | M | xx | RAL9010 | VD | W Ø300 |
|---|---|---|----|---|----|-------------------------------|
| S : Fixed core A : Removable core | | Sheet Metal frame and core : M Aluminum frame and core : A | | XX: without Mounting VD: Screw Mounting KP: Bridge Mounting KS: Mounting Frame | | W: Neck Size C: Frame Size |
| XX: WITHOUT DAMPER KD: BUTTERFLY DAMPER CD: HIT AND MISS DAMPER | | | | 00: without coating EL: Anodic Aluminium RAL----: Powder Coated RAL | | |