



**Roller Type Slot Diffuser  
SD35**



**DESCRIPTION:**

SD35 : Slot diffuser with air control blades and 35mm wide diffuser face.

**MATERIAL :**

Specially extruded from 6063 aluminium profile.

Extruded aluminium frame and plastic air control blades.

**FUNCTION :**

The slot diffuser, types SD35 is used for the supply and return cooled and heated air in facilities such as offices, shops, with heights from approx. 2,60m to 4,00m. It is designed for installation in the ceiling and is available from 1 to 4 slots. Each slot is individually adjustable and equipped with control blades. The direction of the airflow can be adapted to the required room condition by rotating of control blades. All lengths are available so that the diffuser fits ideally in every ceiling system.

**FINISHING :**

- Powder coated in RAL 9010 colour as standart
- Aluminium anodized
- Other colours on request.

**INSTALLATION :**

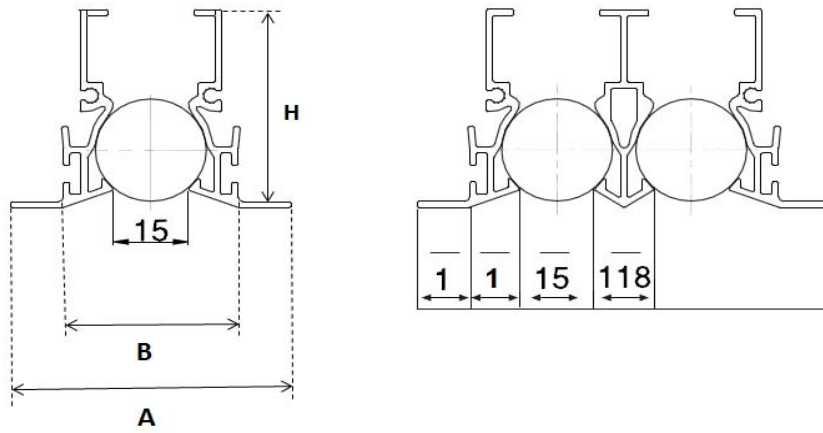
- Bridge (standard)
- Clips

**ACCESSORIES:**

- White, Black, Grey, Gold leaf rotate blades
- Plenum Box



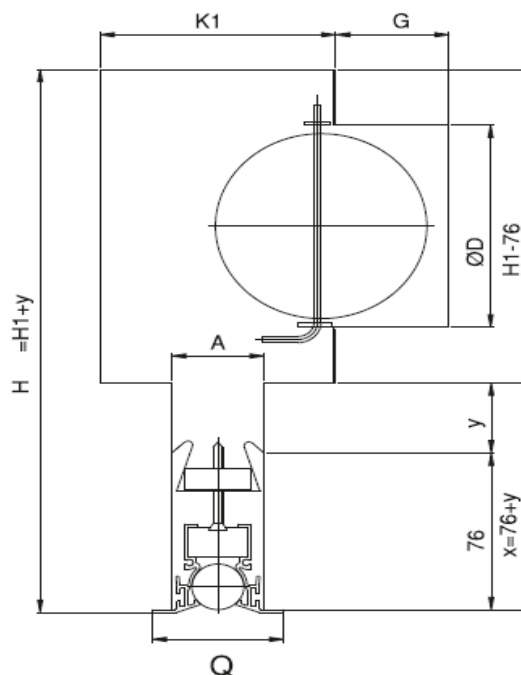
**STANDARD SIZES (mm) :**



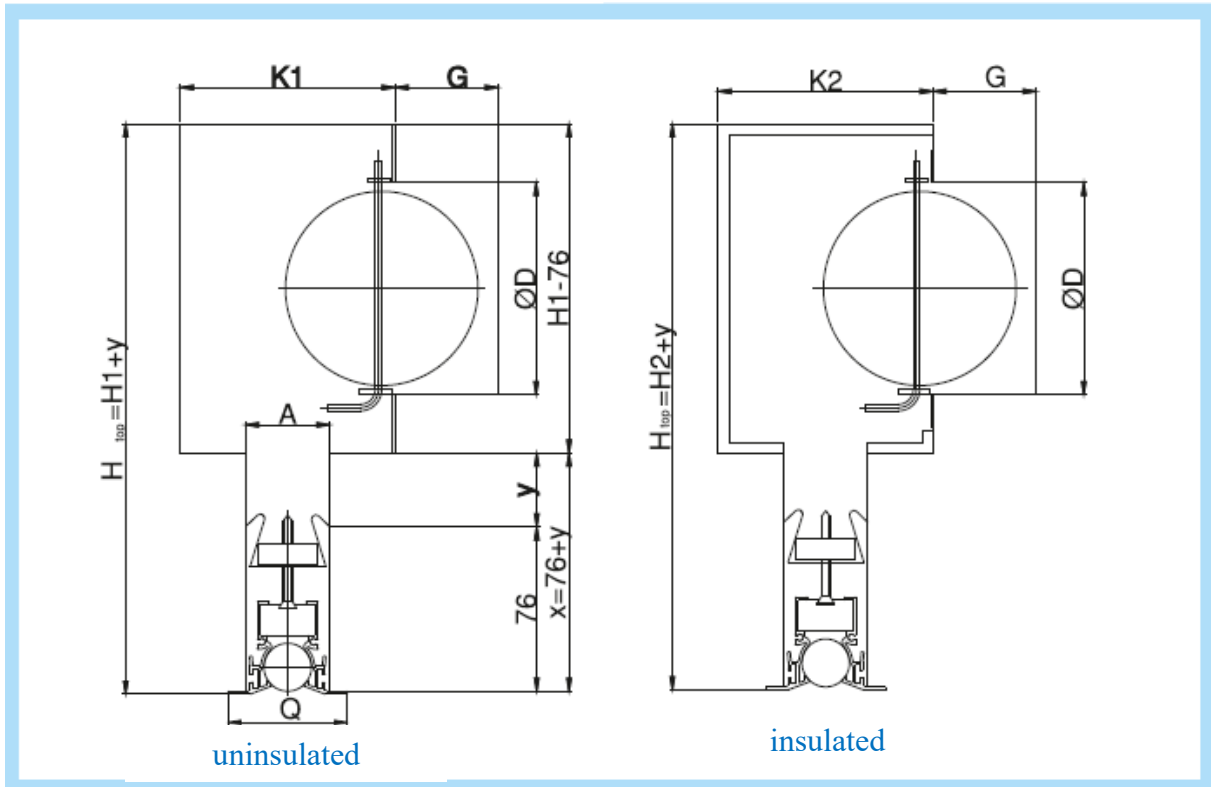
Slot	A (mm)	B (mm)	H (mm)
1 Slot	57	37	42
2 Slots	84	64	42
3 Slots	113	93	42
4 Slots	142	122	42

**NOMINAL LENGTH**

L : 600 – 750 – 900 – 1050 – 1200 – 1350 – 1500 – 1650 – 1800 – 1950



## DRAWINGS



Slot Diffuser and Plenum Box Sizes (mm)

Slot sayısı	K1	K2	H1	H2	Q	A	D	G
1	100	138	228	248	55	31	98	48
							123	46
2	138	176	258	278	83	59	123	46
							138	40
3	176	214	276	296	111	87	138	40
							158	48
4	214	254	308	328	139	115	158	48
							198	48

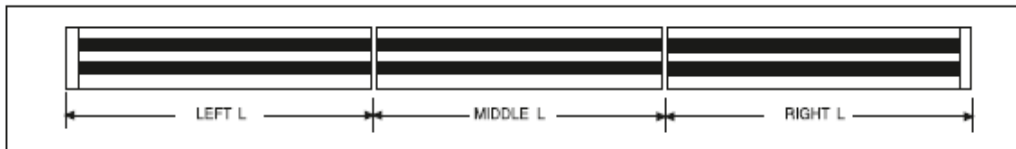
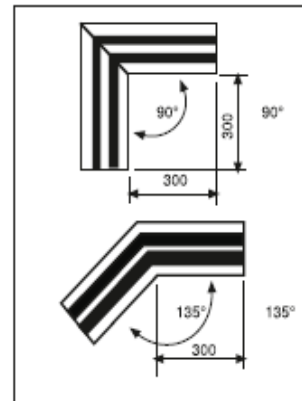


SD35 INSTALLATION COMBINATIONS

CAP COMBINATIONS

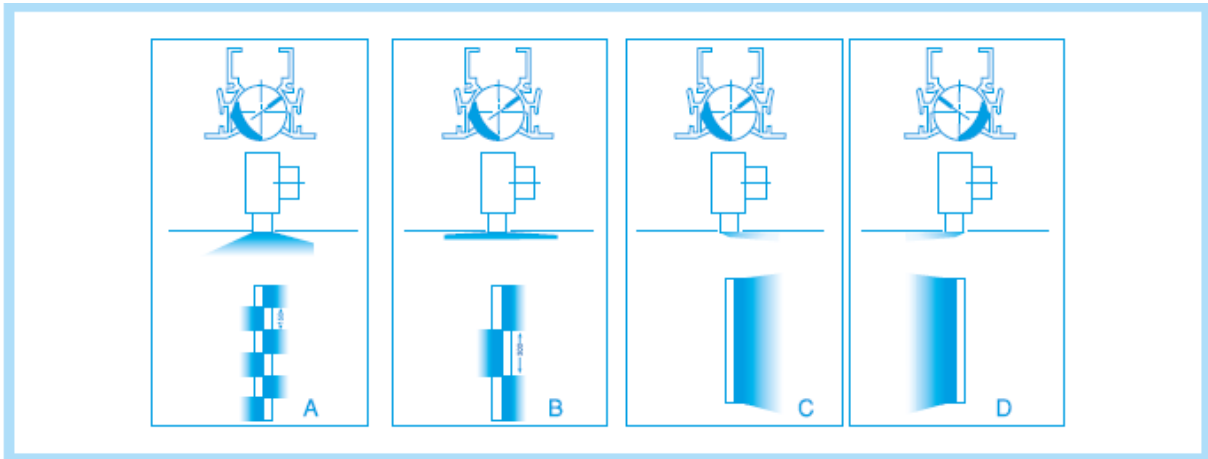


CORNER PIECES



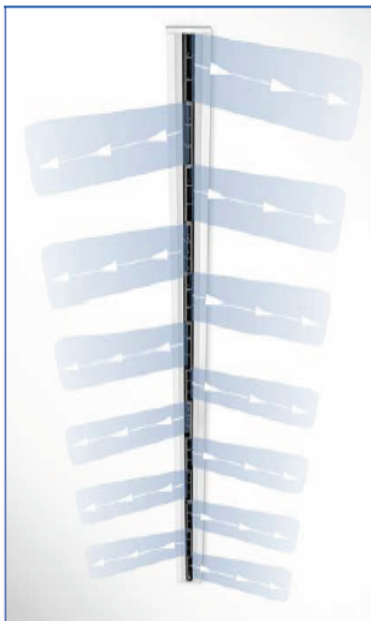


**SD35 – AIR DEFLECTION TYPE :**



**A-B**

**Alternating angled air discharge**



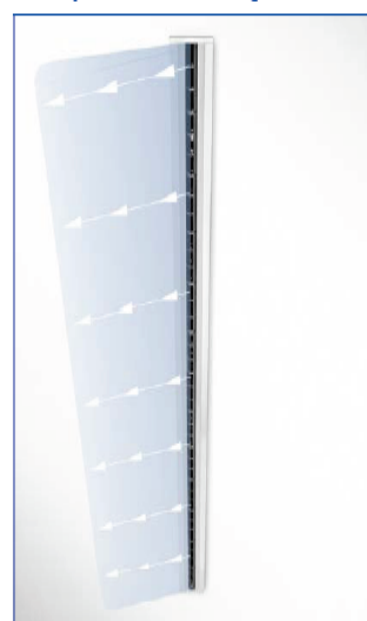
**C**

**One-way horizontal air discharge to the right**



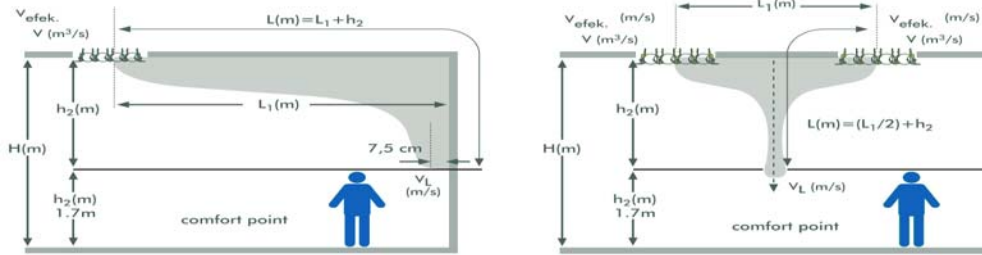
**D**

**One-way horizontal air discharge to the left**





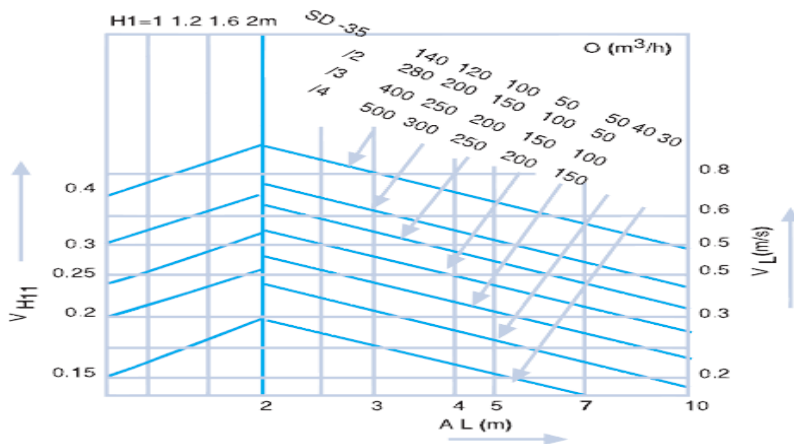
**SELECTION CHARACTERISTICS :**



<b>L1</b>	The distance between the diffusers or between the diffuser and the wall (m)
<b>h1</b>	Comfort point height (m)
<b>h2</b>	The distance between the diffuser and the comfort point (m)
<b>Vefek.</b>	Effective comfort point (m/s)
<b>VL</b>	At the comfort point (m)
<b>Δt<sub>o</sub></b>	The temperature difference between the air accessing to the environment and the temperature of the comfort point (°C)
<b>Δt<sub>L</sub></b>	The temperature difference between the air accessing to the comfort point and the temperature of the comfort point (°C)
<b>L</b>	Throw distance (m)
<b>V</b>	Mass air flow (m³/h)
<b>H</b>	Ambient height (m)
<b>S</b>	Sound powder level dB(A)

To achieve "Coanda effect" the outlet velocity must be greater than 2 m/s. The general comfort conditions require that the sound power level is below 40 dB(A). The height of the comfort zone is taken as 1.70 m the floor important that 0.25 m/s core velocity not exceeded in the zone.

**SD35 SELECTION TABLE**



**EFFECTIVE AREA**

Nominal length	SD35 - 1 Slot		SD35 - 2 Slot		SD35 - 3 Slot		SD35 - 4 Slot		L
	A <sub>eff</sub>	A <sub>eff</sub> WS	A <sub>eff</sub>	A <sub>eff</sub> WS	A <sub>eff</sub>	A <sub>eff</sub> WS	A <sub>eff</sub>	A <sub>eff</sub> WS	
	m <sup>2</sup>								mm
600	0.0035	0.0039	0.0070	0.0078	0.0105	0.0117	0.0140	0.0156	600
750	0.0044	0.0049	0.0088	0.0097	0.0131	0.0146	0.0175	0.0194	750
900	0.0053	0.0058	0.0105	0.0117	0.0158	0.0175	0.0210	0.0233	900
1050	0.0061	0.0068	0.0123	0.0136	0.0184	0.0204	0.0245	0.0272	1050
1200	0.0070	0.0078	0.0140	0.0156	0.0210	0.0233	0.0280	0.0311	1200
1350	0.0079	0.0088	0.0158	0.0175	0.0237	0.0262	0.0315	0.0350	1350
1500	0.0088	0.0097	0.0175	0.0194	0.0263	0.0292	0.0350	0.0389	1500
1650	0.0096	0.0107	0.0193	0.0214	0.0289	0.0321	0.0385	0.0428	1650
1800	0.0105	0.0117	0.0210	0.0233	0.0315	0.0350	0.0421	0.0467	1800
1950	0.0114	0.0126	0.0228	0.0253	0.0342	0.0379	0.0456	0.0505	1950

A<sub>eff</sub>: One-way horizontal and alternating horizontal air discharge  
 A<sub>eff</sub> WS: Alternating angled air discharge



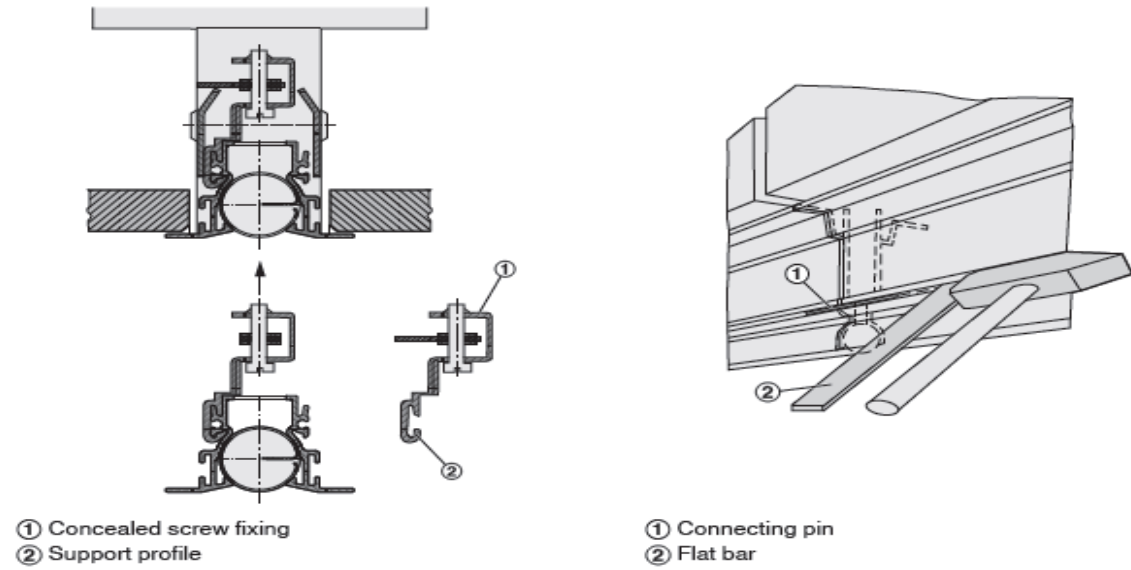
## SD35 QUICK SELECTION TABLE

Qv (m³/h)	L	1 SLOT	2 SLOT	3 SLOT	4 SLOT
50	NR	20			
	Pt (Pa)	4,0			
	Vt (m/s)	0,12			
70	NR	25			
	Pt (Pa)	8,0			
	Vt (m/s)	0,16			
100	NR	30			
	Pt (Pa)	16,0			
	Vt (m/s)	0,21			
120	NR	35	20		
	Pt (Pa)	23,0	13,0		
	Vt (m/s)	0,24	0,17		
150	NR	40	25		
	Pt (Pa)	36,0	21,0		
	Vt (m/s)	0,30	0,20		
180	NR		30	25	
	Pt (Pa)		30,0	10,0	
	Vt (m/s)		0,23	0,18	
200	NR		35	25	20
	Pt (Pa)		35,0	12,0	6,0
	Vt (m/s)		0,26	0,20	0,17
220	NR		40	30	25
	Pt (Pa)		44,0	15,0	8,0
	Vt (m/s)		0,28	0,22	0,18
250	NR			35	25
	Pt (Pa)			19,0	10,0
	Vt (m/s)			0,24	0,20
280	NR			35	30
	Pt (Pa)			24,0	13,0
	Vt (m/s)			0,27	0,22
300	NR				30
	Pt (Pa)				14,0
	Vt (m/s)				0,23
320	NR				35
	Pt (Pa)				16,0
	Vt (m/s)				0,25

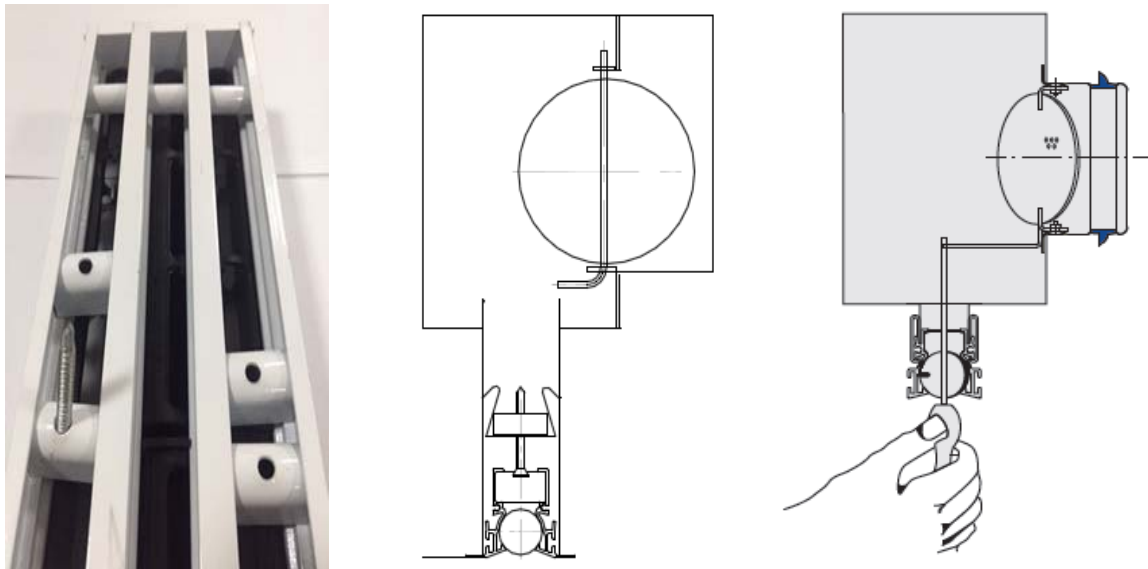
SELECTION TABLE  
CRITERIAS  
Horizontal blow  
Ceiling Height  
H: 3 ±0.5 mt  
Vt: 0.25 m/s

**MOUNTING DETAILS :**

**1 – CLIPS MOUNTING**



**2 - WITH BRIDGE MOUNTING**





**PLENUM BOX MOUNTING :**



Nominal Length up to 1500mm: one sleeve

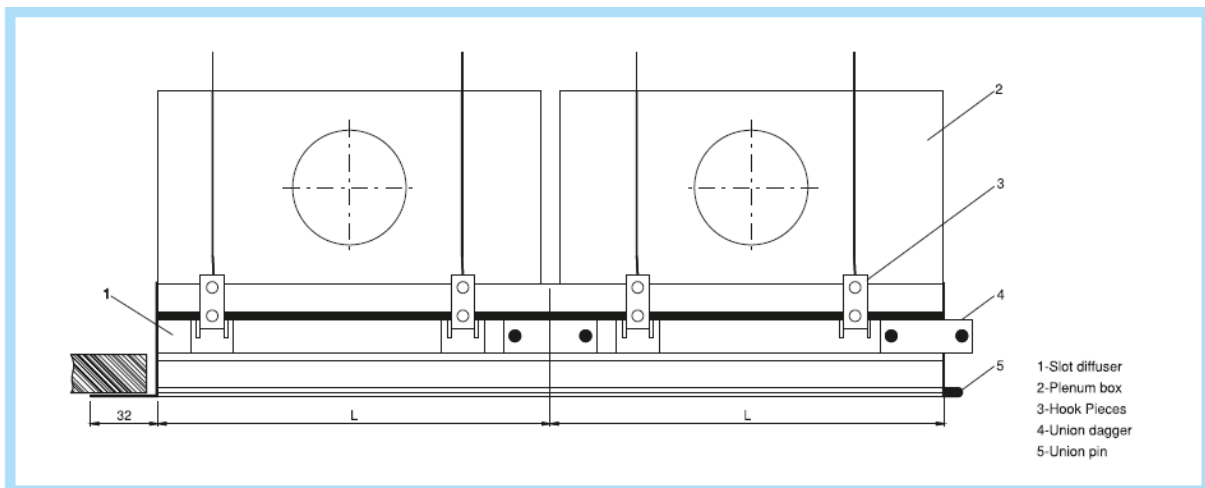


Nominal Length 1650-1950mm: two sleeve

**Number of sleeve and sleeve diameter**

Nominal length	SD35 - 1 Slot		SD35 - 2 Slot		SD35 - 3 Slot		SD35 - 4 Slot	
	ØD							
	mm							
600 – 1500	1 x 98	1 x 123	1 x 123	1 x 138	1 x 138	1 x 158	1 x 158	1 x 198
1650 – 1950	2 x 98	2 x 123	2 x 123	2 x 138	2 x 138	2 x 158	2 x 158	2 x 198

**Slot Diffuser Continues Installation**



**ESTHETIC MODELS :**



Golden Ivory – 2 slots



Golden Ivory – 4 slots



**ORDER CODES**

SD35	00	06	PFD	RAL9010	SM	L 1000	S1
							NUMBER OF DIFFUSER SLOTS (Between 1 to 4)
						L: Length	
						00: No Mounting BM: Bridge Mounting	
						00: No coating EX: Eloxal Coating RAL----: Oven Drying Coating	
00: No Plenum Box PL: With Plenum Box		00: Non-insulated 06: Insulated (6mm) 09: Insulated (9mm)					
000: Without Damper PFD: Plenum Box with Perforated Damper							