

[Skip to content](#)

Manuals+

User Manuals Simplified.



Puravent 423556 TSOI-T-160-T Perforated Face Multidirectional Supply Extract Diffuser User Manual

[Home](#) » [puravent](#) » Puravent 423556 TSOI-T-160-T Perforated Face Multidirectional Supply Extract Diffuser User Manual

Contents [hide](#)

[1 Puravent 423556 TSOI-T-160-T Perforated Face Multidirectional Supply Extract Diffuser](#)

[2 Description](#)

[3 Dimensions](#)

[4 Diagram](#)

[5 Documents / Resources](#)

[5.1 References](#)

[6 Related Posts](#)



Puravent 423556 TSOI-T-160-T Perforated Face Multidirectional Supply Extract Diffuser



Description

Function

The TSOI-T is a perforated facemultidirectional ceiling diffuser with adjustable deflectors set internally. The diffuser is suitable for both supply and extract applications. As standard all side entry plenums are insulated and Top entry

plenums are non insulated. Internal deflectors permit the diffuser to be set for Air pattern direction of 1 to 4 way. Diffuser and deflectors are as standard powder painted to RAL9010.

Product Description

TSOI-T-ØD-T : Top-entry perforated plate supply diffuser

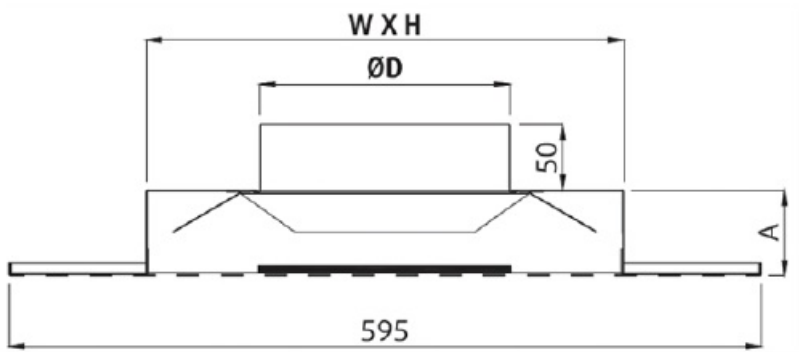
Features

- Supply and extract functionality
- Suitable for chilled, isothermal or warmed air
- Ideal for modular ceiling tile replacement
- High entrainment and mixing of surrounding air
- Short throw

Selection Criteria

- Ceiling Height 2.7m
- Temperature Differential (Room/Supply air) ≤10K
- Lt, throw velocities shown in the table are for 0.375m/s to achieve air velocity of 0.15m/s in the occupied zone.

Dimensions



Type	WxH	ØD	A
125	240X240	123	61
160	300X300	158	61
200	380X380	198	65
250	480X480	248	80
315	560X560	313	86

Ordering codes

Product series	TSOI	T	ØD	S
Plaster ceiling installation	P			
T-Bar ceiling 595x595 installation	T			
Inlet size	125			
	160			
	200			
	250*			
	315*			
Top entry plenum	T			
Side entry plenum	S			

Documentation

TSOI-T GB.pdf (348,08kB)

Diagram

TSOI			4-Way Supply				
m³/h	l/s		125	160	200	250	315
100	28	L _{0.25}	0.5	0.4			
		ΔP _t (Pa)	8	3			
		L _{WA}	-	-			
150	42	L _{0.25}	0.8	0.6			
		ΔP _t (Pa)	16	7			
		L _{WA}	35	-			
200	56	L _{0.25}	1	0.8	0.7		
		ΔP _t (Pa)	33	12	5		
		L _{WA}	43	29	-		
250	69	L _{0.25}	1.3	1	0.8	0.5	
		ΔP _t (Pa)	48	18	8	3	
		L _{WA}	52	37	-	-	
300	83	L _{0.25}		1.2	1	0.8	
		ΔP _t (Pa)		28	12	5	
		L _{WA}		46	28	-	
400	111	L _{0.25}			1.3	1.1	0.9
		ΔP _t (Pa)			20	9	4
		L _{WA}			39	-	-
500	139	L _{0.25}			1.6	1.4	1.2
		ΔP _t (Pa)			32	13	6
		L _{WA}			45	33	-
600	167	L _{0.25}				1.7	1.4
		ΔP _t (Pa)				18	9
		L _{WA}				40	29
750	208	L _{0.25}					1.7
		ΔP _t (Pa)					13
		L _{WA}					37
1000	278	L _{0.25}					23
		ΔP _t (Pa)					24
		L _{WA}					48

- L t0.25 = Throw value (m) with terminal velocity of 0.25 m/s
- LWA = Sound Power level in dB (A)
- ΔPt = Total pressure Drop (Pa)

With room height of 2.7m, average occupied room velocity of 0.15m/s can be achieved The diffusers and plenums are tested together as one unit

Selection Example

Selection Criteria

- Ceiling Height 2.7 m
- Temperature Differential (Room to Supply air) ΔT of -10K
- Air Velocity In The Comfort Zone Vt = 0.15 m/s

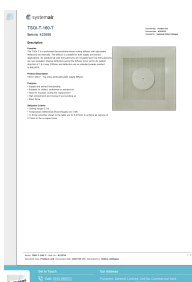
Result

- TSOI-T-ØD-S
- Air Volume QV = 111 l/s or 400 m3/h
- Throw Lt = 1.1 m
- Pressure Drop ΔPt = 9Pa
- Noise Level LWA ≈ <25dBA

Get In Touch

- Call: 0845 6880112
- Email: info@adremit.co.uk

Documents / Resources



[Puravent 423556 TSOI-T-160-T Perforated Face Multidirectional Supply Extract Diffuser](#) [pdf]
 User Manual
 423556, TSOI-T-160-T Perforated Face Multidirectional Supply Extract Diffuser, 423556 TSOI-T-160-T Perforated Face Multidirectional Supply Extract Diffuser, Face Multidirectional Supply Extract Diffuser, Multidirectional Supply Extract Diffuser, Supply Extract Diffuser, Diffuser

References

- [🌐 Text.name](#)

[Manuals+](#),

- [home](#)
- [privacy](#)