

PRODUCT BROCHURE

SMARTEMP[®]
IN COMFORT



Linear Multistream Wall Diffuser

LMW-AD

DESCRIPTION

The SMARTEMP® Linear Multistream Wall Diffuser, type LMW-AD (figure 1), is a multi-nozzle linear slot diffuser with adjustable discharge direction that can be flush mounted to the side of a wall or bulkhead.

The diffuser's 1 to 4-row linear slots comprise a multitude of nozzle barrels each with vertical discharge direction adjustment to produce highly inductive discharge by breaking up the supply air stream into a multitude of miniature jets.

The barrel nozzles are made of black polycarbonate, each with an adjustable guide vane, and are located in aluminium extrusions that are anodised or powder coated. Each guide vane can be easily adjusted to alter discharge direction up or down (figure 2).

Intense mixing at the diffuser discharge face strongly dilutes the supply air stream with large quantities of room air. High induction provides rapid temperature equalisation of the supply air stream with room air, preventing cold air dumping, thereby ensuring uniform temperature distribution (no cold and draughty or hot and stagnant spots) and high comfort levels in the space.

Heating performance is also improved.

The stable discharge characteristics of the diffuser over a wide range of supply air temperatures and volume flow rates make the LMW-AD suitable for standard or low temperature air conditioning systems, with constant flow or VAV, whilst maintaining uniform temperature distribution and high levels of draught-free comfort in the occupancy space.

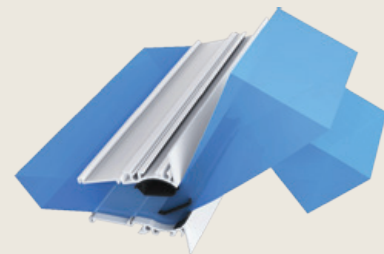
Linear Multistream Ceiling Diffuser

LMW-AD : 022017

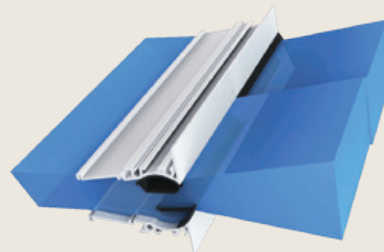


Figure 1

GUIDE VANE ADJUSTMENT



Position C

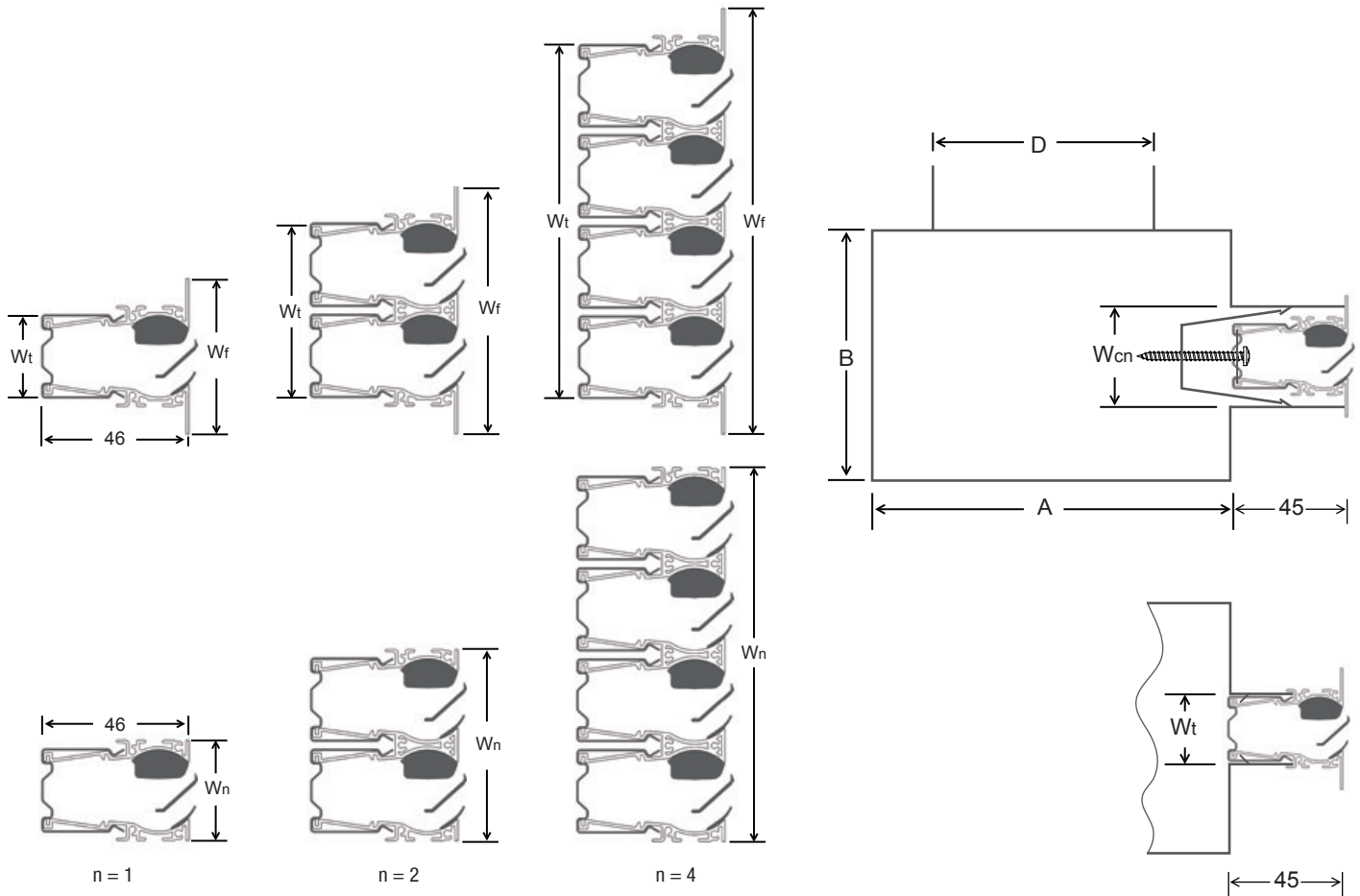


Position E

Figure 2

Maximum ΔT:	-10 K cooling for 1 or 2-slots
	-9 K cooling for 3-slots
	-8 K cooling for 4-slots
	+8 K heating for < 3 m height
	+5 K heating for < 4 m height

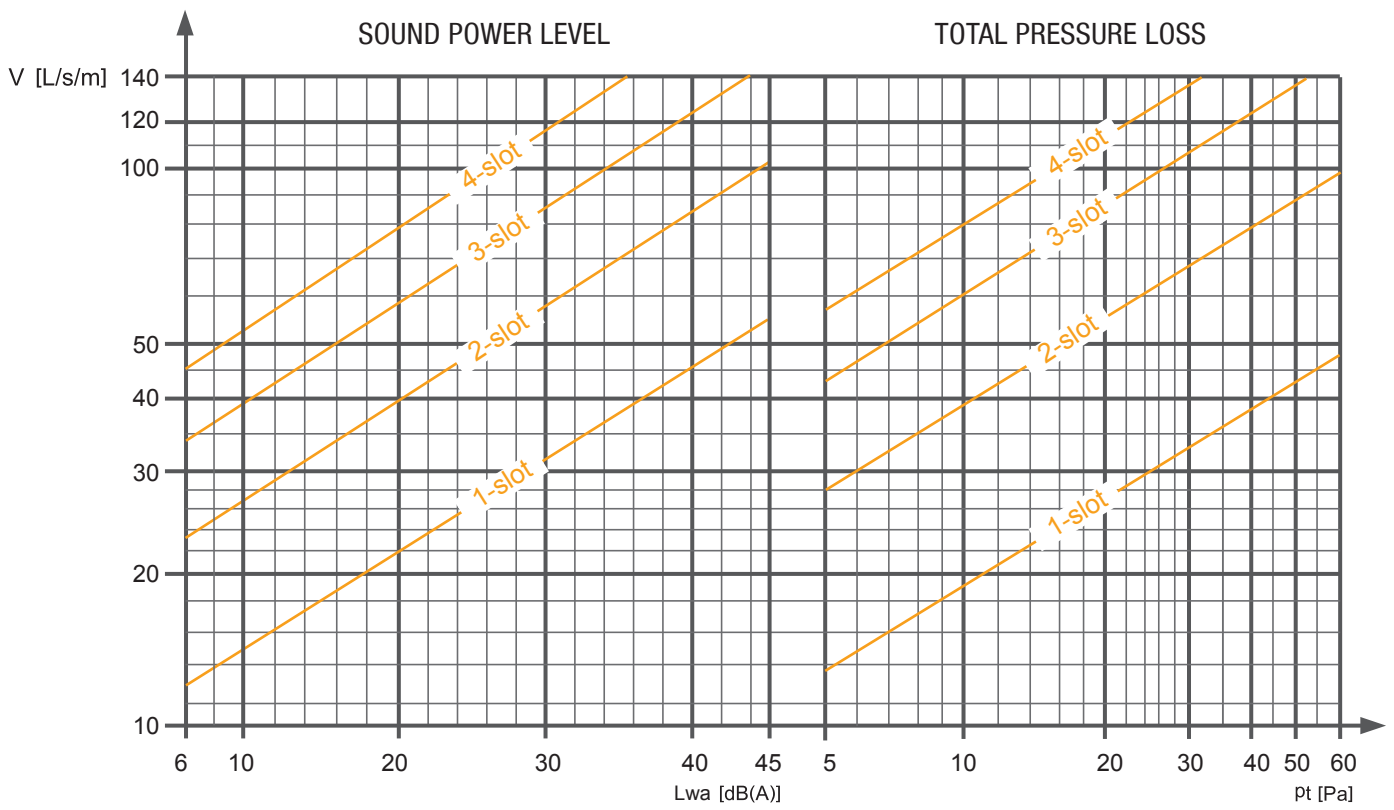
TECHNICAL DATA



DIMENSIONS

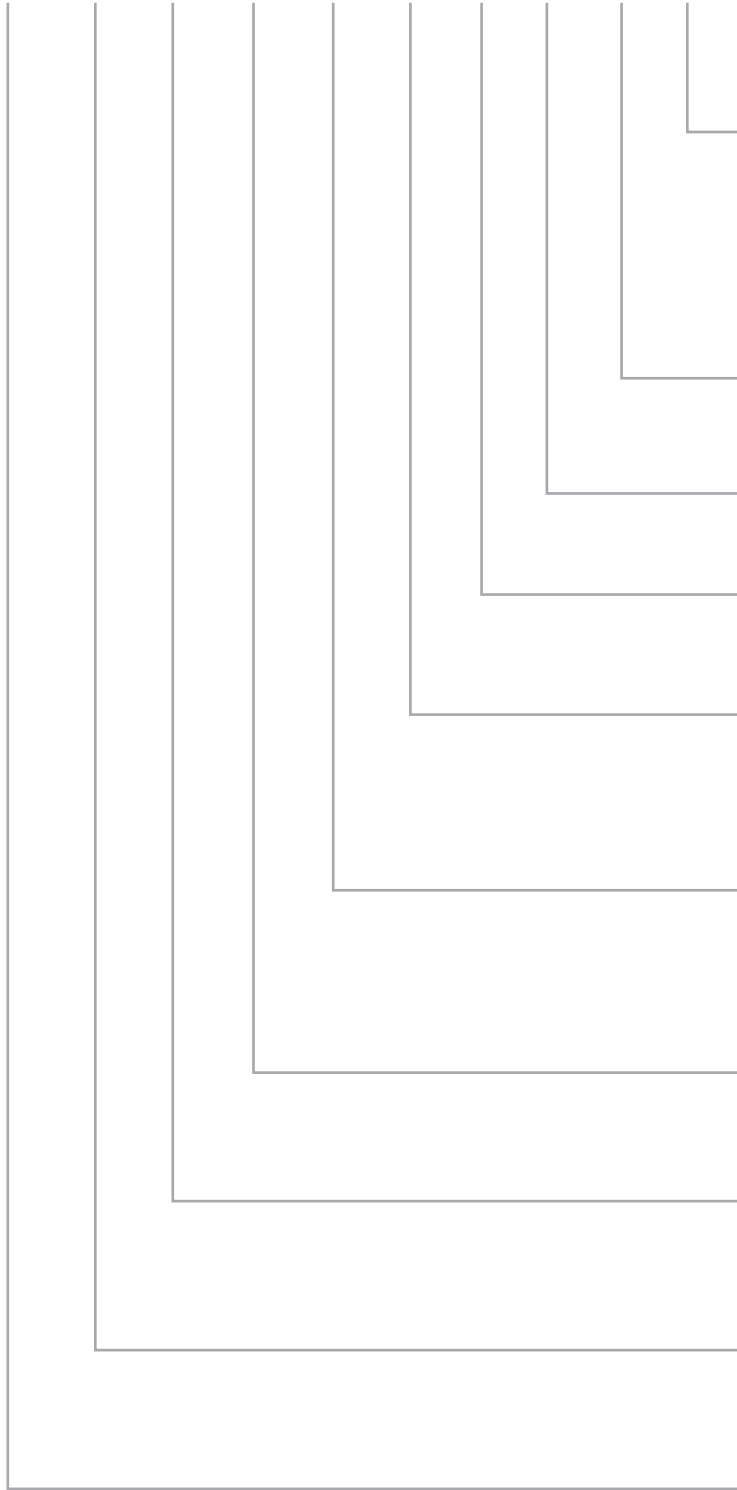
Number of Slots (n)	1	2	3	4
Width Flangeless Face W_n [mm]	31	59	87	115
Width Flanged Face W_f [mm]	48	76	104	132
Width of Diffuser Throat W_t [mm]	27	55	83	111
Width of Plenum Neck W_{cn} [mm]	41	68	96	123
Recommended Plenum Depth A [mm]*	155	180	230	230
Recommended Plenum Height B [mm]*	81	109	137	165
Recommended Spigot Dimension D [mm]*	125	150	200	200

*Check exact dimension with local supplier



ORDER DETAILS

LMW-AD- _____



ACCESSORIES:

- 0* - Diffuser only.
- Kt - With uninsulated connection box clipped to diffuser throat.
- Kn - With uninsulated connection box screwed to into diffuser neck.
- KIt - With internally insulated connection box clipped to diffuser throat.
- KIn - With internally insulated connection box screwed into diffuser neck.

BARREL COLOUR:

- B* - Black.
- W - White.

PROFILE COLOUR:

- RAL_____ (Signal White RAL9003* standard).

AIR PATTERN:

- 2DE* - horizontal and inclined.

FIXING :

- 0* - Without accessories / by others.
- EX - Expansion bracket.

DIFFUSER ENDS:

- 0* - Without end flange.
- E1 - 1 End flange + 2 joining strips.
- E2 - 2 End flanges.
- J - 2 Joining strips.

PROFILE TYPE:

- F* - With side flanges.
- N - Flangeless.

NUMBER OF SLOTS:

- 1, 2, 3, 4.
- Other slots available on request.

NOMINAL LENGTH:

- 1200.
- 1500.
- Other lengths available on request.

MODEL:

- Linear Multistream Wall - Adjustable Direction.

Note:

* Standard, if no type code entered

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