

# NSP

## FLOOR SLOT DIFFUSER



### Description:

An aluminium slot diffuser floor mounted with fixed vanes.



### Intended use

NSP slot diffusers are used in floor ventilation systems with constant or variable air volume. They are recommended for rooms with large glazed surfaces and increased relative humidity levels (e.g. swimming pool halls). They create an air curtain that prevents rooms from cooling down and condensation from forming on window surfaces.

### Design

NSP floor slot diffusers may have from one to six slots arranged with the following spacing: 8, 10 or 12 mm. The slots have fixed vanes arranged for vertical air supply. NSP vanes are made of natural anodised aluminium and the plenum box is made of sheet aluminium. A slot diffuser of non-standard length L can be manufactured on request.

Table 1. Diffuser width for different slot widths A [mm].

Number of slots	Outlet width A [mm]			Box width C [mm]		
	s = 8 [mm]	s = 10 [mm]	s = 12 [mm]	s = 8 [mm]	s = 10 [mm]	s = 12 [mm]
1	18	20	22	113	115	117
2	31	35	39	126	130	134
3	44	50	56	139	145	151
4	57	65	73	152	160	168
5	70	80	90	165	175	185
6	83	95	107	178	190	202



Technical data of the diffusers, including pressure drop, noise level and stream ranges, is available at smay.eu, in the "Flow Characteristics for Grilles and Diffusers" document.

### Dimensions

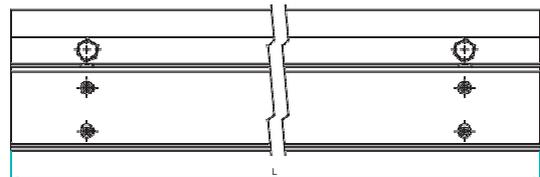
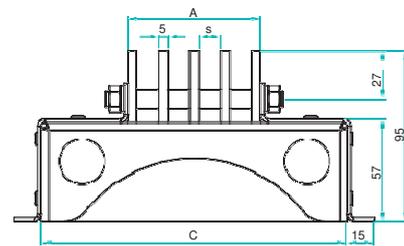


Figure 1. NSP diffuser dimensions without terminal units. (standard).

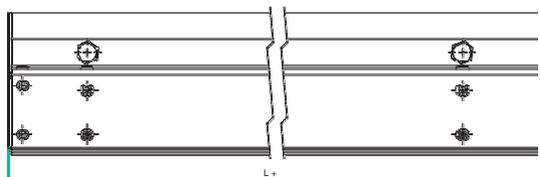


Figure 2. NSP dimensions with one terminal unit.

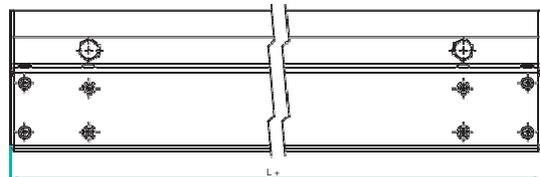


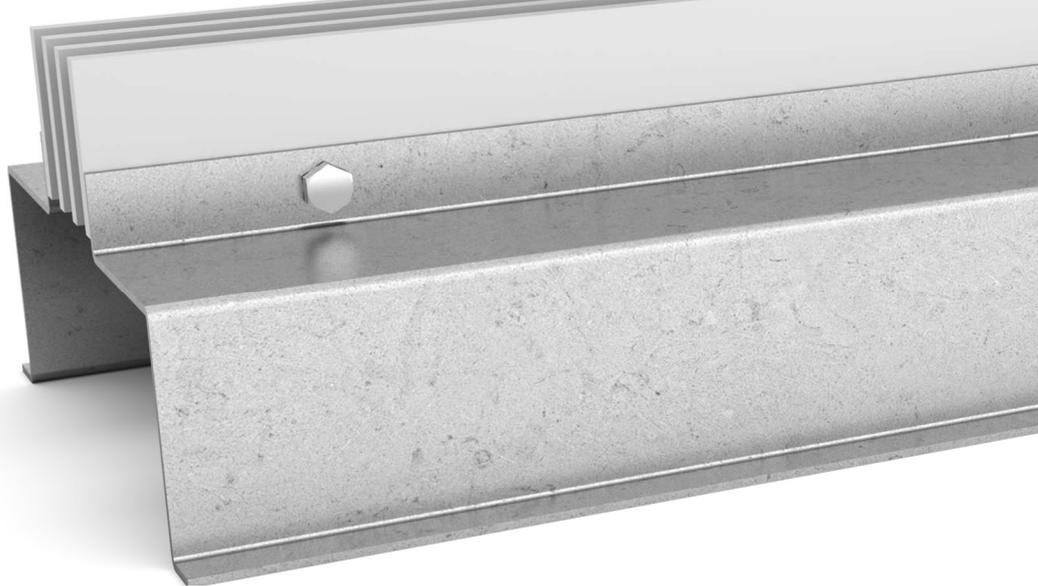
Figure 3. NSP dimensions with two terminal units.

Maximum diffuser length:

- **L = 2500 mm**

Diffusers longer than those listed above are made up of smaller modules and combined on site. Other dimensions are only available on special request after consultation with the sales department.

Mainimum diffuser length is **100 mm**.



## Installation

The diffuser is embedded in a prepared mounting hole, which constitutes a ventilation duct.

The diffuser may be fixed by pouring mortar or concrete.



Figure 4. NSP mounting.



Figure 5. NSP diffuser terminal unit.

# NSP – Floor slot diffuser

When ordering, please provide information in accordance with the following pattern:

NSP - <S> - <K> - <L> - <Z>

Where:

<b>S</b>	Diffuser slots width in mm: 8, 10, 12
<b>K</b>	Number of slots 1, 2, 3, 4, 5, 6
<b>L</b>	Diffuser length in mm: 500, 1000, 1500, 2000, 2500 or other
<b>Z</b>	Terminal units*

**None** – No caps at the diffuser ends

- 1 – A cap at one end
- 2 – Caps at both ends

\* Optional values, if not specified, the default values will be used

Sample order: **NSP-8-4-1500-2**



- Blocks for REVIT software,
- selection range and
- certificates are available

at [www.smay.pl](http://www.smay.pl).