

Operating theatre ceiling – textile version DSS-N

The DSS-N ventilation ceiling with polyester textile is used for air supply in hospitals where a high air exchange rate is required. It is intended to be built into suspended ceilings in operating theatres and intensive care facilities. DSS-N is suitable for OP rooms class Ib as defined in DIN 1946-4.

Description

DSS-N is based on a standard DPS-N perforated ventilation ceiling whose panels are replaced with synthetic textile affixed to stainless steel frames. The ceiling and filter housing is made of either stainless steel or epoxy coated sheet steel.

The synthetic textile allows laminar flow, as the tight weave of the fibers prevents turbulent flow from forming on the surface. The polyester textile is DIN 4799 compliant in terms of minimum hygienic requirements for operating rooms. Moreover, it has all the necessary certificates for use in operating theatres, as well as high resistance to aggressive disinfectants. The synthetic textile may be single-layer or double-layer. The second layer allows the air to be evenly distributed across the entire surface before it enters the room.

The units are made of one, two or four parts, depending on size. All elements are assembled with screws on site.

The supply ceiling is also available with a transition for an operation light with dimensions of 300 x 300 mm. In this case a plate with a round opening for the lamp is attached.

The synthetic mask is fastened with screws which require no special tools.

Depending on project requirements, side or top duct connections are available. The dimensions of the connecting ducts and the number of filters are specified in the table. Inside are connectors for measuring the pressure drop on filters (the difference between the pressure upstream and downstream of the filter, which indicates the dirtiness of the filter), as well as a connection for the SCAN test.

In accordance with applicable standards, a scan test must be performed after each filter replacement.

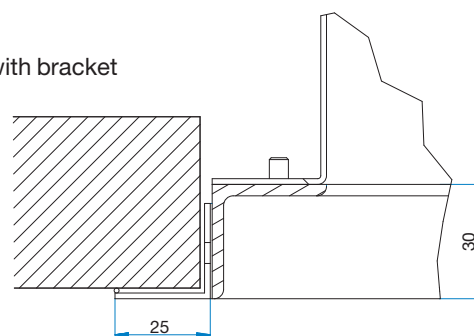
Accessories

See chapter Accessories.



Installation

Z - installation with bracket



X - installation without bracket

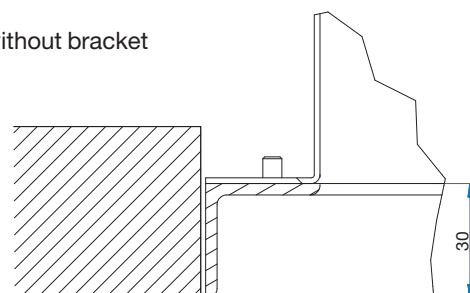
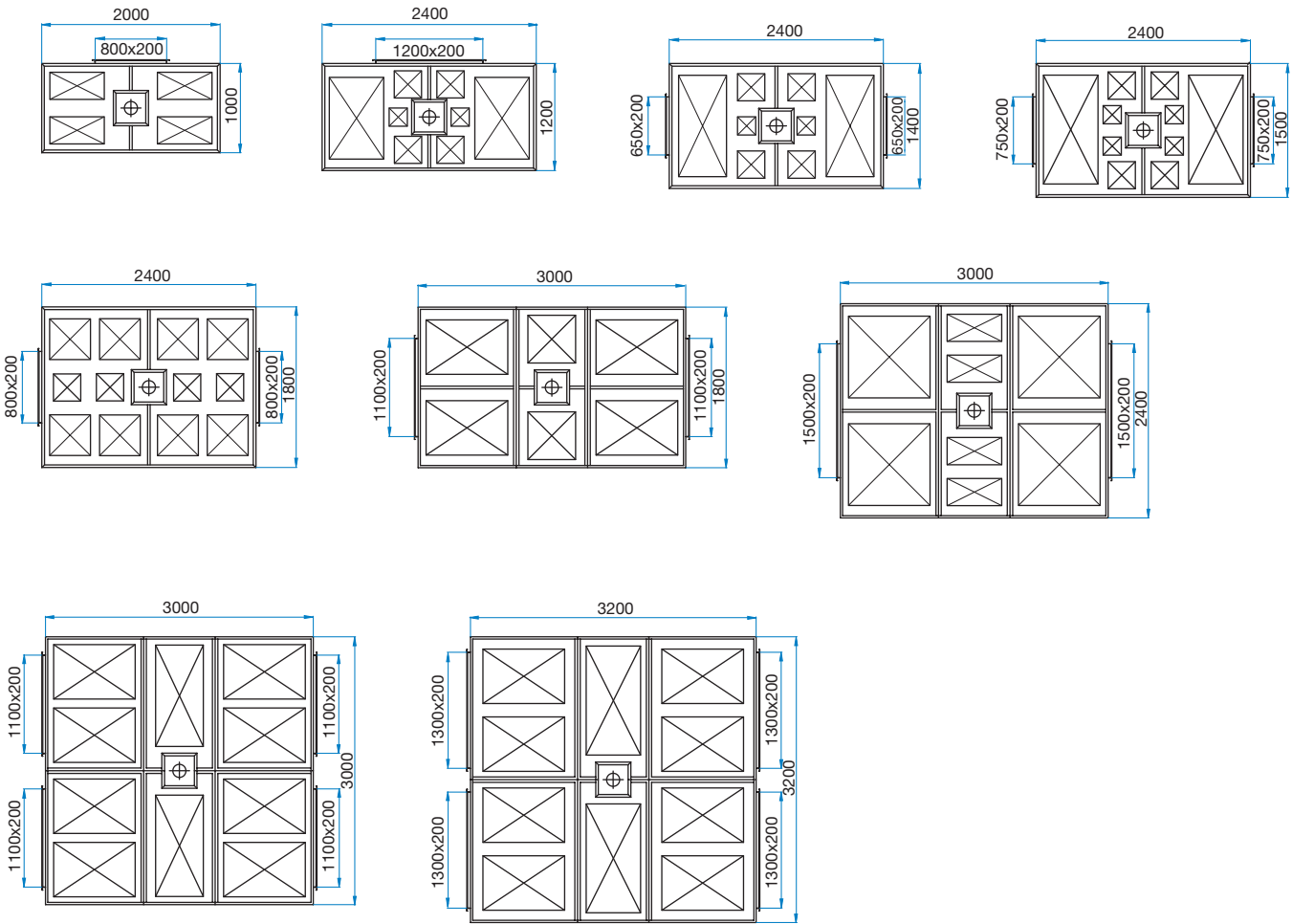


Table 1: DSS-N technical data

B	H	H _{DPS}	Q [m³/h]	Weight [kg]	Connection flange
2000	1000	450	1200	110	200x800
2400	1200	450	2400	150	200x1200
2400	1400	450	2700	165	two connections 200 x 650
2400	1500	450	3080	180	two connections 200 x 650
2400	1800	450	3300	230	two connections 200x800
3000	1800	450	4500	275	two connections 200x1100
3000	2400	450	6000	325	two connections 200x1500
3000	3000	450	9000	405	four connections 200 x 1100
3200	3200	450	10800	490	four connections 200 x 1300

DSS-N - positions of spigots and HEPA filters



Ordering key

DSS-N – B x H / L / S / Z / H13 / RAL

1	2	3	4	5	6	7
1 Type						
DSS-N	Laminar flow ceiling with textile diffuser					
2 Dimensions						
B x H	Dimension B x H in mm (see table 1)					
3 Lighting						
L	Light transition					
-	Without light transition					
3 Spigot						
S	Side entry spigot					
V	Vertical entry spigot					
4 Installation						
Z	With end bracket					
-	Without end bracket					
5 Filter type						
H13	≥ 99,95% efficiency - filter classification EN 1822:2010					
H14	≥ 99,995% efficiency - filter classification EN 1822:2010					
5 Finish						
RAL	Steel epoxy coated in RAL 9010					
INOX	Stainless steel (AISI 304)					

Note:

Filters are included in price.

Other dimensions are available on request.