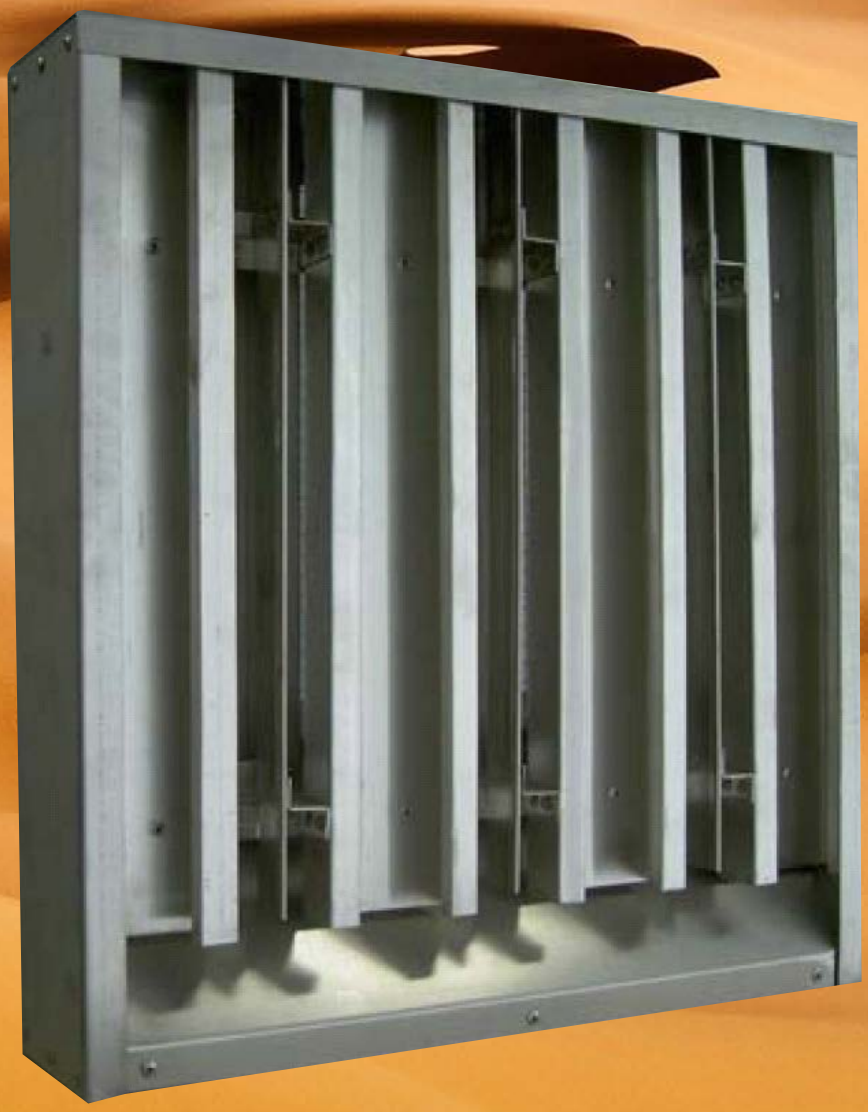
SANDTRAP

In arid areas the provision of natural inlet ventilation is essential in commercial and industrial premises if a satisfactory environment is to be maintained. Yet providing this ventilation invariably allows sand to penetrate into the building; causing discomfort to personnel and the possibility of damage to machinery.

The Colt Sandtrap louvre system provides the necessary ventilation while separating the sand from the incoming air. The Colt Sandtrap louvre has been tested to EN 13181:2001. (Refer to performance table overleaf).



HOW IT WORKS

Airborne particles pass through a series of deflector louvres arranged so that the sand hits the louvres. The sand's forward momentum is arrested and the particles fall out of the airstream. The sand falls out of the bottom of the louvre panel. Because of the panel's configuration, additional filters are not required and, having no moving parts, it is virtually maintenance free.

CONSTRUCTION AND APPEARANCE

The Colt Sandtrap louvre is normally manufactured from locally produced aluminium (to BS 1470 alloy, 1060A: temper H14) with a natural mill finish. If required it can be supplied with a variety of finishes - anodised, polyester powder or 2 pack epoxy. In addition, the louvre panels can be manufactured from stainless steel or galvanized mild steel. It is recommended that galvanized mild steel is finished in polyester powder paint.

The panels are 130mm in depth and are supplied in pre-assembled modules to a maximum size of 2.438m x 2.438m.

OPTIONAL ACCESSORIES

Bird and insect guards are available, usually fitted to the panels in the factory. Slight modifications to the basic design and profiles can be incorporated to suit specific requirements i.e. extended cills, flashings etc.

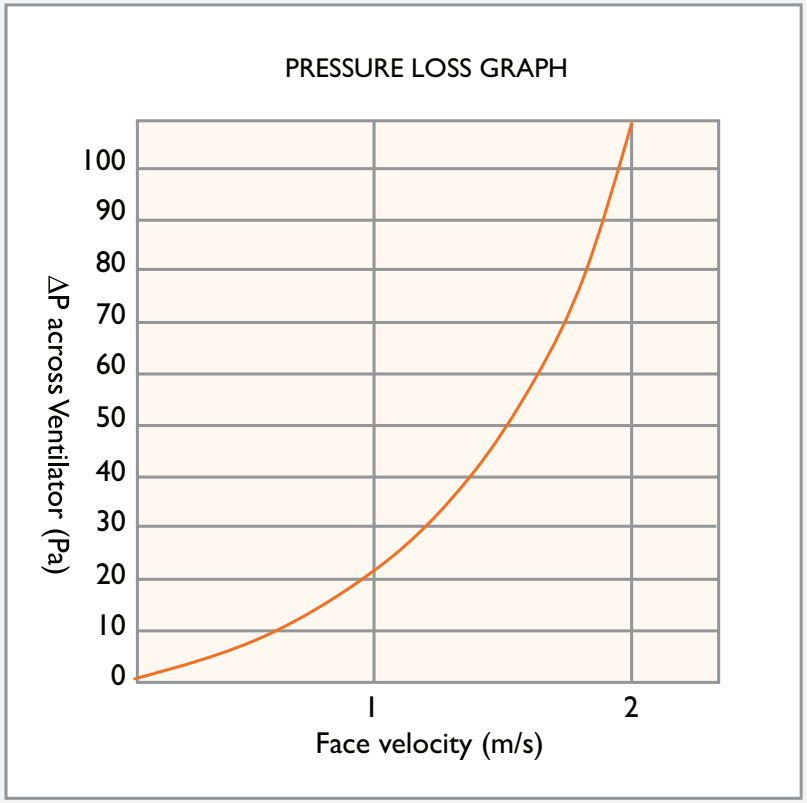
TESTING

The Colt Sandtrap louvre has been independently tested and certified to EN 13181 : 2001 in the United Kingdom by the Building Services Research and Information Association (BSRIA). The louvre has been tested for sand elimination effectiveness and the pressure drop characteristics.

Copies of the certificates are available on request.

The Colt Sandtrap louvre is fitted with a unique baffle strip between the front louvre channels to effectively improve performance and efficiency giving the louvre an aerodynamic coefficient of 0.15.

PERFORMANCE



The sand elimination tests were carried out at 5 different airflow rates and provided the following results in accordance with EN 13181:2001:

COLLECTION EFFICIENCY %	
Air face velocity m/s	Effetiveness
0.5	97.6%
1.3	65.1%
2.0	34.2%
2.81	16.3%
3.51	14.7%

The aerodynamic coefficient of the standard unit is 0.15.