

Introduction

DRAGON metal acoustic ceilings are artificial functional acoustic solutions. Noise is absorbed when the sounds are directed to specific zones. Thus, the characteristics of the metal panel like perforation patterns and acoustic inlay like its structure and volume are to influence the acoustic ability and feature in a indoor space in order to meet any specific expectations.

產品介紹

天龍牌 隔音金屬天花產品能夠有效解決有關問題。當發出噪音之來源在指定的吸音範圍內，噪音經過隔音物料後，分量則被減少。在室外或室內的環境下，天花板及隔音物料的特徵將影響它的隔音能力及特性，如天花板的佈孔模式及隔音物料的成份等，最終目的是為了迎合不同程度的隔音需求。

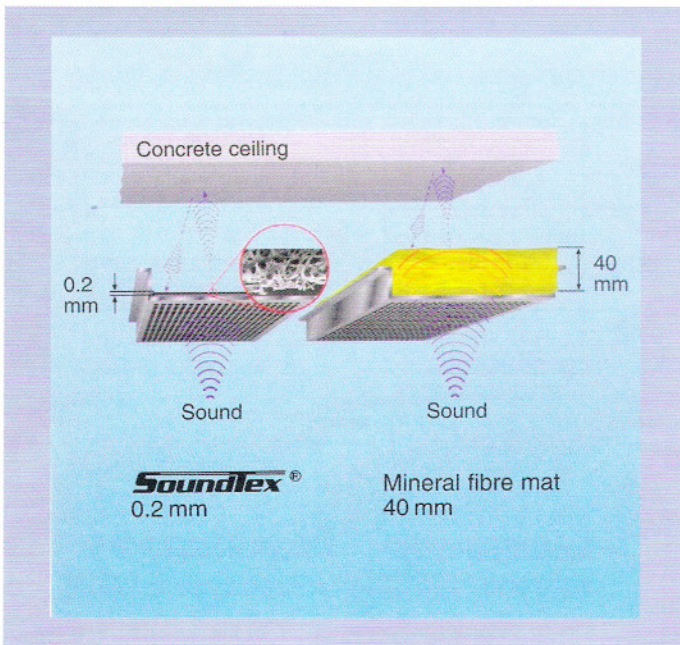
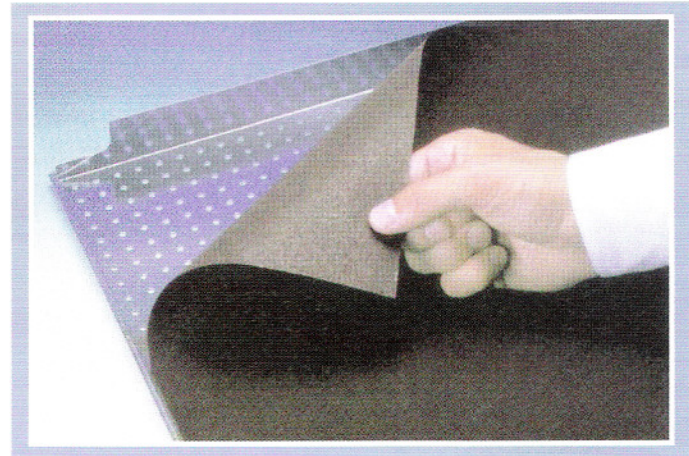


FIG. A : The relationship between the thickness of acoustic fleece and the volume of sound absorption

(圖A：吸音棉的厚度與吸音量的關係)

Sound Absorption

"**SOUND ABSORPTION**" is a sound dissipation. It can be achieved by means of very thin absorbers presenting appropriate sound impedance (FIG. A). For sound absorption, the propagation of sounds is absorbed by converting sound energy into thermal energy. Materials with sound absorbing properties are called sound-absorbing materials.

隔音

"**隔音**"是指阻隔大部份的聲音的進入。圖(A)所示，使用十分稀薄的隔音物料便可以達到相當的噪音阻隔。隔音的原理是把聲音傳播之能量轉換成熱能吸收。擁有阻隔噪音特性之材料均稱為"隔音材料"。

Sound Absorption Performance

Acoustic non-woven can also be used for room to room sound attenuation purposes (standard - noise level difference) in combination with a suspended ceiling design. According to DIN EN 20140-9 or FIG. B, our ceiling products achieved an excellent result. A test was carried out with a suspended ceiling with a (1) Hole diameter of 2.5mm, (2) 16% open area and (3) a ceiling cavity of 50, 200 and 400mm.

隔音能力

非纖維性隔音紙與吊掛式天花設計組合，可達到不同空間之間的噪音阻隔（標準噪音水平差別）。根據DIN EN 20140-9標準或圖(B)顯示，我們的天花產品得到了極佳的測試結果。被測試的吊掛天花板詳細資料如下：

- (1) 孔直徑：2.5mm
- (2) 開放面積比率：16.0%
- (3) 天花板容量：50、200及400mm

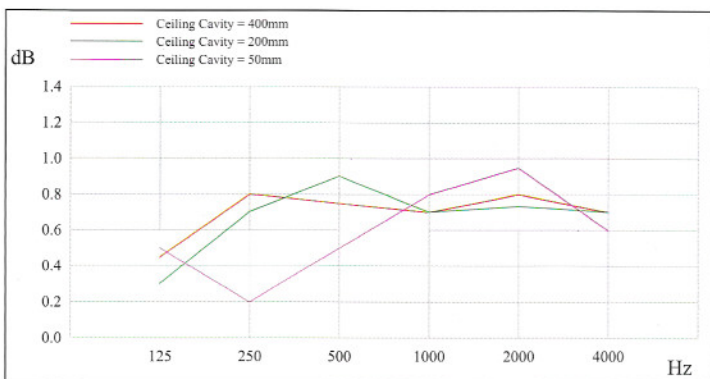
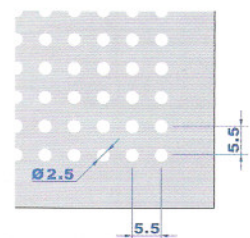


FIG. B : The Sound Absorption Performance Range —
(圖B：吸音系數圖表)

Measurement (測試數據)

- Hole Diameter : 2.5 mm (孔直徑)
- Pitch : 5.5mm (孔距)
- Open Area : 16% (開放面積比率)



Perforated pattern (佈孔形式)