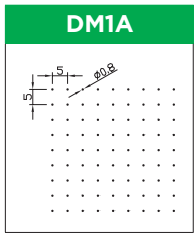




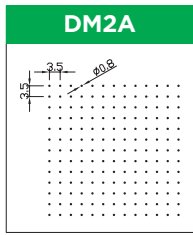
USG BORAL METAL CEILINGS PERFORMANCE GUIDE



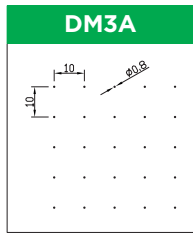
Standard Perforation Pattern



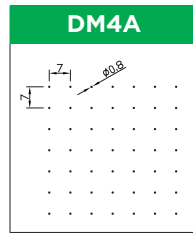
DM1A
Hole Size
 Dia. 0.8mm
Pitch
 5.0mm
Open Area
 2.0%



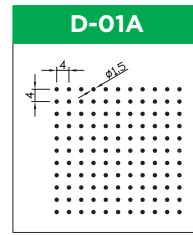
DM2A
Hole Size
 Dia. 0.8mm
Pitch
 3.5mm
Open Area
 4.0%



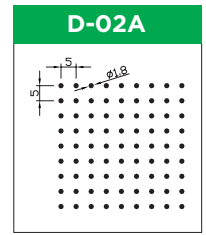
DM3A
Hole Size
 Dia. 0.8mm
Pitch
 10mm
Open Area
 0.5%



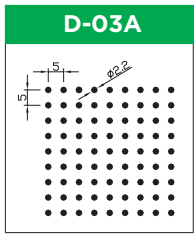
DM4A
Hole Size
 Dia. 0.8mm
Pitch
 7.0mm
Open Area
 1.0%



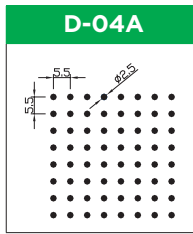
D-01A
Hole Size
 Dia. 1.5mm
Pitch
 4.0mm
Open Area
 11.0%



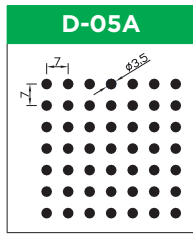
D-02A
Hole Size
 Dia. 1.8mm
Pitch
 5.0mm
Open Area
 10.0%



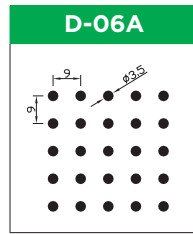
D-03A
Hole Size
 Dia. 2.2mm
Pitch
 5.0mm
Open Area
 15.0%



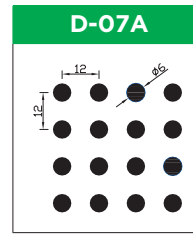
D-04A
Hole Size
 Dia. 2.5mm
Pitch
 5.5mm
Open Area
 16.0%



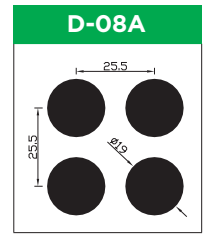
D-05A
Hole Size
 Dia. 3.5mm
Pitch
 7.0mm
Open Area
 20.0%



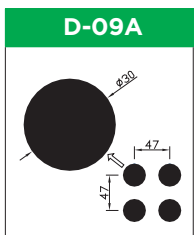
D-06A
Hole Size
 Dia. 3.5mm
Pitch
 9.0mm
Open Area
 12.0%



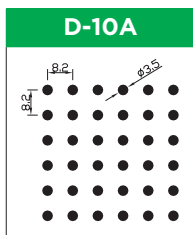
D-07A
Hole Size
 Dia. 6.0mm
Pitch
 12.0mm
Open Area
 20.0%



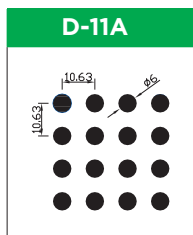
D-08A
Hole Size
 Dia. 19.0mm
Pitch
 25.5mm
Open Area
 44.0%



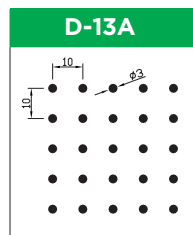
D-09A
Hole Size
 Dia. 30.0mm
Pitch
 47.0mm
Open Area
 32.0%



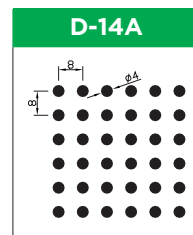
D-10A
Hole Size
 Dia. 3.5mm
Pitch
 8.2mm
Open Area
 14.0%



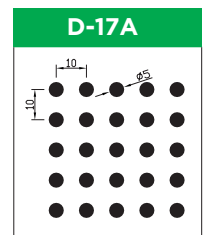
D-11A
Hole Size
 Dia. 6.0mm
Pitch
 10.63mm
Open Area
 25.0%



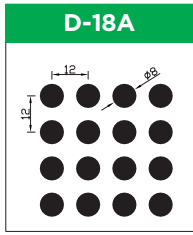
D-13A
Hole Size
 Dia. 3.0mm
Pitch
 10.0mm
Open Area
 7.0%



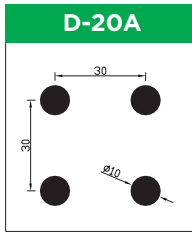
D-14A
Hole Size
 Dia. 4.0mm
Pitch
 8.0mm
Open Area
 20.0%



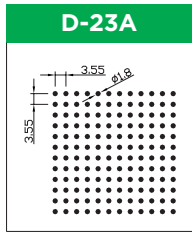
D-17A
Hole Size
 Dia. 5.0mm
Pitch
 10.0mm
Open Area
 20.0%



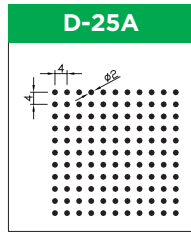
D-18A
Hole Size
 Dia. 8.0mm
Pitch
 12.0mm
Open Area
 35.0%



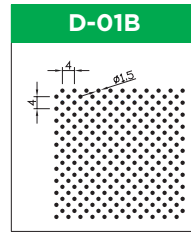
D-20A
Hole Size
 Dia. 10.0mm
Pitch
 30.0mm
Open Area
 9.0%



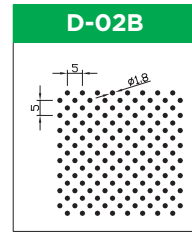
D-23A
Hole Size
 Dia. 1.8mm
Pitch
 3.55mm
Open Area
 20.0%



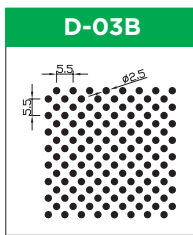
D-25A
Hole Size
 Dia. 2.0mm
Pitch
 4.0mm
Open Area
 20.0%



D-01B
Hole Size
 Dia. 1.5mm
Pitch
 4.0mm
Open Area
 22.0%

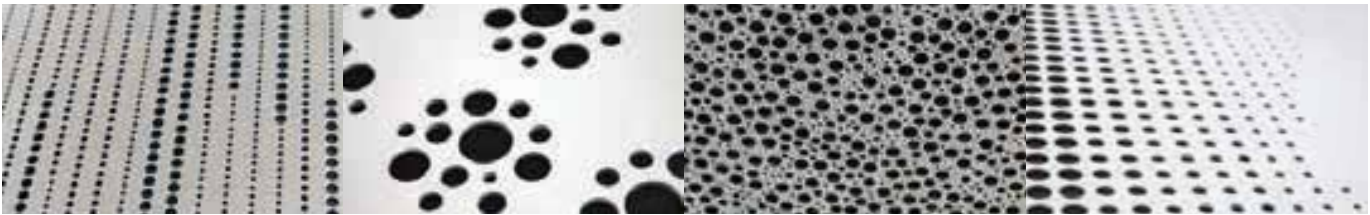


D-02B
Hole Size
 Dia. 1.8mm
Pitch
 5.0mm
Open Area
 20.0%

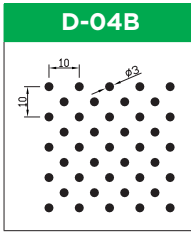


D-03B
Hole Size
 Dia. 2.5mm
Pitch
 5.5mm
Open Area
 32.0%

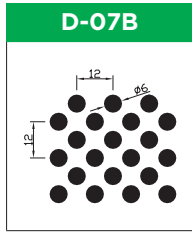
Project Specific Pattern



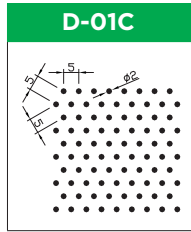
Standard Perforation Pattern



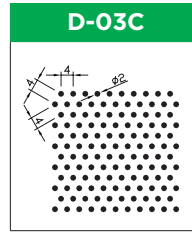
Hole Size
Dia. 3.0mm
Pitch
10.0mm
Open Area
14.0%



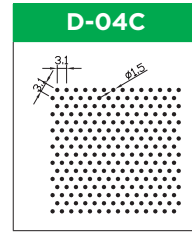
Hole Size
Dia. 6.0mm
Pitch
12.0mm
Open Area
39.0%



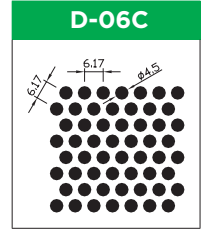
Hole Size
Dia. 2.0mm
Pitch
5.0mm
Open Area
15.0%



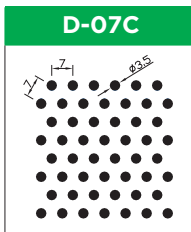
Hole Size
Dia. 2.0mm
Pitch
4.0mm
Open Area
23.0%



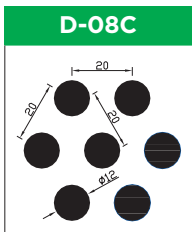
Hole Size
Dia. 1.5mm
Pitch
3.1mm
Open Area
21.0%



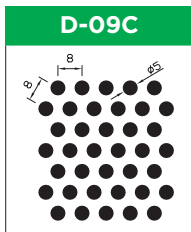
Hole Size
Dia. 4.5mm
Pitch
6.17mm
Open Area
48.0%



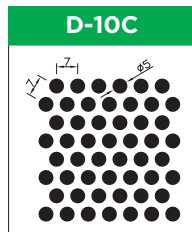
Hole Size
Dia. 3.5mm
Pitch
7.0mm
Open Area
23.0%



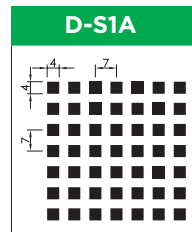
Hole Size
Dia. 12.0mm
Pitch
20.0mm
Open Area
33.0%



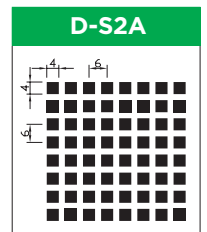
Hole Size
Dia. 5.0mm
Pitch
8.0mm
Open Area
35.0%



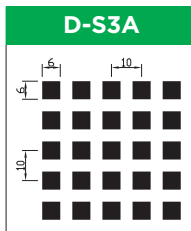
Hole Size
Dia. 5.0mm
Pitch
7.0mm
Open Area
46.0%



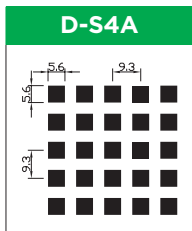
Hole Size
Q.S.
4.0mm x 4.0mm
Pitch
7.0mm x 7.0mm
Open Area
33.0%



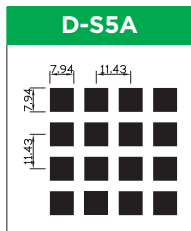
Hole Size
Q.S.
4.0mm x 4.0mm
Pitch
6.0mm x 6.0mm
Open Area
44.0%



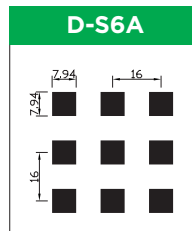
Hole Size
Q.S.
6.0mm x 6.0mm
Pitch
10.0mm x 10.0mm
Open Area
36.0%



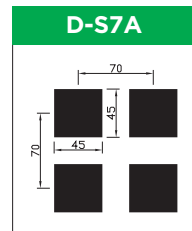
Hole Size
Q.S.
5.6mm x 5.6mm
Pitch
9.3mm x 9.3mm
Open Area
36.0%



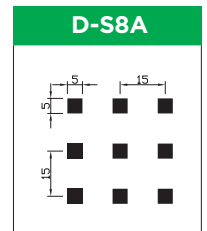
Hole Size
Q.S.
7.94mm x 7.94mm
Pitch
11.43mm x 11.43mm
Open Area
48.0%



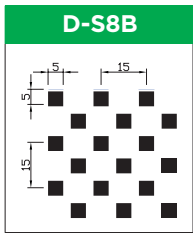
Hole Size
Q.S.
7.94mm x 7.94mm
Pitch
16.0mm x 16.0mm
Open Area
25.0%



Hole Size
Q.S.
4.5mm x 4.5mm
Pitch
70.0mm x 70.0mm
Open Area
41.0%



Hole Size
Q.S.
5.0mm x 5.0mm
Pitch
15.0mm x 15.0mm
Open Area
22.0%

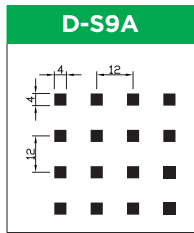


D-S8B

Hole Size
Q.S.
5.0mm x 5.0mm

Pitch
15.0mm

Open Area
22.0%

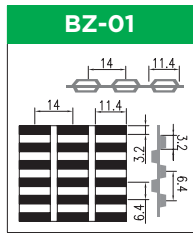


D-S9A

Hole Size
Q.S.
4.0mm x 4.0mm

Pitch
12.0mm

Open Area
11.0%

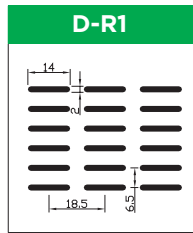


BZ-01

Hole Size
Oblong
3.2mm x 11.4mm

Pitch
6.4mm x 14.0mm

Open Area
40.71%

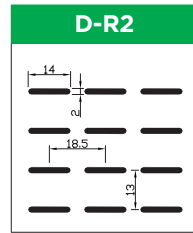


D-R1

Hole Size
Oblong
2.0mm x 14.0mm

Pitch
6.5mm x 18.5mm

Open Area
23.0%

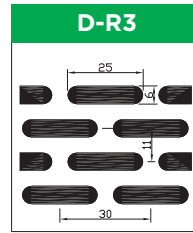


D-R2

Hole Size
Oblong
2.0mm x 14.0mm

Pitch
13.0mm x 18.5mm

Open Area
11.0%

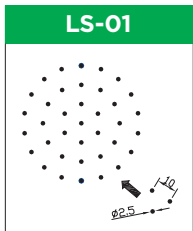


D-R3

Hole Size
Oblong
6.0mm x 25.0mm

Pitch
11.0mm x 30.0mm

Open Area
45.0%



LS-01

Hole Size
Dia. 2.5mm

Pitch
10.0mm

Open Area
5.0%

Project Specific Pattern



Australia
China
India
Indonesia
Malaysia
Middle East
New Zealand
Philippines
Singapore
South Korea
Thailand
Vietnam

3rd Floor 108 Central Building A
108 E. Rodriguez Jr. Avenue, Bagumbayan,
Quezon City, Philippines 1110
T: +63 2 911 6709 | F: +63 2 911 6709 ext. *98
info.ph@usgboral.com