

## **USG BORAL HIGHLANDS™ CEILING SYSTEM**

### Series A, Lay-in Type Submittal Sheet

The USG Boral Highlands™ Ceiling System provides customised ceiling visual effects with multiple perforation patterns and panel height options. The Highlands™ ceiling panels can be easily installed or removed, offering access to the plenum.



#### USGBoral.com Gypsum Boards

Compounds

Metal Framing

Substrates

© 2017 USG BORAL. All rights reserved. The trademarks USG BORAL and INNOVATION INSPIRED BY YOU and Highlands are trademarks of USG Boral or one or more of its affiliates. SS\_C\_HS(A)\_1117

Ceilings

# **USG Boral Highlands<sup>™</sup> Ceiling System**

### Series A, Lay-in Type

#### **Features and Benefits**

- A sealed ceiling design with simple lay-in panels provides easy access to enclosed plenum
- Available in multiple panel heights and also option of squared and beveled edges
- Numerous perforation patterns to achieve a customised effect or a higher noise reduction coefficient when used with acoustical backing
- Concealed suspension system offers a smooth appearance
- Security clips holds panels safely in place
- A wide range of colors and wood tones
- Individually replaceable panels

#### **Applications**

- Transportation Centres, including Train Stations and Airports
- Lounges
- Foyers
- Corridors
- Commercial Spaces
- Offices
- Conference Rooms

#### **Material Options**

- Aluminium
- Galvanised Mild Steel
- Stainless Steel

#### **Color Options**



Over 45 colors and 26 wood look options.

Please refer to USG BORAL Series 2000-5000 and Wood Look Aluminium Metal Ceilings Color Guide. Due to printing limitations, shades may vary from actual product.

### **Product Information**

Panel Dimension Options

Item Number	Panel Dimensions W x L (mm)
P1-575	575 x 575 (Beveled)
P1-585	585 x 585 (Squared)
P1-595	595 x 595 (Squared)

### **Suspension System Components**

Suspension System Detail			Number	ltem Number	Description
			1	P1-PANEL	Ceiling panel
			2	P-24-1	24mm Main runner (3.0m)
3,6		2,5	3	P-24-2	24mm Cross runner (1.2m)
			4	P-24-3	24mm Cross runner (0.6m)
		(4), (7) acoustic backing	5	P-14-1	14mm Main runner (3.0m)
9		(optional)	6	P-14-2	14mm Cross runner (1.2m)
			7	P-14-3	14mm Cross runner (0.6m)
			8	P-102	Runner bracket
_			9	P-103	Security clip
Runner Detail	Runner Detail Runner Bracket Edge Configuration with Detail 14mm or 25mm Runner Op			Panel Height Options (mm)	
		Beveled edge			
		Squared edge		1015	

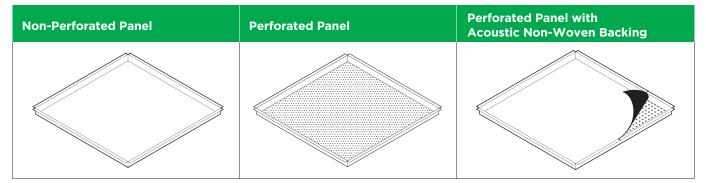
The suspension system consists of the T-shaped Main runners and Cross runners connected to the Runner bracket (8).

### **Perforation Options**

	D-01B Diamond Square	D-01A* Square	DM1A	D-S5A	D-R3
Pattern					
Hole Diameter	1.5mm	1.5mm	0.8mm	7.9mm	6.0mm x 25.0mm
Hole Diameter	1.5mm	1.5mm	0.8mm	7.9mm	6.0mm x 25.0mm
Pitch	4.0mm	4.0mm	5.0mm	11.43mm x 11.43mm	11.0mm x 30.0mm
Open Area	22%	11%	2%	48%	39%
NRC/SAA	0.75/0.74	0.65/-	0.45/0.46	0.70/-	0.70/-

\*D-01A is a standard perforation, for more perforation options refer to USG Boral Metal Ceilings Perforation Guide, GS\_PG\_1117.

### **Panel Options**



#### **Technical Data and Notes**

#### **Light Reflectance**

Flat White (050): Up to LR 0.80 (less with optional perforated panels).

#### Material

Minimum material thickness of 0.7mm. Please advise USG Boral of project specific panel sizes for minimum thickness recommendation.

#### Finishing

Electrostatically applied polyester powder coating. Minimum coating thickness of 60 microns. Very low VOC emissions.

#### Weight per square metre

Aluminium

0.7mm thickness, non-perforated panel, 585mm x 585mm. Calculated panel weight = 2.1kg /m<sup>2</sup>

#### Warranty

Please refer to Metal Ceiling Warranty CW2015B

#### Installation

Please refer to USG Boral Highlands Ceiling System Technical Manual (Installation Guide) TM\_C\_HS\_1117

Tests	Standards	Performance
Surface burning characteristics	ASTM E84	Flame Spread Index = 10 Smoke Developed Index = 0
Dimensional tolerance	BS 8290-2	Comply within allowable limits
Non-combustility test for materials	BS 476-4	Non-combustible
Fire propagation and surface spread of flame of products	BS 476-6 & 7	Class 0
Sound absorption and sound absorption coefficients	ASTM C423	NRC & SAA values varies with hole diameter, pitch and open area %
Organic emissions from indoor materials or products	ASTM D5116	Below allowable limits of emission rates in GBCA guide
Analysis of pyrolysis and combustion gases	NF X 70-100	Below allowable limits of IDLH values in NIOSH guide
Luminous reflectance factor of acoustical materials	ASTM E1477	LR values varies with hole diameter, pitch, open area % and finish

Safety First! Follow good safety or industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read SDS and literature before specification and installation.

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