ELEPHANT
EchoBloc

Sound Absorption Board

The Siam Gypsum Industry (Saraburi) Co., Ltd.
A member of USG Boral Building Products

ELEPHANT
Gypsum Board

EchoBloc

Unblock your sound & design

EchoBloc is the Sound Absorption Gypsum Board, the innovative way of ceiling and wall/partition design with graphic pattern, beauty and modern style. EchoBloc gives a very high performance in absorbing sound and can be harmoniously used with Standard and Technical Boards.

EchoBloc is perforated with round hole and square hole. Bonded with "Glass Mat" on the back side, enhancing the sound absorption capability.

Properties

◆ Provides sound absorption with NRC 0.65–0.80 when install with "Glass Wool" insulation.

◆ Modern design with graphic pattern.

◆ Can be applied for stepped ceiling.

◆ Easy to install (same as regular wall/partition and concealed ceiling system installation).

Size	: 1200x2400 mm.
Thickness	: 12 mm.
Edge	: Tapered Edge

Recommended Usage Areas

Mainly used in wall and ceiling wherever there is a need to increase sound absorption or achieve desired decorative finish.

Music and Movie Rooms

EchoBloc helps to increase better sound quality of watching movie and listening to music as Home Theater, Music Studio, Movie Theater.

Noisy Areas

EchoBloc helps to absorb people's voice in crowded area such as Hotel, Shopping Center, Meeting & Seminar Room, Restaurant, Office.

Huge Space in Building Area

EchoBloc helps to decrease echo sound in a big hall and wide space such as Library, Computer Center, Hospital, Airport, Dharma Center, Conference & Seminar Center, Exhibition Hall, Theater.
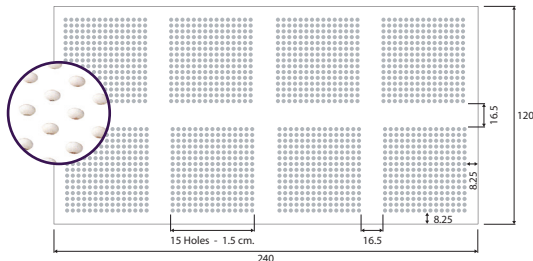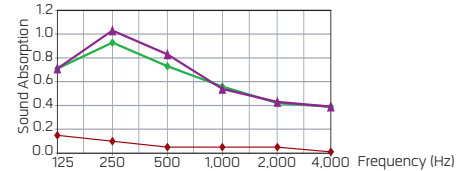
Available Patterns

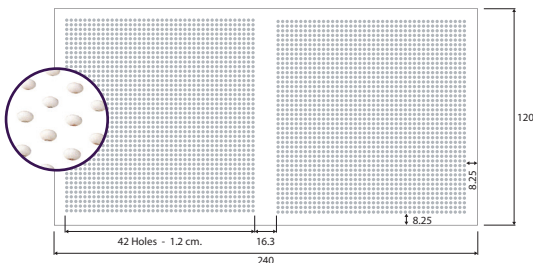| Board Pattern | Characteristic | Sound Absorption (NRC) |

EchoBloc R–8 (Round Hole)

- Size 1200x2400x12 mm.
- Round hole shape punching 8 groups/sheet
- Rate of perforation 11%
- Diameter of punching hole 15 mm.

*NRC 0.65 – 0.70

Frequency (Hz)	125	250	500	1,000	2,000	4,000	
▲ Plenum 10 cm.	0.71	1.03	0.83	0.54	0.43	0.39	NRC = 0.70
◆ Plenum 30 cm.	0.71	0.93	0.73	0.56	0.42	0.39	NRC = 0.65
◆ Standard Board	0.15	0.10	0.05	0.05	0.05	0.01	

EchoBloc R–2 (Round Hole)

- Size 1200x2400x12 mm.
- Round hole shape punching 2 groups/sheet
- Rate of perforation 13.9%
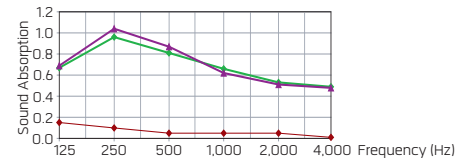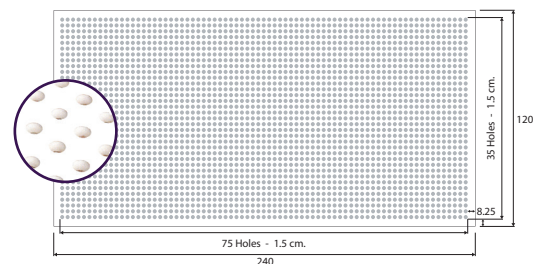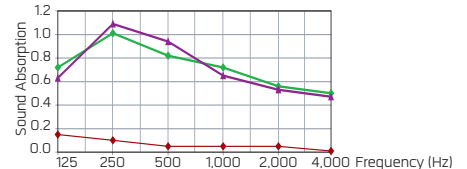- Diameter of punching hole 12 mm.

*NRC 0.75 – 0.80

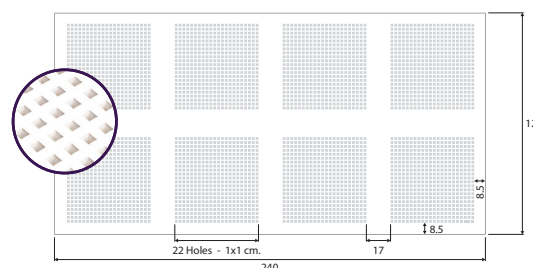| Frequency (Hz)	125	250	500	1,000	2,000	4,000	
▲ Plenum 10 cm.	0.69	1.04	0.87	0.62	0.51	0.48	NRC = 0.80
◆ Plenum 30 cm.	0.67	0.96	0.81	0.66	0.53	0.49	NRC = 0.75
◆ Standard Board	0.15	0.10	0.05	0.05	0.05	0.01	

EchoBloc R–1 (Round Hole)

- Size 1200x2400x12 mm.
- Round hole shape punching 1 group/sheet
- Rate of perforation 16.1%
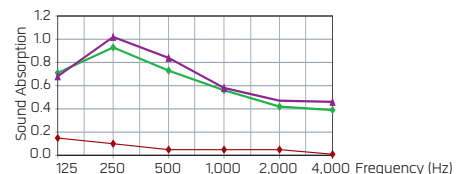- Diameter of punching hole 15 mm.

*NRC 0.80

Frequency (Hz)	125	250	500	1,000	2,000	4,000	
▲ Plenum 10 cm.	0.63	1.09	0.94	0.65	0.53	0.47	NRC = 0.80
◆ Plenum 30 cm.	0.72	1.01	0.82	0.72	0.56	0.50	NRC = 0.80
◆ Standard Board	0.15	0.10	0.05	0.05	0.05	0.01	

EchoBloc S–8 (Square Hole)

- Size 1200x2400x12 mm.
- Square hole shape punching 8 groups/sheet
- Rate of perforation 13.4%
- Size of a hole 10x10 mm.

*NRC 0.70–0.75

Frequency (Hz)	125	250	500	1,000	2,000	4,000	
▲ Plenum 10 cm.	0.68	1.02	0.84	0.58	0.47	0.46	NRC = 0.75
◆ Plenum 30 cm.	0.62	0.96	0.72	0.60	0.49	0.46	NRC = 0.70
◆ Standard Board	0.15	0.10	0.05	0.05	0.05	0.01	

– Sound absorption test following NF EN20354 and ISO/DIS 11654

– Applicable with sound insulation "NoizeZoft 50 mm."

– All the above NRC rating are with glass wool insulation.

Installation Direction

- **To increase sound absorption capability, putting insulation at the back side of EchoBloc.**
- The installation is as easy as installing the concealed ceiling or general wall/partition.
- To arrange the pattern of EchoBloc, adjust the board by aligning the punctured side with the beam. This will make it be more convenient to screw in.
- EchoBloc can be modified and its plastering joint can be performed smoothly as the same way as standard gypsum board.
- For smooth finishing, the sheet can be sawed and sanded.
- To coat the joint, use Elephant Gypsum Jointing Compound with Cotton Tapes.
- All other gypsum accessories can be installed with EchoBloc.
- The postition of lighting system, AC outlet and other accessories should be located in advance so that you can plan the beam and the sheet structure for more appealing pattern.
- EchoBloc can be painted regularly by using the roller. It is not necessary to paint into the punctured hole of the board.

Specification

Pattern R-8
- Size 1200x2400x12 mm.
- Round hole shape punching with diameter of 15 mm.
- Rate of perforation 11%
- Glass mat is laminated on the back side of board to achieve NRC rate of 0.65-0.70.
- Install EchoBloc with ProLine Concealed Ceiling Metal Profile, Elephant Brand, 0.52 mm. thickness, size 37x15 mm., 4 m. length, certified by TIS 863-2532. Material made from Hot-dipped Galvanized Steel certified by JIS G3302-1987 along with hanging system from manufacture standard.

Pattern R-1
- Size 1200x2400x12 mm.
- Round hole shape punching with diameter of 15 mm.
- Rate of perforation 16.1%
- Glass mat is laminated on the back side of board to achieve NRC rate of 0.80.
- Install EchoBloc with ProLine Concealed Ceiling Metal Profile, Elephant Brand, 0.52 mm. thickness, size 37x15 mm., 4 m. length, certified by TIS 863-2532. Material made from Hot-dipped Galvanized Steel certified by JIS G3302-1987 along with hanging system from manufacture standard.

Pattern R-2
- Size 1200x2400x12 mm.
- Round hole shape punching with diameter of 12 mm.
- Rate of perforation 13.9%
- Glass mat is laminated on the back side of board to achieve NRC rate of 0.75-0.80.
- Install EchoBloc with ProLine Concealed Ceiling Metal Profile, Elephant Brand, 0.52 mm. thickness, size 37x15 mm., 4 m. length, certified by TIS 863-2532. Material made from Hot-dipped Galvanized Steel certified by JIS G3302-1987 along with hanging system from manufacture standard.

Pattern S-8
- Size 1200x2400x12 mm.
- Square hole shape punching with 10x10 mm. per hole.
- Rate of perforation 13.4%
- Glass mat is laminated on the back side of board to achieve NRC rate of 0.70-0.75.
- Install EchoBloc with ProLine Concealed Ceiling Metal Profile, Elephant Brand, 0.52 mm. thickness, size 37x15 mm., 4 m. length, certified by TIS 863-2532. Material made from Hot-dipped Galvanized Steel certified by JIS G3302-1987 along with hanging system from manufacture standard.