

Assalamo Alikom

Ref: Sound Proofing the Marquee @ BMHC Grounds

Further to my visit @ BMHC on Friday 20th June. The trip to the Marquee side was arranged with Shahid, as that evening a Waleema event was booked. It was a very hot summer afternoon with outside temperature exceeding more than 26°C. Temperature inside the Marquee was much hotter. I was in and around the Marquee area from 6.20pm ~ 7.45pm, observing the proceedings inside the Marquee, listening & assessing the Audio levels outside the Marquee.

All the announcements & music is played through Yamaha MG10 mixing console system. This console in turn is linked with the Tower Cabinet consisting of Power Amp (Lab.Gruppen C48.4), Mixer (Cloud, Z4MK3) & CD player (Denon DN 300C)

That evening Audio levels were considerably high whenever the announcements were made. After the arrival & entrance of the couple in the Marquee, the Audio level was high, one could easily hear the Mic announcements & accompanying music tracks on Clarendon Road by existing through the small door.

Marquee Overall Dimension @BMHC
Structure: 25m Width x 30m Length x 3m Eave
Roof Pitch - 18° the slanted Diagonal section
Eave Height - 3m
Roof Beam Length - 13.2m
Bay Width - 5m

Forwarding with my suggestion for the solution to the existing “Sound Pollution” in the area around BMHC:

Considerations:

- Venue Location:
The proximity of the marquee to residential areas is a crucial factor in determining the level of sound proofing required.
- Event Type:
The type of event (e.g., wedding, festival, corporate event) will influence the specific soundproofing needs.
- Sound absorption, also called sound deadening, stops sound already inside a space from echoing and reverberating.

Sound Source:

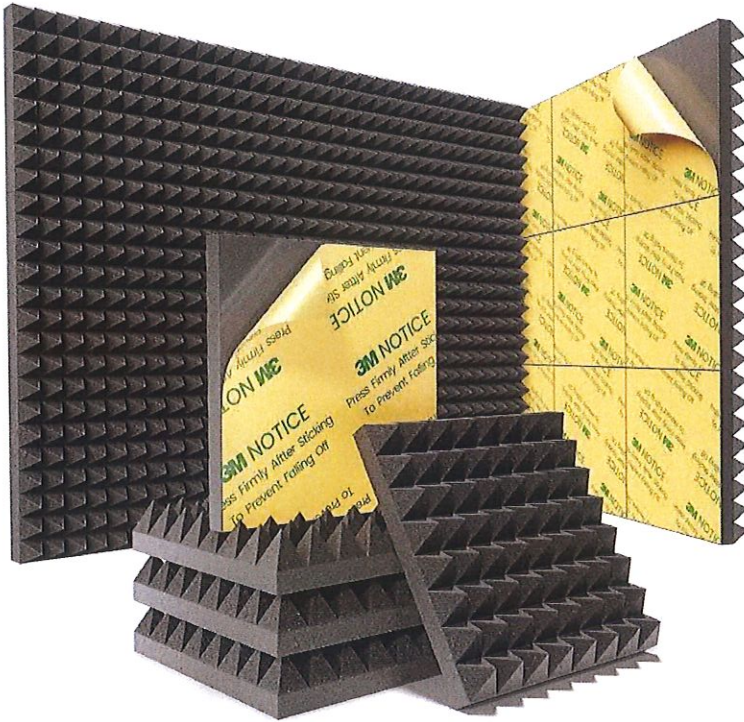
Identifying the primary sources of sound (e.g., music, PA systems, and conversations) will help in choosing the most effective soundproofing solutions.

Soundproofing a marquee will be achieved through various methods, including:

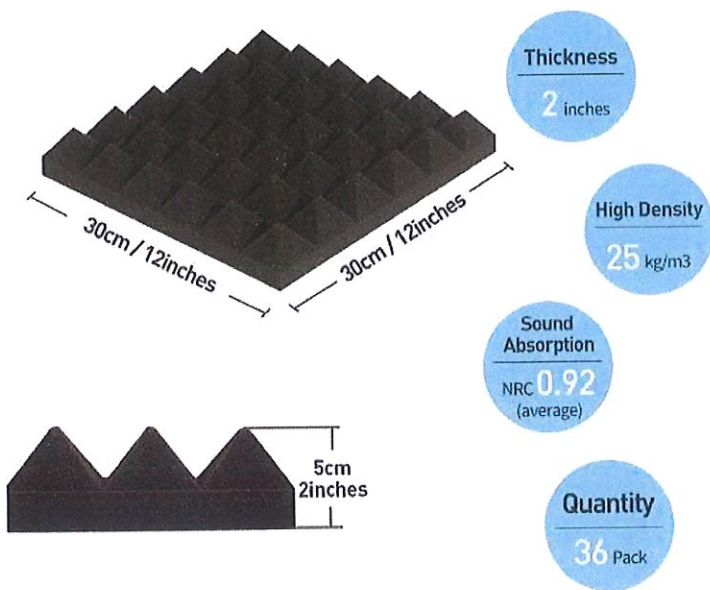
- 1) Acoustic Panels, 2) Directional Speakers, 3) Heavy Acoustic Curtains, 4) Sound proof Acoustic Linings and other sound-absorbing materials. Acoustic linings, designed to absorb sound and reduce noise, can be particularly effective in controlling sound both within and outside the marquee.

1. Acoustic Panels for Soundproofing the Marquee

Installing acoustic panels on the interior walls of the marquee can absorb sound and reduce echoes. Acoustic Foam Panels Sound proofing (Foam Tiles Egg Crate) are supplied in various thickness & density, depending upon the amount of soundproofing is needed. The cost per panel varies from the base thickness of the panel, alongside the height of the panel & material density. Also known as self-adhesive acoustic foam panels or studio soundproofing foam tiles or pyramid foam tiles

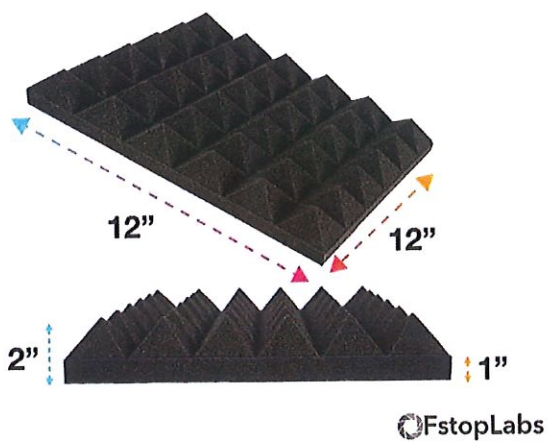


Marquee Panel 1

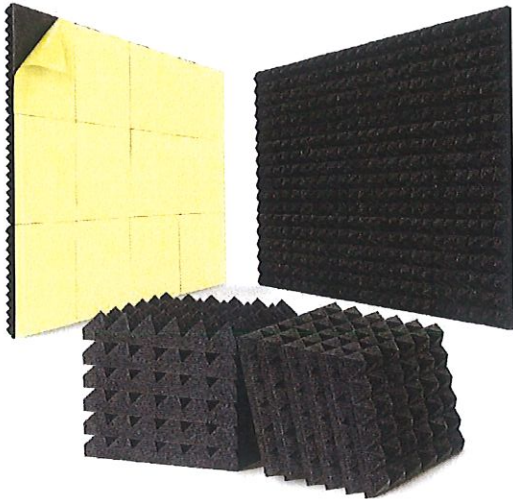


Marquee Panel 2

Dimensions



Marquee Panel 3

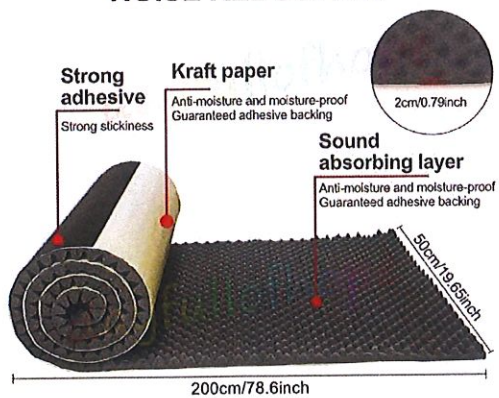


Marquee Panel 4



- Marquee Roll 1

SOUND ABSORPTION AND NOISE REDUCTION



- Marquee Roll 2



- Marquee Roll 3



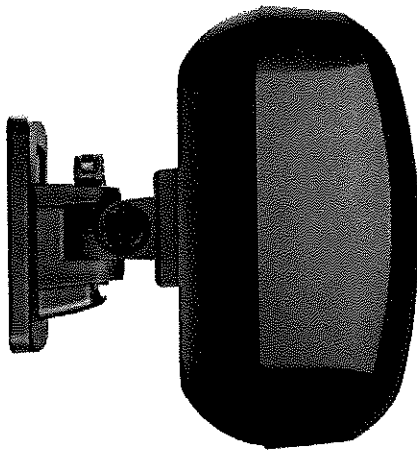
- Marquee Roll 4

2. Directional Speakers:

- Using directional speakers can help to focus the sound on specific areas, like the dance floor, while minimizing sound spill over to surrounding areas.
- This can significantly reduce the overall noise level perceived outside the marquee.
- Directional speakers allow you to direct your sound directly to your audience. For example, by using a directional speaker you can effectively target your audience without creating noise issues in the surrounding environments.
- This type of sound control system is particularly useful in wedding and entertainment venues that may be situated near to residential areas.
- Whilst traditional speaker systems are designed to amplify sound over a wide area, directional speakers are designed to focus their sound to more precise areas.

I suggest: Apart MASK6CT-BL or MASK6CT-W 6.5 inch Wall Mount Speakers 100V/16 Ohms, IP64 Rate, with 100V transformer power taps: 60 - 30 - 15 - 6 watts

10 x speakers mounted on each side of the Marquee rafters, 12 x speakers mounted on 3 circular wooden boards, suspended from the ceiling with metal strings

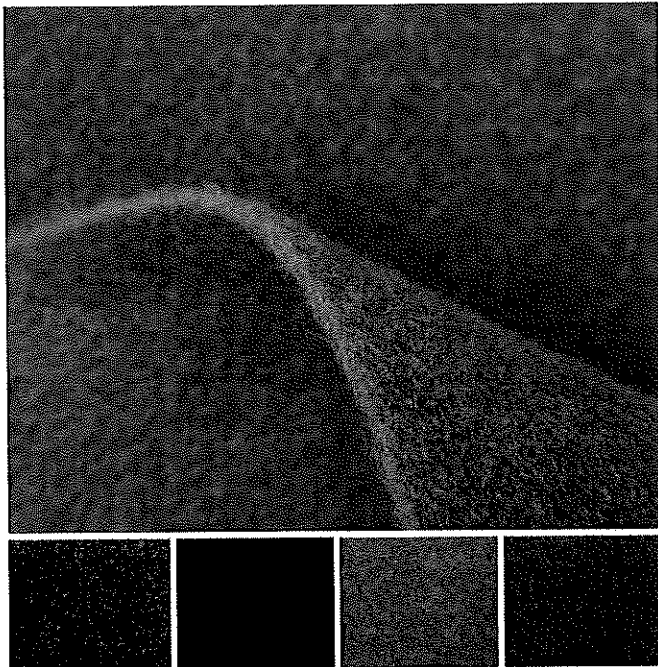


Will require a separate 100volt Line Power Amp, 2 channel, 'Electro Voice' Power Amplifier PA2400T
This will not alter the existing Preamp Settings. Will take the feed from the Preamp, located in the Tower Cabinet.



3. Acoustic Linings:

- Acoustic linings are designed to absorb sound energy, reducing the amount of sound that escapes the marquee.
- These linings can be particularly effective in targeting low bass frequencies, which can be a common source of noise complaints.
- Acoustic linings that can be installed within the marquee structure, helping to control both incoming and outgoing sound.
- Thick car carpet boot lining acoustic velour van upholstery vehicle fabric





4. Soundproofing with Heavy Acoustic Curtains:

Soundproof curtains can also be known as sound-absorbing curtains, sound deadening curtains, acoustic curtains, and sound dampening curtains depending on the manufacturer you purchase from and the type of soundproofing you are trying to accomplish. Regardless of the name, these curtains are made of heavy, thick materials like polyester, velvet, or suede that you hang above your partitioning wall frame. They usually have a porous surface that allows them to absorb sound waves in order to make a room quieter. A truly effective and high-quality soundproof curtain will be heavy, tightly woven, and run from ceiling to floor with several inches of fabric going past each side of the window. It's essential they cover as much area around the window as possible so that the folds of the curtains can create a seal around the sides.

- Thick, heavy curtains can act as a barrier to sound, especially when placed around windows or doors.
- Installing special type of Heavy Curtains have great effect in noise reduction the Marquee PA signals are impeded greatly from leaking & causing noise pollution in the vicinity. It also minimizes outside road, airplane, and neighbourhood sounds, reaching inside the venue.
- With thermal acoustic curtain, Marquee stays warmer in winter and cooler in summer
- Total Blackout: Achieve both sound reduction and complete darkness with blackout fabric.
- These Curtain material must come with Flame Retardant ratings certificate



Heavy Acoustic Curtains 1



Heavy Acoustic Curtains 1

Wasalaam,

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