

TECHNICAL SPECIFICATIONS-SOUNDPROOFING

(I) introduction

Soundproofing against echoes is to reduce the echoes in a hall or room by using acoustic materials

1. Echoes: is a sound caused by the refraction of sound waves from a smooth surface bounce back to the listener. It is the reflection of sound, arriving at the listener sometime after the direct sound.

Main causes of echo

- Sound reflection surface (such as tiles, painting wall, high ceiling)

Materials used to reduce echoes

- ❖ Acoustic materials
- ❖ Furniture upholstered with fabrics
- ❖ Dense curtains

According to our main hall we use:

- ❖ Acoustic panels

1. Acoustic panels:

(Also, sound absorption panels, soundproof panels or sound insulation) are sound absorbing fabric-wrapped boards designed to control echo and reverberation in a hall.

Our main hall

- ❖ Length: 42 m
- ❖ Width: 21

In Kepler main hall We proposed 60 panels.

Materials	Description of materials
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Acoustic panel



Main hall we proposed 60 panels

Size of :

1,30-meter width * 2,20meter long

Thickness

25-50 mm

Materials

Acoustic Fiber Glasswool heat insulation

Shape

Rolls

Wood frame

Wood frame acoustic products are used in theatres and auditoriums to provide low-frequency reverberation control

Cover (vellul)

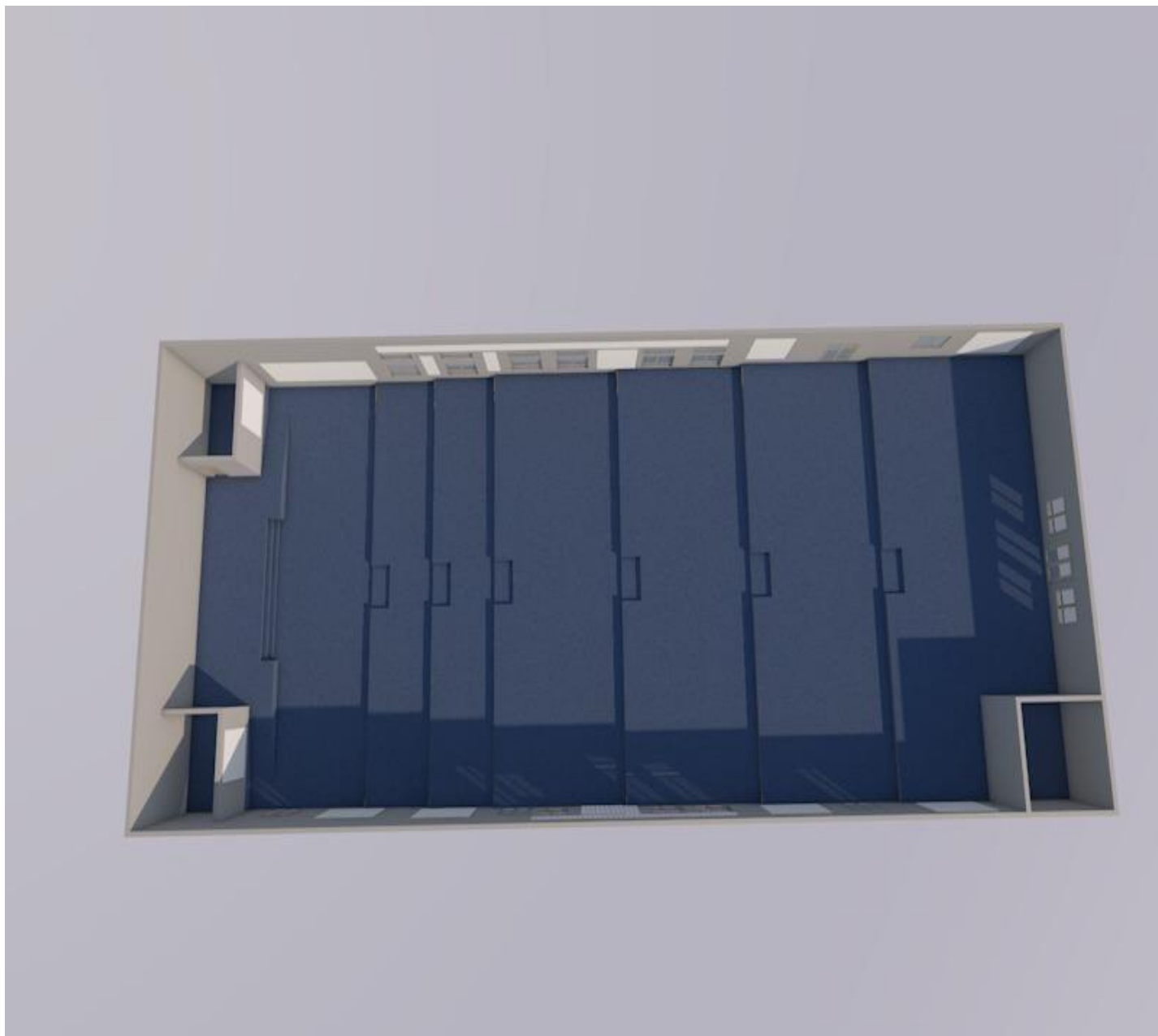
And covered by best acoustic fabrics for sound absorption and noise reduction.

Features:

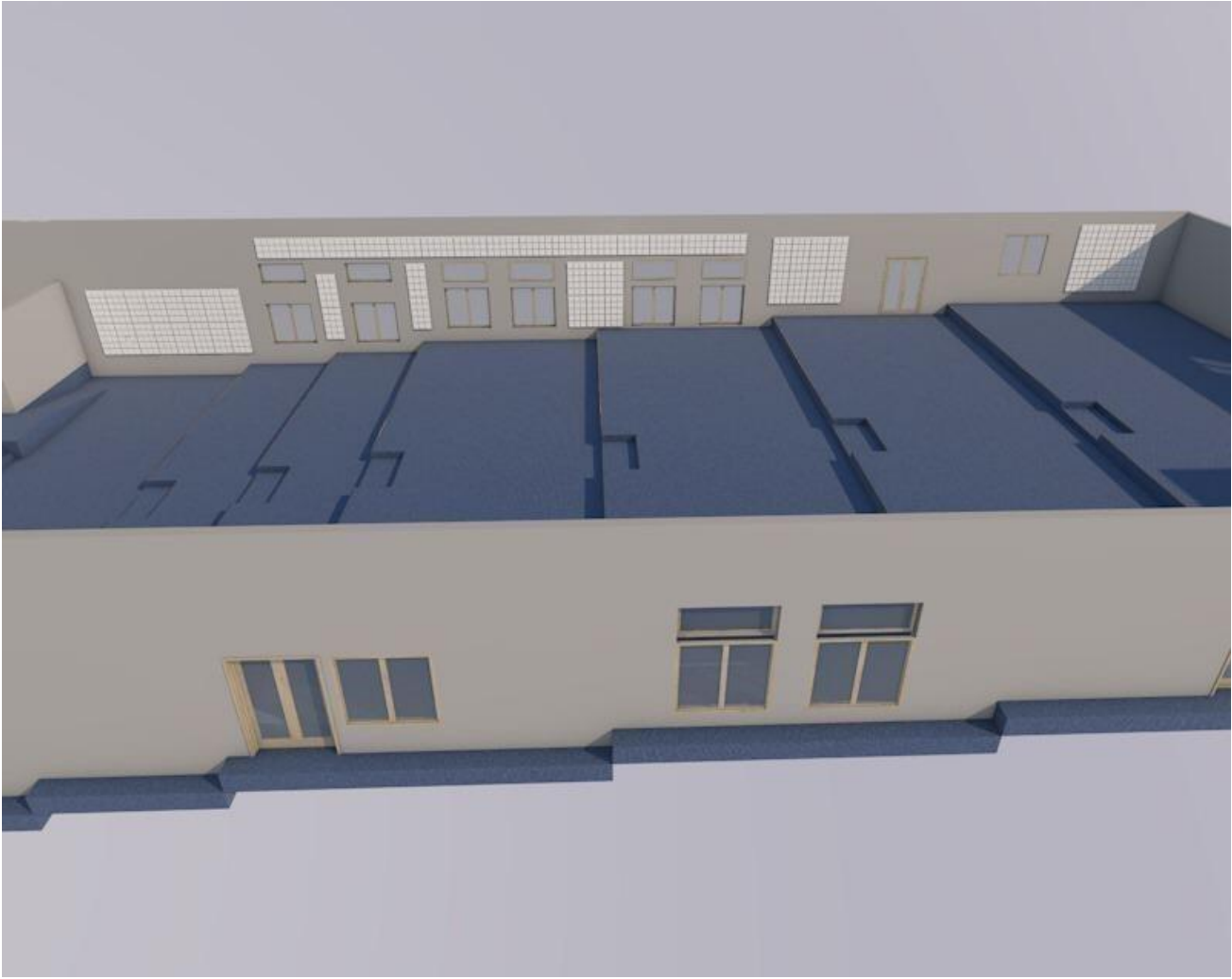
- High quality
- Long life
- Easy to install

3D Design: Main hall

Top view



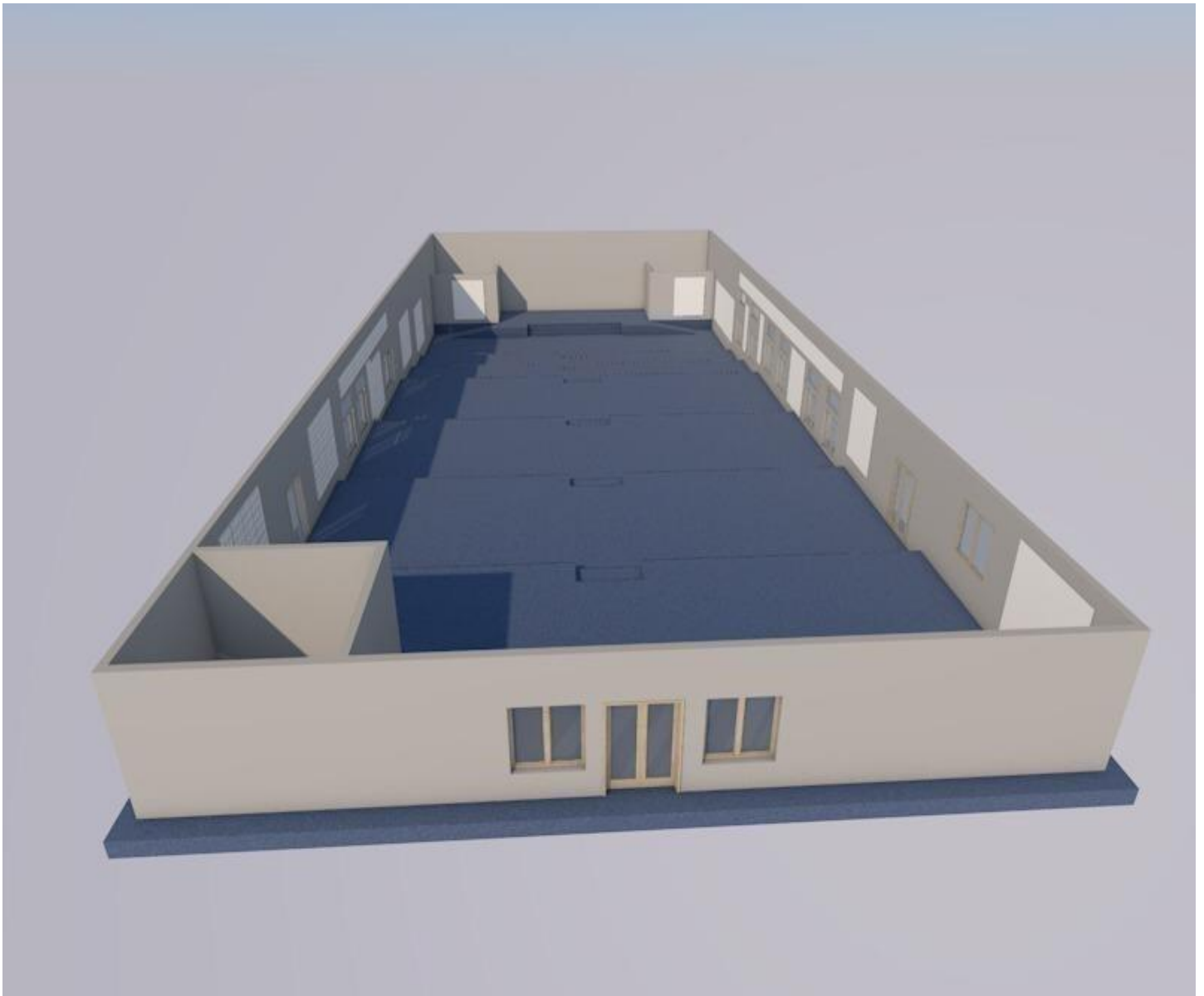
Right and left side



Back view



view



Conclusion

In our conclusion the main hall filled with plush furniture and accessories help cut down on echo. for example, absorb sound reflection. Fabric upholstery typically absorbs sound more effectively than vinyl or leather. Essentially, the more objects there are in a hall, the less sound will bounce around.