





## **Creating Optimal Lighting and Noise Solutions**

With open floor plans, there is the

advantage of feeling connected

with our surroundings, but this

comes with the **disadvantage of higher reverberation** in a room.

By combining acoustics with

lighting, we can create sound-

absorbing luminaires.

### **Noise Management**

#### NRC - Noise Reduction Coefficient

# what are acoustics?

Acoustic products are made from 100% polyethylene terephthalate (PET), with 50% post-consumer recycled material.

PET is a **green product** manufactured free of added chemicals, binders, adhesives and dyes. The product is very adaptable. It can be cut, notched, or trimmed for installation purposes.

PET can achieve a triple purpose. It is functionally acoustic in nature, enhances the design of any space, and is an environmentally conscious choice.

#### **ABSORB**

absorbs sound waves and reduces reverberation





## NRC - 0.5

NRC - 0

0% sound absorption

all sound waves are reflected

back into the environment

50% sound absorption only half of all sound waves are reflected back into the environment



#### NRC - 1.0

100% sound absorption

no sound waves are reflected back into the environment



blocks sound waves through materials to help reduce overall noise







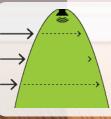
\*the NRC for our 9mm PET material is about 0.85\*

#### **COVER**

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introducing sound into an environment to mask excessive noise





#### **HOW TO CALCULATE**

Area x % = Sabin (a)

Sabine Formula | RT60 = 0.49 x V/a

RT60 = Reverberation Time V = volume of the space (feet cubed) a = sabins (total room absorption

at given frequency)