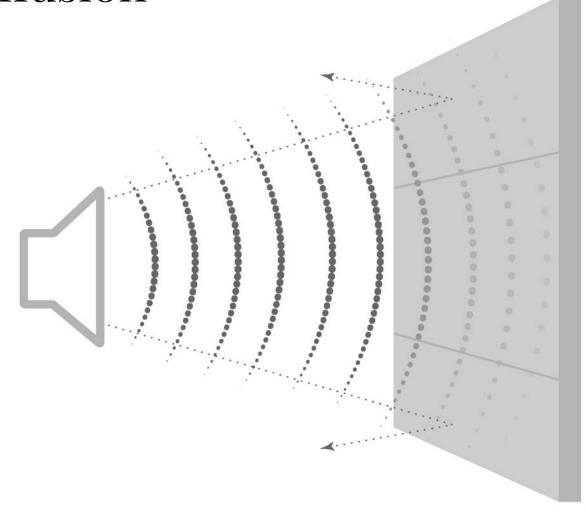




#### Absorption + Reflection + Diffusion

With CinemaTech's ARS system, your private home theater acoustics will be engineered and precisely tuned based off the the room's design, audio equipment the physical elements within the space.

Through the precise design and installation of high and low-frequency absorption, reflective, and diffusion acoustic panels, CinemaTech engineers the theater environment to maximize the investment made in theater audio equipment.





#### 100Hz @ 1.25"



- The heart of the CinemaTech Acoustic Room System is the patented reversible acoustic core material. Because of this design, in a low 1 1/4" profile, one can get excellent performance down to 100 Hz. No other system can give this kind of performance in such a shallow a profile.
- The soft side (insulation) gives excellent high frequency absorption.
- The hard side (sheetrock) contributes three factors to the overall design flexibility.
- Excellent transmission loss to keep sound from escaping into other rooms
- High frequency reflection to keep a Home Theater space from being too "dead."
- Low frequency absorption through diaphragmatic dampening



#### Diffusion & Track





- The Owens Corning diffuser consists of a random series of column stacking diamond shapes. The height varies while keeping within the 1 1/4" framework of the Acoustic Room System
- The frequency range is 1000 Hz and up. Because of the rounding of the edges, this diffuser works considerably better than straight edge diffusers which often gives a snap flutter at the higher frequencies.
- Additionally, unlike some diffusers which are slotted either horizontally or vertically, thus giving only horizontal or vertical polarization scattering, the Owens Corning diffusers are diamond shaped and give multi dimensional scattering - both horizontal and vertical polarizations.
- System meets ASTM E 84 flame requirements often unavailable from other diffusion systems.



## Acoustic Room Modeling

Ensuring the best audio experience



#### Did You Know?

Acoustic Room Modeling consists of 3 parts: analyzing direct sound, early reflections & late reverberation.

The purpose of diffusion is to break up repetitive echoes and create a larger sound stage.

Poorly reflected sound causes an imbalance in notes, resulting in midrange and treble that's too harsh and base notes that are too "boomy".

### CinemaTech's Acoustic Room Modeling ensures the best audio experience by:

- Understanding the make and model of the speakers & science behind proper speaker locations.
- Considering the size of the room.
- Observing the location of doors, windows and other openings.
- Taking into account millwork, especially wainscot, columns, beams, cabinets etc
- Location of seating and its position.
- Fabric treatment & soft surfaces in the room.
- Unique fixtures such as a golf simulator, pool table, angled walls, equipment racks, unusual lighting fixtures and similar.
- Ceiling height
- Room Ratios



## Step One





Step Two





# Step Three





## Step Four





#### Materials

ARS uses acoustically-transparent fabric, allowing the sound-absorbing products behind the material do their best work.

Over 1,000 Acoustical fabric options to choose from

