



**ACOUSTIC
DISTINCTIONS**

DESIGN IN HARMONY



THEATER SPEECH INTELLIGIBILITY STUDY

SCHNADER THEATER

Part of the Roschel Performing Arts Center, the 305-seat venue offered excellent sightlines and backstage facilities yet less than optimal conditions for theatrical performances. As the primary venue for theatre performances on the campus, AD was engaged to explore opportunities to improve speech intelligibility within the auditorium. The intent was to achieve a setting to better support student performers particularly when staging dialogue-intense drama pieces such as Shakespearean plays.

In addressing issues to assist the clarity of spoken word, specific focus centered on:

- Competing sounds from HVAC, electrical & exterior sources
- Detrimental sound reflections

A noise inventory of theatre equipment identified disruptive noise sources which interfered with speech intelligibility. Notable recommendations included eliminating noise from a ventilation fan.

Architectural acoustic elements that offered additional means for improving speech intelligibility included:

- Replacing existing wood paneling from face of cross aisle wall with full-spectrum sound-diffusing panels
- Adding sound absorbing panels

The College accepted AD's recommendations and implemented corrective measures. Today, the theater is actively used for a broad range of student theatrical productions and professional off Broadway shows.

CLIENT

Franklin & Marshall College

LOCATION

Lancaster, PA

PROJECT TYPE

Renovation

COMPLETE

2012

SEAT COUNT

305

CONTACT

Sheldon S. Wenger
Franklin & Marshall College
Facilities and Operations
717.291.4013

SCOPE

Acoustics