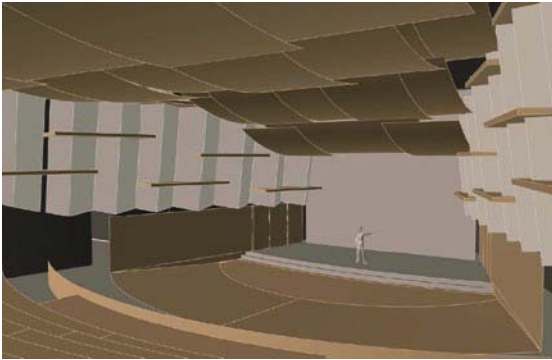


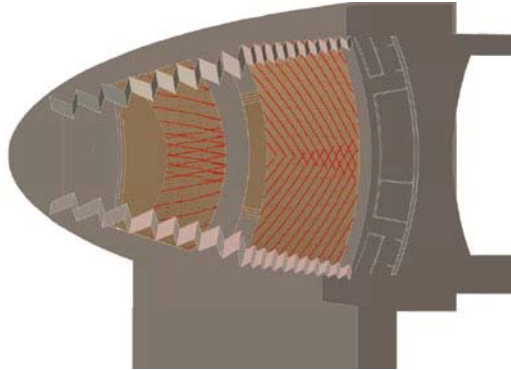
PROFESSIONAL EXPERIENCE: selected works

In my 2 years at Edward Dugger + Associates (ED+A) I have been able to utilize both my design and acoustic education by providing new methods of acoustic and architectural analysis using software and techniques already employed by architects. I have gained invaluable experience in all facets of the architectural design process, interfacing with architects, engineers and independent clients to deliver acoustically successful buildings, and solve undesirable noise problems, both before and after building turnover. I have designed architectural elements and building details, conducted field measurements, presented at city commission meetings, provided mechanical noise and vibration control strategies, and worked on several LEED certified projects.

CORPORATE AUDITORIUM, JUNO BEACH, FL DESIGN OF ACOUSTICALLY CRITICAL ARCHITECTURAL ELEMENTS



CEILING AND WALL STUDY PERSPECTIVE

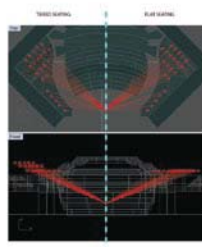


SURFACE REFLECTION MAPPING

Working closely with the architectural team, I was responsible for the design and optimization of ceiling and wall elements that would reflect both the intent of the design team and yield superb acoustic performance. The building was modeled in the ED+A office with Rhino 3D and surface acoustic reflections were mapped with the Grasshopper plugin.

JOHNSON AND WALES UNIVERSITY, HOSPITALITY BUILDING AUDITORIUM, NORTH MIAMI, FL COMPREHENSIVE ACOUSTIC ROOM ANALYSIS

In a holistic building analysis, this project required detailed acoustic analysis, including surface reflection mapping and reverberation time calculations, as well as material finish selections and sight-line studies providing alternate seating options. Mechanical details were also provided to improve background noise conditions in the space.



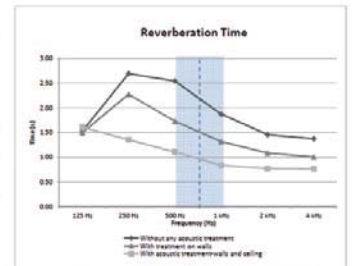
Johnson and Wales University Auditorium

Edward Dugger + Associates, Consultants in Architectural Acoustics

4-066-12
ED+A 1201

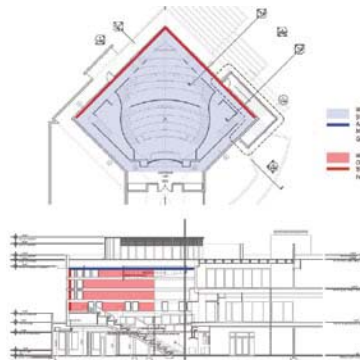
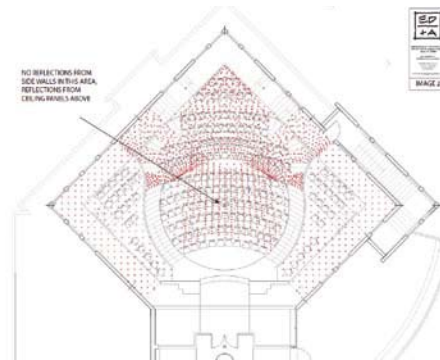
Auditorium 268

Surface Area	Length	Width	Height	W x L	TOTALS
Walls					
wall 1 upper	42	32			1,368
wall 2 upper	42	32			1,368
wall 3 upper	42	32			1,368
wall 4 upper	42	32			1,368
wall 5 lower wall	33	15			495
wall 6 lower wall	33	15			495
wall 7 kitchen	42	15			720
Ceiling					
open ceiling			1,000		1,000
Floor					
carpet			1,000		1,000
seating			800		800
Volume					60,162



Surface Material Area	125 Hz		250 Hz		500 Hz		1 kHz		2 kHz		4 kHz	
	a	b	a	b	a	b	a	b	a	b	a	b
Walls												
Oases	0.18	432.00	0.08	144.00	0.04	96.00	0.03	72.00	0.02	48.00	0.02	48.00
large panels	0.29	580.80	0.10	192.00	0.05	96.00	0.04	72.00	0.03	36.00	0.02	72.00
small panels	0.29	139.20	0.10	48.00	0.05	24.00	0.04	18.00	0.03	9.00	0.02	43.20
acoustic wall	0.04	33.42	0.21	231.00	0.57	547.20	0.58	882.40	0.72	691.20	0.82	787.20
Ceiling												
No ceiling treatment	0.20	444.00	0.10	192.00	0.05	96.00	0.04	72.00	0.03	36.00	0.02	144.00
ACT ceiling	0.20	320.00	0.05	1,040.00	0.05	1,040.00	0.05	1,040.00	0.15	1,200.00	0.05	1,040.00
Floor												
carpet	0.02	32.00	0.06	96.00	0.14	224.00	0.27	882.00	0.40	960.00	0.68	1,040.00
seating	0.19	312.00	0.37	456.00	0.60	840.00	0.94	752.00	0.92	736.00	0.67	656.00
Air Absorption @ 5m/1'	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Reverberation Times (RT = 0.16V / (S * alpha))												
Without any acoustic treatment	1.52		2.89		2.54		1.87		1.48		1.37	
With treatment on walls	1.48		2.27		1.73		1.22		1.09		1.01	
With acoustic treatment on walls and ceiling	1.81		1.35		1.11		0.83		0.78		0.77	

Legend:
Notes:
1. Calculations based on ACT with NRC of .70 or higher



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