



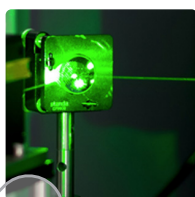
# ABD Engineering & Design

Architectural Acoustics ▪ AV Design ▪ Noise & Vibration

## Library and Museum

*Statement of Qualifications*

Acoustical Consulting & Audiovisual Design



## ABD Engineering & Design

ABD Engineering & Design is an independent acoustical engineering and audiovisual design firm, proud to be a nationally and state (OR, WA) certified Women Owned business. We work with you to provide practical solutions with options that allow for informed decisions. Our timely communications and responsiveness give you the right information at the right time. The cornerstones of ABD's work include data collection on site, research, and calculations to deliver evidence-based designs. With decades of experience across multiple markets, and a team of consultants from varied backgrounds, you can count on ABD to bring you the best in audiovisual design and acoustical consulting.

At ABD, we strive to create a future where every day spaces meet the acoustical and audiovisual needs of every person. We are committed to providing an open, inclusive workplace where everyone, no matter what their background or where they come from, can learn and grow to their full potential.

## Certifications

**WBENC:** WBE1701950

**OR-COBID-WBE:** 11342

**WA-OMWBE:** W2F0027557

**WI-WBE:** WI-13264



## Professional Memberships

Acoustical Society of America

Institute of Noise Control Engineering

American Society of Testing and Materials

National Council of Acoustical Consultants

AVIXA (CTS-D)

## Staff Count

Acoustics = 8

Audiovisual = 2

Leadership/Admin = 2

## Contacts

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**Incorporated:** S-Corp incorporated 10/30/2001 in the State of Michigan

**EIN:** 38-3631490

**DUNS:** 104088682

**NAICS Code:** 541330

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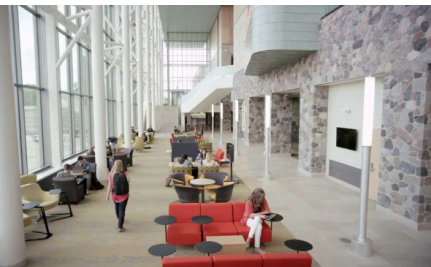
Architectural Acoustics • AV Design • Noise & Vibration

# Enhancing Communications in Libraries and Museums

## Acoustical Engineering and Audiovisual Design

No longer just quiet spaces, new media and technologies are enriching the K-12, higher education, museum and public library experience with more aural and visual communication options. Designing architectural spaces that create engaging environments and embrace and integrate these options into the pedagogy and learning techniques are paramount for encouraging creativity, ingenuity, and discovery at progressive institutions.

At ABD Engineering & Design, our acoustical engineers develop expert solutions to enhance communications in all types of museum and library facilities. We help design and engineer audiovisual communications systems and the architectural environments in which they perform to optimize speech intelligibility and acoustical performance – so communications are delivered with acoustical clarity, while still honoring the traditional “shhh” we all associate with the library or museum.



## Acoustics for the Built-Environment

Capital programs directors, facilities directors, architects, engineers, and contractors consult us, often early in the pre-construction phase, for expert acoustical analyses and solutions. Using measured noise and vibration data, sophisticated computer modeling software, our acoustical engineers draw upon their professional experience to assess and predict potential noise problems. We analyze sound transmission, reverberation, absorption,



reflection, diffusion, vibration, and other complex acoustical challenges. We help engineer the design of building partitions – shaping spaces of all sizes to negate distracting noise for adjacent spaces and exterior sources to ensure that building mechanical systems won't mask vocal communications. We work with architects to select surfaces and finishes that naturally amplify speech and reduce vocal efforts while complementing architectural aesthetics.

## Audiovisual Systems Design

Our AV consultants are experts at designing and integrating custom AV solutions for each type of setting – from classrooms, lecture halls, distance learning, active learning classrooms, and e-learning centers to conference facilities, assembly halls, and performing arts centers. We understand the performance capabilities of multi-media, entertainment, and critical listening technology and its relationship and integration in varying environments.

## BIM Design

Building Information Modeling (BIM) is an intelligent 3D modeling and database-based process that gives architecture, engineering, and construction (AEC) professionals the insight and tools to more efficiently plan, design, construct, and manage buildings and infrastructure. ABD's design professionals use BIM as a collaborative design process, not just a documentation tool, making use of Cloud-based resources for smoother real-time collaboration with our partners. Our team performs QA/QC within the model for accuracy beyond what appears on a drawing or sheet. We're using Revit families for better visualization. This helps our clients gain insight into system performance, loudspeaker coverage,

projection system geometry, and sight lines. ABD's BIM process also provides more accurate coordination with other disciplines including MEPS, lighting, furniture, and specialty equipment.

## Objective Recommendations

As an independent acoustical and AV consulting firm, we have no affiliations with or affinity for any particular brands, products, technologies, or suppliers. We bring objectivity and unbiased recommendations that are best suited to your facility – procured through a competitive bid process to ensure superior designs at or below budget.



## Experience

The ABD Engineering & Design team has extensive acoustical design and engineering experience. In addition, staff members have held teaching and research positions at various colleges and universities and regularly conduct educational seminars, conferences, workshops, and institutional training sessions on acoustics, and environmental noise and vibration control.

## Green Design

ABD Engineering & Design is a leader in the acoustical and AV design community for creating sustainable facilities. Our own Green Initiatives put theory into practice to reduce our own corporate carbon footprint. Every employee's “green ideas” help to improve energy efficiency and environmental quality of life. These organic solutions improve all of our offices, further solidifying our commitment to the environment.



# Library and Museum Projects

## Selected Experience



**Avondale Schools**  
Avondale, MI

**Beaverton Health & Science School**  
Beaverton, OR

**Bloomfield Hills High School**  
Bloomfield Hills, MI

**Buchanan Elementary School**  
Grand Rapids, MI

**Burton Elementary-Middle School (LEED)**  
Grand Rapids, MI

**Catholic Central High School**  
Grand Rapids, MI

**Central Catholic High School**  
Portland, OR

**City of East Grand Rapids, MI**  
Community Center and Library

**David Douglas School District**  
Ventura Park Elementary  
Portland, OR

**Dayton School District**  
Dayton, OR

**Davenport University:**  
Caledonia, MI  
College of Business  
Student Center  
Fieldhouse

**Detroit Public Schools**  
Detroit, MI

**Eastern Michigan University:**  
Ypsilanti, MI  
Fletcher School  
Autism Collaborative Center

**Ferris State University:**  
Big Rapids, MI  
University Center Renovation  
Ferris Library for Information  
Technology and Education (FLITE)

**Grand Rapids Art Museum**  
Grand Rapids, MI

**Grand Rapids Public Museum**  
Meijer Theater  
Grand Rapids, MI

**Grand Valley State University:**  
Allendale, MI  
Health Sciences  
Mary Idema Pew Library

**Hatfield Courthouse Library:**  
Portland, OR

**Lincoln Township Library:**  
Stevensville, MI

**Linfield College:**  
McMinnville, OR  
Murdock and Graf Halls

**Madison Public Library**  
Madison, WI

**Michigan Institute of Aviation and Technology:** Bellville, MI



**Michigan State University:**  
Grand Rapids, MI - Secchia Center

**Muskegon Community College**  
Arts and Humanities

**North Central Michigan College:**  
Petosky, MI  
Administration and Classroom Building

**North Eugene High School:**  
Eugene, OR

**Pacific University:**  
Forest Grove, OR  
Scott Hall, McGill Hall Lecture Hall

**Sloan Longway Planetarium**  
Flint, MI

**The Music Settlement**  
Cleveland, OH

**Thomas M. Cooley Law School**  
Grand Rapids, MI

**University of Connecticut**  
Hartford Downtown Campus

**University of Michigan:**  
Ann Arbor, MI  
Digital Education and Innovation  
Lab  
Inst for Healthcare Policy &  
Innovation  
Journalism & Screen Studies  
Relocation

**University of Montana:**  
Missoula, MT  
Early Childhood Education Center

**University of Oregon**  
Oregon Hall

**University of Notre Dame**  
Hesburgh Library  
Corby Hall Replacement

**Utah Data Center, Technical Library:**  
Saratoga Springs, UT

**Virginia M. Tutt Branch Public Library:**  
South Bend, IN

**Wayne State University:**  
Detroit, MI  
Student Center

**Western Theological Seminary:**  
Holland, MI  
Library

This listing represents portions of the collective career experience of the ABD Engineering & Design Staff.

Educational projects that contain libraries or museums are included, along with formal spaces.



**ABD Engineering & Design**  
Architectural Acoustics • AV Design • Noise & Vibration



# Library Project

Project Name Happy Valley Library Expansion

Location Happy Valley, Oregon

Size and Budget 10,700 SF \$6.5 million

Year Completed 2024

Description ABD Engineering & Design worked with Scott Edwards Architecture and the City of Happy Valley on this community library expansion project. ABD provided acoustical and audiovisual consulting services for the new lobby, plaza, divisible 300-person community room, 3 study rooms, offices, kitchen, and support spaces.

ABD's AV design began with audiovisual infrastructure needed to support the systems and allow for later improvements and expansion. In the divisible community room, we addressed projection and screens for video and presentation while balancing the needs of floor-to-ceiling daylight windows on two sides with a row of clerestory windows across the back.

Acoustical engineering recommendations for room acoustics, interior noise isolation, and mechanical noise control maintained the expected quiet in the new library spaces.





# Museum & Theater Project

Project Name	Chehalem Cultural Center (Phase 3)
Location	Newberg, Oregon
Size and Budget	9,000 SF \$5 million
Year Completed	2024
Description	<p>Scott Edwards Architecture, the Chehalem Park and Recreation District (CPRD), and Chehalem Cultural Center (a nonprofit 501(c)(3) organization) brought ABD Engineering &amp; Design in for this adaptive reuse project. The ongoing project reimagined a 1935 WPA elementary school as a community building celebrating the arts, community, education, and heritage to inspire and enrich lives by connecting community and culture.</p> <p>ABD's acoustical and audiovisual consulting services in the new performing arts wing (phase 3) addressed room acoustics, interior noise isolation, mechanical noise control, and AV design for the flexible and specialized spaces including meeting rooms, art galleries, movement studio, multipurpose arts studio classrooms, and spacious two-story lobby with open stairs. The 215 seat La Joie Theatre with the Jim Halliday Stage features a large screen with rear video projection, high-end audio systems, and acoustical treatment that makes the space sound as good as it looks.</p>

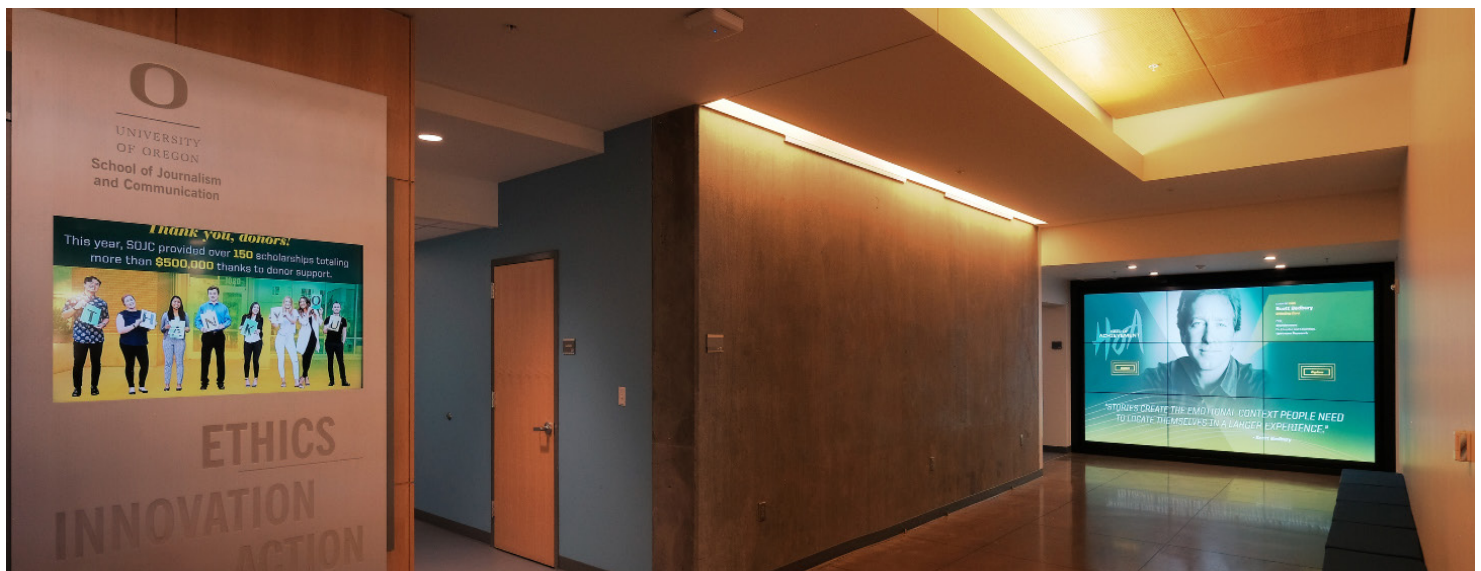


# University Project

Project Name	University of Oregon Allen Hall Experience Hub
Location	Eugene, Oregon
Size and Budget	18,000 SF \$3.2 million
Year Completed	2019

**Description** ABD Engineering & Design worked closely with PIVOT Architecture, and University of Oregon staff on the Allen Hall Experience Hub renovation. The facility is shared by different groups including: the School of Journalism and Communications, immersive media, games development, psychology and counseling, and traditional media faculty. The school demonstrated the need to replace the existing traditional broadcast studios with spaces for new and emerging media. ABD provided complete acoustical engineering, audiovisual design, and AV infrastructure design.

Tech-spaces included new broadcast suites, control room, podcast, digital media editing in conjunction with surround audio mixing, and a social media lab with real-time analytics monitoring, as well as host UC/web-conferencing and streaming applications on a large video-wall. Virtual Reality and Augmented Reality share space with collaborative games development. Common-area upgrades included the replacement of existing lobby signage, as well as a new wall-sized interactive display system to showcase significant alumni and donors.





# K-12 Performing Arts School

Project Name **Interlochen Center for the Arts Music Center**

Location Interlochen, Michigan

Project Size & Cost 65,000 SF, \$24 million

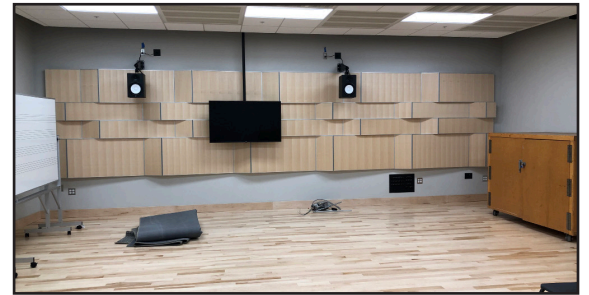
Year Completed 2019

Description ABD Engineering & Design worked with Cornerstone Architects to develop complete acoustical recommendations for the state-of-the-art Music Center.

The Music Center includes a variety of acoustically critical listening spaces: teaching studios, practice and ensemble rooms, recording studios and rehearsal spaces. Recommendations for reverberation time, isolation, and background noise extended into classrooms, and offices.

"The new Music Center provides the opportunity to incorporate 21st century expectations into our already rich music curriculum. ... Music students will have even greater success and Interlochen as a whole will be able to expand offerings and enhance the curriculum."

- Camille Colatosti, Provost, Interlochen Center for the Arts





# K-12 Project

Project Name **Sam Barlow High School**

Location Gresham, Oregon

Year Completed 2020, 181,000 SF, \$290-million  
Size and Budget

Description ABD Engineering & Design worked with Opsis Architecture and the Gresham-Barlow School District to provide acoustical and audiovisual design of Sam Barlow High School.

The school focuses on STEM and Career Technical Education (CTE) with a new science wing and maker spaces. The project covered AV and acoustics for the stadium, classrooms, labs, administration and guidance. The performing arts center includes a teaching theater (blackbox), chorus and band rooms, plus a full auditorium.



# K-12 Private School

Project Name **South Christian High School**

Location Byron Center, Michigan

Year Completed 2019

Description ABD Engineering & Design partnered with AMDG Architects to develop acoustical and audiovisual designs for this new campus.

The school includes 56 classrooms, performing arts center around a 1,100-seat auditorium featuring fixed and flexible seating and balcony, commons, STEM classrooms and labs, industrial arts, competition/performance gymnasium, along with administrative spaces.

South Christian High School offers classes for nearly 700 students from 9-12th grades. SCHS is affiliated with Moline Christian School, Byron Center Christian School, Dutton Christian School, Legacy Christian School, all of which provide K-8 Education





# University Adaptive Re-Use Project

Project Name	University of Connecticut Hartford Downtown Hartford Times Building
Location	Hartford, Connecticut
Cost and Size	\$70 million, 232,000 SF
Year Completed	2017
Description	<p>The University of Connecticut – Hartford Downtown campus serves over 3,000 students in the historic Hartford Times building and addition.</p> <p>Robert A.M. Stern Architects (RAMSA) hired ABD Engineering &amp; Design to address the Room Acoustics, Noise Isolation and Speech Privacy, and Mechanical Noise Control throughout the project.</p> <p>ABD followed the BIM (Building Information Modeling) process with the architect, other consultants, and contractors to maintain efficiency of planning and construction along the way.</p> <p>Our work on the project included complete acoustical engineering and consulting for the entire structure of 6 floors plus basement mechanical spaces, divided between approximately 140,000 SF of new construction and 90,000 SF of historic preservation renovation. The completed project consists of the student center, commons, cafe, conference and meeting rooms, classrooms, the STEM program, study rooms, labs (including state-of-the-art computer labs), lounges, the President's and Directors' offices, along with department and administrative offices, and a Veterans' Oasis lounge.</p> <p>In April, 2018 the project was awarded a Connecticut Preservation Award of Merit from the Connecticut Trust for Historic Preservation. This award honors outstanding efforts in building preservation, enhancement of historic places as well as excellence in adaptive re-use of historic buildings, preservation of neighborhoods, and restoration of cultural landscapes.</p>

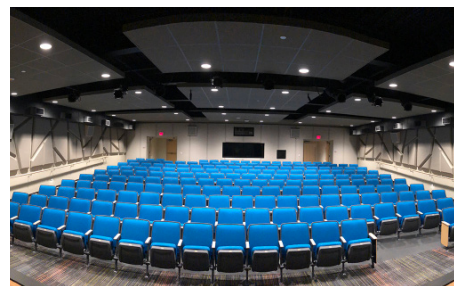


# University Project

Project Name	Hope College Jim and Martie Bultman Student Center
Location	Holland, Michigan
Year Completed	2017
Size and Budget	42,000 SF and \$22.5 million

Description ABD Engineering & Design worked with Stantec (Philadelphia) on the Bultman Student Center, Hope College's first dedicated student-center space since 1980. The facility includes a comfortable lounge, large multi-purpose event space, exciting food and coffee cafe, intimate chapel, and a flexible movie theater/performance room. Other program elements of the building include Student Life, Counseling, and Psychological Services.

ABD provided complete acoustical engineering services and designed integrated audiovisual systems, including digital signage, sounds systems, and projection screens throughout the student center. The acoustical challenges included a multi-purpose room stacked above a flexible movie theater space. Our acoustical consultants paid special attention to the noise isolation and impact insulation between the two, to be sure the two conflicting spaces could be used simultaneously. Room acoustics were critical in the open spaces, and mechanical noise control was important throughout.





# University Project

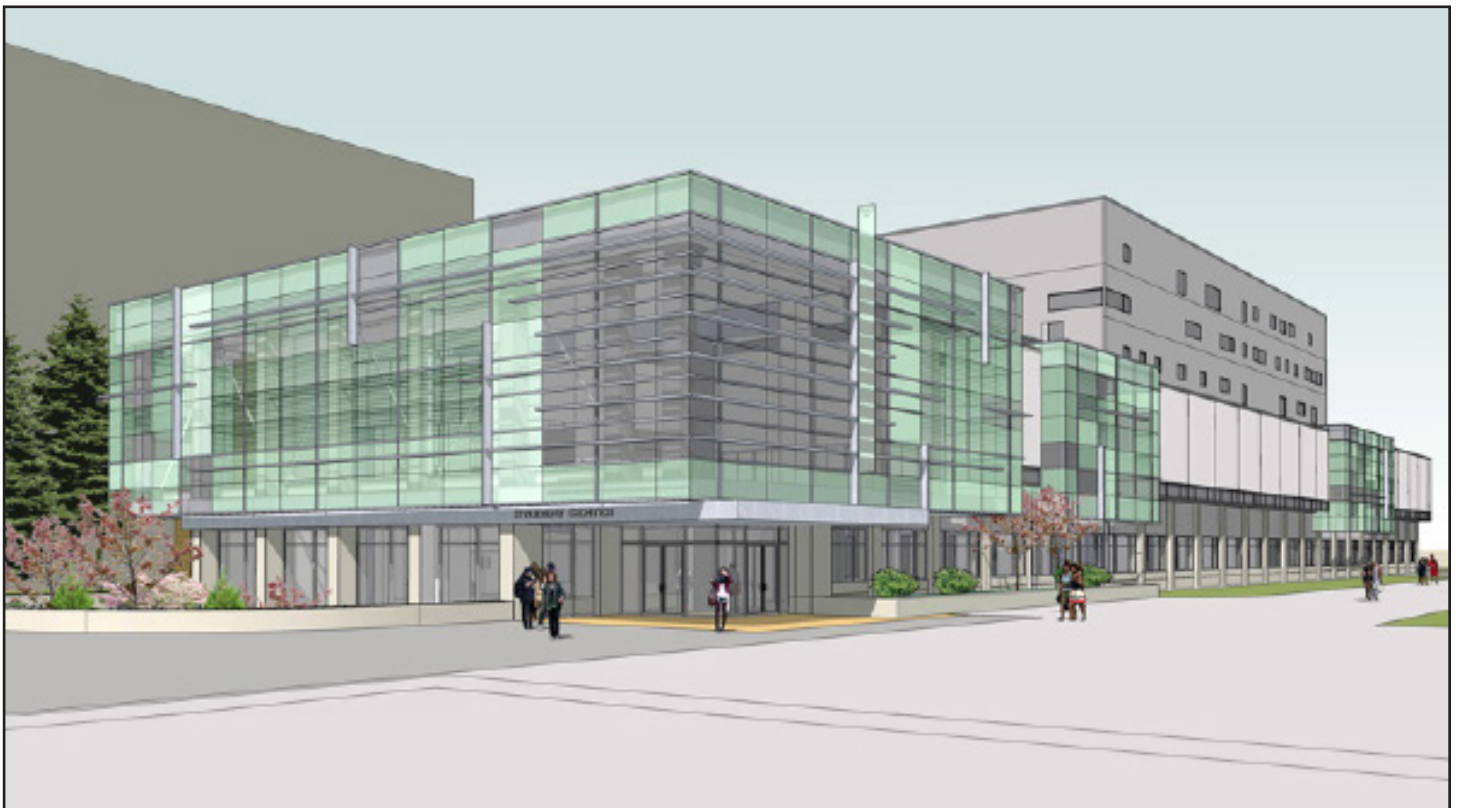
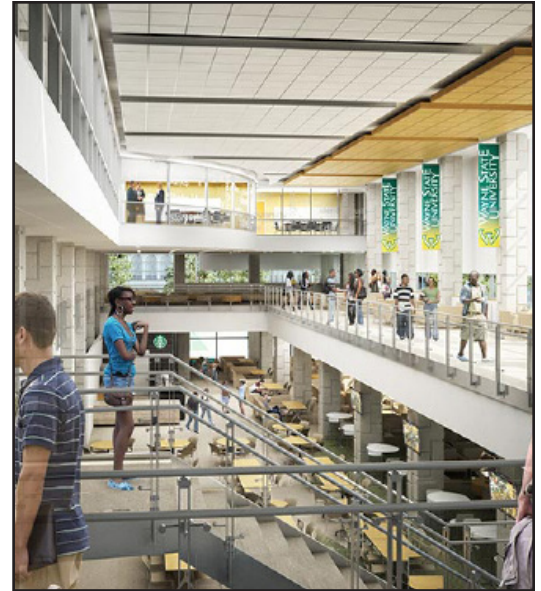
Project Name **Wayne State University  
Student Center**

Location Detroit, Michigan

Year Completed 2016

Size 100,000 SF

Description Wayne State University hired ABD Engineering & Design for Audio, Video, and Digital signage systems design in the renovation of the 45 year old Student Center. The improvements provide a more modern, expansive and student-friendly atmosphere, and include touch-screen building directories at each entrance along with state of the art audio-video and technology systems throughout the rooms.



# University Project

Project Name **Ferris State University  
University Center**

Location Big Rapids, Michigan

Year Completed 2015

Project Size \$30 Million, 120,000 SF

Description ABD Engineering & Design was hired by architectural firm Neumann/Smith to design comprehensive acoustical solutions and audio-visual and IT systems for this modern, future-oriented University Center. ABD worked with the design team to develop audio-visual and IT systems that create interactions beyond the classroom. The University Center has been designed to be a gathering space for residential and commuter students, and will include a mix of dining, retail and entertainment options. It also will house additional meeting space for student organizations. In addition, ABD's acoustical engineers developed solutions that optimized the environment for research and learning.





# K-12 Project

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Project Name **Unity Christian High School**

Location Grand Rapids, Michigan

Year Completed 2015

Size and Cost 147,000 SF, \$30 million

Services Provided Audio-Video System Design  
Theatrical Lighting System Design  
Room Acoustics  
Noise Isolation  
Mechanical Noise Control

Description Unity Christian High School features a two-story, three-court, 1800 seat gymnasium - auditorium. New music rehearsal spaces, along with updated classrooms, technology, and shop spaces. GMB Architects brought ABD Engineering & Design onto the project to provide acoustics and technical systems design throughout. Brightly colored common spaces, large windows, and open spaces create a vibrant hub for students and faculty. Acoustics and noise control was especially important to maintain the learning environment, supported by modern technology.



# University Project

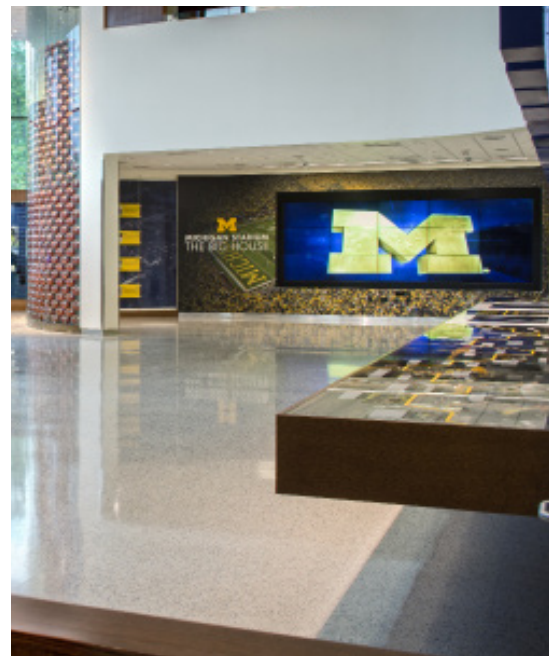
Project Name **University of Michigan Schembechler Hall  
Margaret Dow Towsley Sports Museum**

Location Ann Arbor, MI

Year Completed 2014

Description ABD Engineering & Design was brought in to provide audio-video support for the exhibits in the Towsley Museum, such as the Win Wall, with footballs for each of the program's 910 victories, displays with artifacts highlighting the history of Michigan football and a Legends area.

One of our most visible contributions to the AV Design is The Big House video monitor wall. This set of 15 displays, roughly nineteen feet wide, can act independently or as one, and are controlled either by multi-touch or from a distance with gestures.





# K-12 Project

LEED Certified  
by the U.S. Green Building Council



Project Name **Grand Rapids Christian High School**

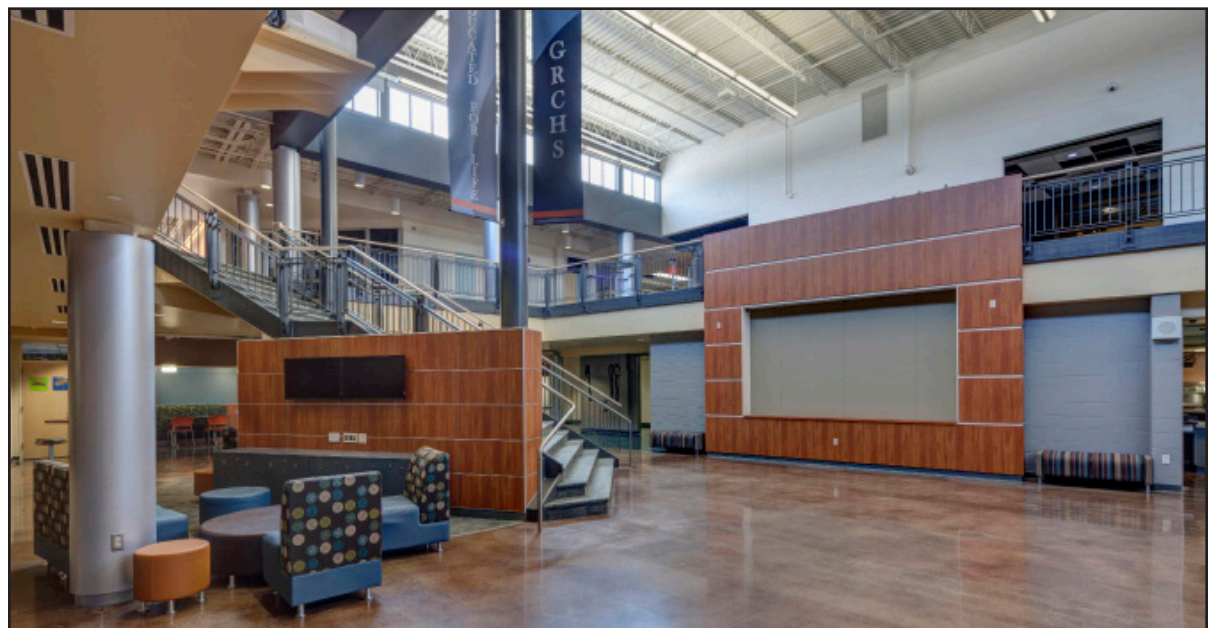
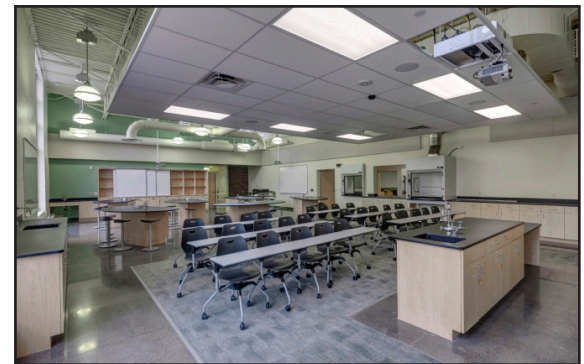
Location Grand Rapids, Michigan

Year Completed 2013

Size and Cost 165,000 SF, \$22 million

Services Provided Audio-Video System Design  
Digital Signage System Design  
Room Acoustics  
Noise Isolation

Description The Grand Rapids Christian High School project included the renovation of existing classrooms, science labs, commons, town hall, multipurpose room, and specialty rooms. ABD Engineering & Design was retained by A.M.D.G. Architects and Grand Rapids Christian Schools to offer comprehensive acoustical engineering and audio-visual design for the school. The school now uses state of the art AV throughout to facilitate flexible instruction methods with an emphasis on student collaboration.



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# University Project

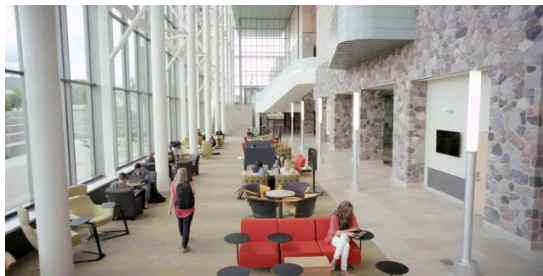


LEED Certified Platinum  
by the U.S. Green  
Building Council



THE AMERICAN  
INSTITUTE  
OF ARCHITECTS

Project Name	<b>Grand Valley State University Mary Idema Pew Library &amp; Information Commons</b>
Location	Allendale, Michigan
Year Completed	2013
Size and Cost	150,300 SF, \$68 Million
Description	This AIA Building Award Winning, Library of the Future, is a new model for the learning environment. Designed and built as a centerpiece for the campus, this LEED Platinum Certified project came in \$2 Million under-budget. Stantec (SHW Group) hired ABD Engineering & Design to provide comprehensive Acoustical consulting for the library, including the Knowledge Market - a cafe/genius bar space for private conversations, in a public and inherently noisy area.



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# University Project

Project Name **Grand Valley State University  
L. William Seidman College of Business**

Location Grand Rapids, Michigan

Year Completed 2013

Size and Price 108,000 SF, \$40 Million

Description The Seidman College of Business building is intended to be a signature piece for the downtown campus, featuring classrooms that can be converted for group projects as well as gathering places for students and faculty to interact, encouraging discussion and innovation. ABD Engineering & Design was hired by Robert A.M. Stern Architects to design comprehensive acoustical solutions for this modern, future-oriented University Business School. ABD worked with the design team to coordinate acoustics with GVSU's in-house audio-visual and IT departments. In addition, ABD's acoustical engineers developed solutions that optimized the environment for research and learning.



# University Project



LEED Certified Gold  
by the U.S. Green  
Building Council

Project Name **Michigan State University Secchia Center  
College of Human Medicine**

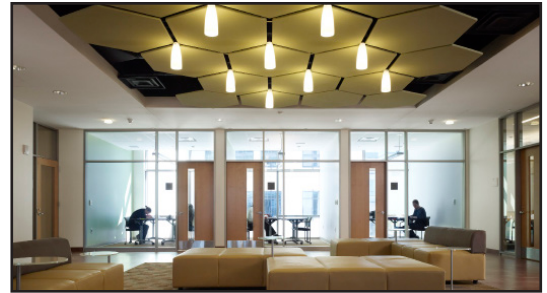
Location Grand Rapids, Michigan

Year Completed 2011

Size and Cost 180,000 SF, \$90 Million

Description ABD Engineering & Design was brought in by URS Corporation to offer consultation in architectural acoustics, noise isolation, and building systems noise control for Michigan State University's Secchia Center College of Human Medicine in downtown Grand Rapids, Michigan.

Several acoustical challenges included: exterior noise isolation from an adjacent freeway, architectural acoustics for the large multi-level atrium, building systems noise control for the top floor mechanical room – including a floating floor, concrete isolation pad. Our professional engineers used ray-tracing computer models to predict the acoustical needs of the space even before construction began. The design was acoustically optimized, cost effective, and aesthetically appealing. The building is optimized to conserve energy and preserve the environment. At the recent dedication ceremony, the building was awarded LEED Gold Certification.



**ABD Engineering & Design**  
Architectural Acoustics • AV Design • Noise & Vibration



# K-12 Project

LEED Gold Certified  
by the U.S. Green Building Council



Project Name **Kalamazoo Linden Grove Middle School**

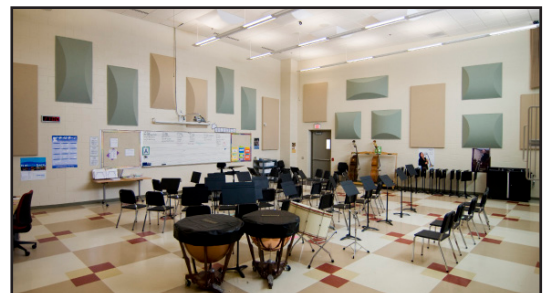
Location Kalamazoo, Michigan

Year Completed 2010

Size and Cost 142,000 SF, \$24 Million

Description Linden Grove is slated to be only the second school in Michigan to be certified under the LEED for Schools program. ABD Engineering & Design was retained by TowerPinkster and Kalamazoo Public Schools as acoustical consultants for the project. The school uses state of the art architectural methods throughout and has been the winner of numerous architectural and construction awards.

ABD Engineering & Design carefully surveyed the acoustical environment throughout the school to ensure that it met the requirements for the reverberation time, background noise levels, and sound isolation properties of LEED. The school design incorporates many open classrooms, pod learning environments, and laboratory spaces. The LEED for Schools Rating System recognizes the unique, "green" nature of the design and construction of K-12 schools, and is designed to ensure that every student has equal access to learning.



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# University Project

Project Name **Valparaiso University  
Harre Student Union**

Location Valparaiso, Indiana

Year Completed 2009

Size and Cost 202,000 SF, \$74 Million

Description The Harre Student Union is the recipient of the 2009 Collegiate Citation, the top award from American School and University Magazine (AS&U). ABD Engineering & Design was brought in by Design Organization to provide comprehensive acoustical consulting and sound isolation design for the large divisible ballroom which is used for lectures, dances, concerts, and student activities. In addition, our work included the meeting rooms, banquet rooms, small conference rooms, and lobby. We paid particular attention to the acoustics for the large main entry lobby. With its glass, stone, and gypsum wallboard room finishes, the room required sufficient absorption to attenuate the acoustics without detracting from the crisp modern look of the space.





# University Project



LEED Certified Silver  
by the U.S. Green  
Building Council

Project Name **Kalamazoo College Hicks Center**

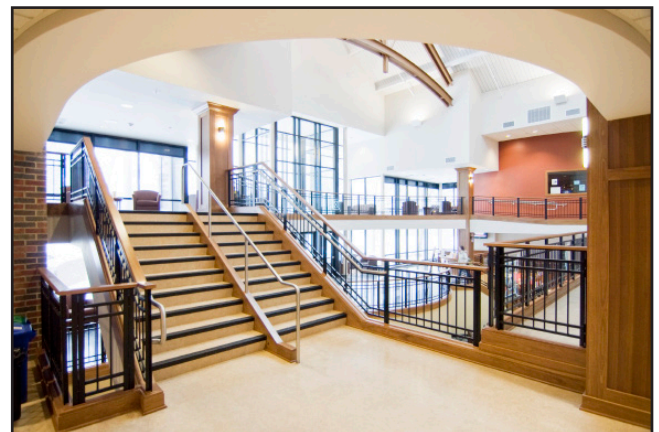
Location Kalamazoo, Michigan

Year Completed 2008

Description The renovated Hicks Center has received the LEED Silver Certification and acts as a center for the campus community. ABD Engineering & Design provided acoustical engineering and consulting services to support the renovation design. We worked with the project design team to address sound isolation, room acoustics, and HVAC noise control for counseling rooms, student healthcare center, bookstore, dining, large banquette and meeting rooms with historic murals and barrel vaulted ceilings, 4-story high main entrance lobby, and offices and conference rooms for student organizations and college staff.

**"The Hicks Center was the first LEED registered new construction project in the Kalamazoo area. It has become a magnet that draws the entire college community into a beautiful space,"**

- Eileen Wilson-Oyelaran,  
Kalamazoo College President



**ABD Engineering & Design**  
Architectural Acoustics • AV Design • Noise & Vibration

# University Project



LEED Certified  
by the U.S. Green  
Building Council

Project Name **Davenport University  
Student Center & Field House**

Location Caledonia, Michigan

Year Completed 2008

Project Size 87,000 SF, \$16 Million  
Description

ABD Engineering & Design provided comprehensive acoustical consulting for the LEED Certified Davenport University Student Center & Field House. Our professional engineers used 3D computer models to predict the acoustical response of the spaces and to design room acoustics, HVAC noise control, and noise isolation for all the critical spaces in the building including the Field House, Aux Gym, Fitness Center, Commons Area, and Meeting Rooms.



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# University Project

Project Name **Thomas M. Cooley Law School**

Location Grand Rapids, Michigan

Year Completed 2006

Project Size 98,000 SF, \$13 Million

Description The acoustical engineers at ABD Engineering & Design provided recommendations for architectural acoustics, interior noise isolation, and mechanical noise control in the renovated Cooley Law Building at 38 Oakes in downtown Grand Rapids, Michigan. Cooley Law School continued its expansion into the Grand Rapids area with the 54,209 SF renovation of, as well as the construction of a 31,376 SF addition to connect 38 Oakes to a new 12,852 SF building that replaced the Durfee building, all to house the Grand Rapids Campus of the Thomas M. Cooley Law School.

The lower level and first floor of the existing building and addition house the law library. The second through fifth floors of the existing building include medium to small sized classrooms, faculty and staff offices. The second through fifth floors of the addition include four two-story, 90-seat classrooms with tiered seating. The new building houses offices for student services, student organizations, and staff.





Melinda Miller brings her passion for all things sound and 20 years of experience to her role as Principal Engineer of ABD Engineering & Design. Her expertise includes diagnosing and preventing noise problems, designing acoustically optimized environments, and using evidence-based design practices. Melinda has consulted on projects involving architectural acoustics, noise isolation, mechanical noise control, and occupational noise exposure. Her experience includes higher education, K-12 schools, performance and worship spaces, healthcare facilities, industrial facilities, hotel and multi-family residential buildings.

A Professional Acoustical Engineer, licensed by the State of Oregon, Melinda earned her Bachelor's Degree in Mechanical Engineering from the University of Idaho, and Master's from the University of Illinois, Chicago. She has continued her education and training, earning her INCE Board Certification (INCE Bd. Cert.), Evidence-Based Design Accreditation and Certification (EDAC), and LEED AP BD+ C. As an Assistant Professor of Acoustics for Columbia College, she taught undergraduate junior and senior level classes in HVAC design, vibrations, acoustical testing, building noise control, and musical acoustics.

Melinda has chaired sessions on various topics at Noise-con and Inter-noise since 2013, and has served INCE as the Co-Chair of Building Acoustics Technical Activities committee, on the Certification Board since 2018, and the Board of Directors (2021-2024). Likewise, she has presented technical papers and education sessions for the Acoustical Society of America, the American Institute of Architects, and the Chicago Chapter of the Audio Engineering Society.

## Professional Experience

- 2011-Present – Principal Engineer, ABD Engineering & Design, Inc., Portland, Oregon
- 2006-2009 – Acoustical Consultant, Listen Acoustics, Inc., Portland, Oregon
- 2003-2005 – Assistant Professor, Audio Arts and Acoustics Department, Columbia College Chicago, Chicago, IL
- 2001-2003 – Graduate Assistant, Acoustics and Vibrations Laboratory, Department of Mechanical & Industrial Engineering, University of Illinois Chicago, Chicago, Illinois

## Professional Licenses and Memberships

- Acoustical Society of America
- Evidence-Based Design Accreditation and Certification (EDAC)
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- Institute of Noise Control Engineering (INCE), Certification Board, and Board of Directors
- National Council of Acoustical Consultants
- State of Oregon, Professional Engineer, #88158PE
- U.S. Green Building Council LEED AP BD+C

## Education

- Master of Science in Mechanical Engineering, University of Illinois at Chicago, Chicago, Illinois, 2003
- Bachelor of Science in Mechanical Engineering, University of Idaho, Moscow, Idaho, 1998.

## Project Experience

- |  |   |   |
|--|---|---|
| • Linfield College, Murdock-Gräf, McMinnville, OR        | • Portland Community College, Cascade Campus, Public Service Education Building, Portland, OR | • Oregon State University, Fairbanks Hall Renovation, Corvallis, OR |
| • Schirle Elementary School, Salem, OR                   | • Tillamook High School, Auditorium, Tillamook, OR  | • Mayo Clinic, Behavioral Health, Albert Lea, MN                    |
| • 1122 SE Hawthorne, Residential Mixed Use, Portland, OR | • Oregon Humane Society, Portland, OR   | • University of Oregon, Autzen Stadium, Eugene, OR                  |
| • German Village, Residential Mixed Use, Columbus, OH    | • Wenaha Baker Schools, Theater, Baker City, OR   |   |
| • Victory Charter School, Performing Arts, Nampa, ID     | • PDX Power Punch, Title Boxing Fitness, Portland, OR   |   |
| • Sprague High School, Salem, OR                         |   |   |





Erik J Geiger has designed and consulted on audio, video, and technical systems for over 20 years. He has served as an Audiovisual discipline leader and project manager, and carries a wealth of technical system consulting and design experience. Erik brings the heart of a teacher to every project, helping clients and end-users to understand a rapidly changing environment — having held a position at Columbia College, Chicago for many years.

Erik specializes in planning, budgeting and needs analysis studies for audiovisual and media technology-based systems, with a focus on facilities and infrastructure planning to provide life cycle value and long-term cost savings through accommodating future technologies, some of which may only be emergent.

Erik has designed large scale facility-wide audio, video and media distribution systems, leveraging IT network topologies and convergence, as well as high performance sound-reinforcement and large-scale video display systems, recording and media post-production facilities. He has designed interactive and collaborative communications environments, that both augment and move beyond the traditional audio and video conferencing space. He has worked on projects in healthcare, university, K-12 education, and corporate environments, along with auditoriums, convention centers and hospitality venues around the world.

When Erik isn't designing technical systems, he enjoys playing the piano, backpacking, cycling, and photography.

## Professional Experience

- 2016-Present – Director of Audiovisual, ABD Engineering & Design, Inc., Portland, Oregon
- 2011-2016 – Senior Associate, Shen, Milsom & Wilke, LLC – Chicago, Illinois
- 2007-2014 – Adjunct Professor, Audio Arts & Acoustics, Columbia College – Chicago, Illinois
- 2009-2011 – Owner, Geiger Design Consultants – Chicago, Illinois
- 2004-2009 – Associate, Shen, Milsom & Wilke, LLC – Chicago, Illinois
- 1998-2004 – Arnold & O'Sheridan, Inc. – Madison, Wisconsin
- 1995-1998 – Hammel Green & Abrahamson, Inc. – Minneapolis, Minnesota

## Professional Certifications and Memberships

- AVIXA (InfoComm International), Certified Technical Specialist
- CTS-D
- AVIXA (Infocomm) Infrastructure Standards working group

## Education

- Mass Communications, University Of Wisconsin – Madison, Wisconsin
- Audio Recording and Production, Musicians Technical Training Institute – Minneapolis, Minnesota.

## Project Experience

- |   |   |  |
|---|---|--|
| • Portland Community College, Cascade Campus, Public Service Education Building, Portland, OR | • Moreland Presbyterian Church, Sanctuary, Portland, OR                                 | • University of Montana, Early Childhood Education Center, Missoula, MT                |
| • Oregon State University, Fairbanks Hall, Corvallis, OR                                      | • Port of Vancouver, Commission Room, Vancouver, WA                                     | • Muskegon Community College, Arts and Humanities, Theater Music and Art, Muskegon, MI |
| • North Eugene High School, Eugene, OR  | • Clackamas Community College, Barlow Hall, Automotive, Oregon City, OR                 | • South Christian High School, Grand Rapids, MI  |
| • City of Ukiah, Council Chambers, Ukiah, CA  | • The University of Providence Great Falls, University Center, Great Falls, MT          | • University of Oregon, Autzen Stadium, Eugene, OR                                     |
| • Kaiser Permanente, North Lancaster Medical Office Building, Salem, OR                       | • Central Michigan University, Center for Integrated Health Studies, Mount Pleasant, MI |  |





Peter Allen is a senior acoustical engineer with a Master of Engineering degree in Acoustics and over 20 years of experience in the field of acoustics. Peter has been with ABD Engineering & Design since 2016 and provides consulting services on a wide-range of projects types, including education facilities, healthcare facilities, worship spaces, hotels, and multi-family housing, while also specializing in vibration testing and analysis.

Peter uses an evidence-based, data-driven approach to provide acoustical recommendations to clients. Whenever possible, his recommendations include multiple options to help clients meet their aesthetic and budgetary constraints. He has presented his work at various industry symposia as well as at the annual conference for the

Institute of Noise Control Engineering.

Prior to joining ABD, Peter worked as an acoustical consultant at Daly-Standlee & Associates for eight years, where he learned to apply his skills from a research environment to the field of acoustical consulting. He began his career at Southwest Research Institute (SwRI), where he worked for ten years. There, he managed technical projects in vibration analysis, noise control, and environmental testing for clients in the electric utility, telecommunications, aerospace, automotive, and building industries. He taught technical courses within the organization to further develop the skills of others in the organization.

In 2005, Peter obtained his Master's Degree of Engineering in Acoustics from Pennsylvania State University, and he has used his additional education to focus his efforts on the use of field testing and analysis to solve noise and vibration problems. In his personal time, Peter enjoys climbing, yoga, riding his motorcycle, and SCUBA diving.

## Professional Experience

- 2016-Present – Senior Acoustical Engineer, ABD Engineering & Design, Inc., Portland, Oregon
- 2008-2016 – Senior Acoustical Engineer, Daly-Standlee & Associates, Portland, Oregon
- 1998-2008 – Senior Research Engineer, Southwest Research Institute, San Antonio, Texas

## Professional Licenses and Memberships

- Acoustical Society of America
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- National Council of Acoustical Consultants
- State of Oregon, Professional Engineer #84392PE

## Education

- Master of Engineering in Acoustics, Pennsylvania State University, State College, Pennsylvania, 2005
- Bachelor of Science in Engineering, Electrical Emphasis, Texas Christian University, Fort Worth, Texas, 1998.

## Project Experience

- |   |  |  |
|---|--|--|
| • Beaverton Health & Science School, Beaverton, OR            | • Lakeridge High School, Lake Oswego, OR         | • USANA Sciences Company, Packaging Area, Valley City, UT  |
| • Jesuit High School, Portland, OR                            | • Ron Russell Middle School, Portland, OR        | • TriMet, Columbia 10, Portland, OR                        |
| • Kaiser Permanente:<br>-Hybrid Operating Room, Clackamas, OR | • Tukes Valley K-8 School, Battlegreound, WA     | • St John Fisher School, Gym Noise Isolation, Portland, OR |
| -Salmon Creek MRI, Vancouver, WA                              | • West End Surgical, Beaverton, OR               | • Bendix, Relocation Noise and Vibration, Avon, OH         |
| -North Lancaster MOB, Salem, OR                               | • Yates Pointe Mixed Use Development, Bend, OR   |  |
| -Clackamas Eye Care MRI, Happy Valley, OR                     | • Zoom+, Bridgeport Village Clinic, Portland, OR |  |





Jeremy Bielecki is a Senior Acoustical Consultant with over 20 years of experience as a consultant, and as a project manager for over 300 building projects. Jeremy has worked in acoustics in the Midwest and Pacific Northwest on projects including healthcare, higher education, workplace, performance spaces, K-12 education, athletics, and multi-family residential.

Jeremy possesses a strong work ethic and creative problem solving skills that have served him and his clients well. Knowing he always wanted to be in engineering and involved with music, Jeremy found acoustics to be the marriage of the two. He gains tremendous satisfaction from being part of a project that starts with lines on a screen and words on a page, eventually becoming a physical space you live within, and get enjoyment from.

Over his career, Jeremy has developed expertise in performing field measurements, creating complex computer prediction models, and analyzing data and drawings to identify primary causes and contributors to noise and vibration problems. He also determines sound isolation ratings, HVAC system noise ratings, and room acoustic performance using reverberation time, acoustical clarity, and speech intelligibility metrics.

In his spare time, Jeremy is a skilled piano tuner and repair technician, musician, and coaches soccer and robotics. He also enjoys 3D printing, and cooking with his family.

## Professional Experience

- 2022-Present – Senior Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2005-2022 – Acoustical Consultant, Kolano and Saha Engineers, Inc., Waterford, Michigan
- 2001-2004 – Acoustical Engineer, Michael R. Yantis Associates, Inc., Seattle, Washington

## Professional Memberships

- Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

## Education

- Bachelor of Science in Mechanical Engineering, University of Michigan, Ann Arbor, 2000.

## Project Experience

- |  |  |   |
|--|--|---|
| • Munson Medical Center<br>Traverse City, MI   | • *Michigan State University, East<br>Lansing, MI<br>Broad Art Museum<br>STEM Power Plant Renovation | • *Charles H Wright Museum<br>of African American History,<br>Detroit, MI |
| • *St. John Hospital, Detroit, MI  | • *Henry Ford Community College,<br>Recording Studio, Dearborn, MI                                   | • *Emagine Theaters, Royal Oak,<br>MI                                     |
| • *Detroit Pistons Performance<br>Center, Detroit, MI  | • *Kendall College of Art and<br>Design, Grand Rapids, MI  | • *Residence Inn by Marriott,<br>Grand Rapids, MI                         |
| • *Greektown Casino Hotel,<br>Detroit, MI  | • *Davidson Foundation<br>Development, Bloomfield Hills,<br>MI                                       | • *Bharatiya Temple, Troy, MI   |
| • *University of Michigan, Ann<br>Arbor, MI<br>Law School: Hutchins Hall,<br>Jeffries Hall<br>Student Union<br>Central Campus Recreation<br>Building<br>Beyster Building Addition<br>Munger Student Residences | • Romeo High School, Auditorium,<br>*Romeo, MI   | • *The Mid: Co-Living, Detroit, MI  |
| • *Central Michigan University,<br>Mount Pleasant, MI<br>Grawn Hall<br>Ronan Hall  | • *Byron Center High School,<br>Byron Center, MI   | • *New Beginning Baptist Church,<br>Waterford, MI                         |
|  | • *Ann Arbor School of the<br>Performing Arts, Ann Arbor, MI   | • *Cobo Center, Detroit, MI   |
|  | • *Toyota Technical Center, Quiet<br>Room, Ann Arbor, MI   | • *Patrick V. McNamara Fitness<br>Center, Detroit, MI                     |
|  |  | • *Theodore Levin U.S.<br>Courthouse, Detroit, MI                         |



# Benjamin Wolf

Senior Acoustical Consultant  
INCE Bd. Cert. [bwolf@abdengineering.com](mailto:bwolf@abdengineering.com)



Benjamin Wolf is a Senior Acoustical Consultant with a Master of Science in Architectural Acoustics from Rensselaer Polytechnic Institute. He specializes in analysis and recommendations for the spaces and structures needed to provide acoustically effective and comfortable environments.

Ben joined ABD Engineering & Design, Inc. in 2016 after four years with Daly-Standlee & Associates. He has worked on architectural projects, including field testing of wall and floor/ceiling systems, HVAC noise analysis, the specification and design of acoustic partitions, and acoustical treatments in churches, movie theaters, offices, apartment buildings, hospitals, and schools. His environmental noise studies include mine and quarry sites, light rail, highway and roadway noise, along with power and industrial facilities.

Ben uses 3D acoustic modeling software to provide a detailed analysis and recommendations for room acoustics, sound distribution, and speech intelligibility. As part of his master's thesis, he modeled accurate acoustical representations of several famous music performance venues allowing musicians to hear their performance simulated in those spaces, in real time, as if they were standing on stage.

In his spare time, Ben plays bass trombone with a wide variety of local groups. He enjoys web design and recording live sound.

## Professional Experience

- 2016-Present – Senior Acoustical Consultant, ABD Engineering & Design, Inc., Portland, Oregon
- 2012-2016 – Acoustical Consultant, Daly-Standlee & Associates, Portland, Oregon

## Professional Memberships

- Acoustical Society of America
- ASTM International, E33 Committee on Building and Environmental Acoustics
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- National Council of Acoustical Consultants

## Education

- Master of Science in Architectural Sciences, Emphasis in Architectural Acoustics, Rensselaer Polytechnic Institute, Troy, New York, 2012
- Bachelor of Arts in Physics, Gustavus Adolphus College, St. Peter, Minnesota, 2011
- Bachelor of Arts in Music Performance, Gustavus Adolphus College, St. Peter, Minnesota, 2011.

## Project Experience

- |   |   |   |
|---|---|---|
| • South Cooper Mountain Apartments, Beaverton, OR                             | • Hermiston Schools (Theater Lane Elementary School, Rocky Heights Elementary School, High School Classroom Annex and CTE), Hermiston, OR | • Northwest Pipe Company, Open Office Acoustics, Vancouver, WA          |
| • Wood Village Mixed Use, Wood Village, OR                                    | • Dry Creek Landfill, Noise Study, Eagle Point, OR  | • Columbia Shores Townhouses, Overlay Noise Study, Vancouver, WA        |
| • Farmdale Apartments, North Hollywood, CA                                    | • Kaiser Permanente, Sunnyside Medical Center, Clackamas, OR  | • Wood Village Mixed Use, HUD Noise Study, Wood Village, OR             |
| • L&M Industrial Fabrication, Lot Expansion Barrier Calculations, Tangent, OR | • United Natural Foods, Noise and Vibration Study, Ridgefield, WA   | • Clackamas Federal Credit Union, Corporate Headquarters, Oak Grove, OR |
| • USANA Sciences Company, Packaging Area, Valley City, UT                     | • Threemile Canyon Farms, Generator Exhaust, Boardman, OR   |   |
| • TriMet, Columbia 10, Portland, OR   |   |   |



**ABD Engineering & Design**  
Architectural Acoustics • AV Design • Noise & Vibration





Quincey Smail is a Senior Acoustical Consultant, with a Master of Engineering in acoustics from Penn State. Quincey's expertise includes acoustical design, modeling and testing to provide thoughtful recommendations for a variety of project types from residential and mixed use to K-12, higher education to healthcare, workplace, environmental, and industrial facilities. Quincey earned his Board Certification by the Institute of Noise Control Engineering (INCE) in 2022.

His projects include noise studies of manufacturing equipment in the US and Europe, car wash sites with residential adjacencies, and high-profile commercial locations.

Quincey's musical background has served him and his projects well in performance spaces including the Interlochen Center for the Arts, as well as other public and private music schools, music stores, event centers, plus the particular needs of worship spaces. Quincey is regularly called upon to assist with hotel acoustical needs during design and construction, along with post-occupancy needs. He has also worked with hospitals, hospice, counseling centers, dental offices, and residential healthcare to address FGI and HIPAA requirements.

In his free time, Quincey – a talented baritone – sings in community and church choirs. He can be found enjoying the Grand Rapids local craft-brewery and cocktail culture, trivia nights, and playing tabletop games.

## Professional Experience

- 2016-Present – Senior Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2015-2016 – Lead Producer, Penn State University, State College, Pennsylvania
- 2012-2013 – Physics Lab Assistance, Central College Physics Department, Pella, Iowa

## Professional Memberships

- Acoustical Society of America
- American Society of Testing and Materials
- National Council of Acoustical Consultants
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- Boy Scouts of America, Eagle Scout

## Education

- Master of Engineering in Acoustics, Pennsylvania State University, State College, Pennsylvania, 2016
- Bachelor of Arts in Physics, Minors in Mathematics, Music, and German, Central College, Pella, Iowa, 2013.

## Project Experience

- |  |  |   |
|--|--|---|
| • Public Museum, Grand Rapids, MI                                    | • Riverview Church, Auditorium, Holt, MI   | • Forslund Condominium, Impact Isolation, Grand Rapids, MI                            |
| • Courtyard Marriott, Detroit, MI                                    | • 212 River Residential Mixed-Use, Holland, MI                                       | • Domino's Pizza, Boardroom and Warehouse Open Office, Ann Arbor, MI                  |
| • Essity Operations Gennep, Netherlands                              | • Jefferson Lofts Condominium Association, Noise Isolation, St. Joseph, MI           | • Interlochen Center For The Arts, Kresge Amphitheater, Interlochen, MI               |
| • Tri County Area Schools, Cafetorium, Howard City, MI               | • West Ottawa Public Schools, Performing Arts Center, Holland, MI                    | • Grand Valley State University, Product Design and Robotics Studio, Grand Rapids, MI |
| • Nestle Production Studio, Solon, OH                                | • Warner Norcross & Judd, Office Acoustics, Detroit, Grand Rapids, and Kalamazoo, MI | • Ford Motor Company, Conference & Event Center, Dearborn, MI                         |
| • Bendix, Relocation Noise and Vibration, Avon, OH                   | • Tommy Car Wash Systems, Car Wash Noise Study, Hudsonville and Flint, MI            | • Opera Grand Rapids, Grand Rapids, MI  |
| • Western Michigan University, Dunbar Hall, Kalamazoo, MI            |  |   |
| • Western Michigan University, College of Aviation, Battle Creek, MI |  |   |





Iva Handley is a graduate of Rosenheim University of Applied Sciences in Germany, where she earned her bachelor's degree in engineering, with a focus on interior engineering.

Iva has since worked as an engineer in the building design field, both in Germany, and in the US. She is experienced in acoustical measurements of airborne sound, impact noise, equipment, construction, and traffic noise, as well as building enclosures and field reviews. She also brings a background in carpentry and metal work to her projects.

When Iva isn't out taking acoustical measurements, building acoustical room models, or writing engineering reports, you might find her brewing her own beer.

## Professional Experience

- 2019-Present – Acoustical Consultant, ABD Engineering & Design, Inc., Portland, Oregon
- 2018-2019 – Building Science Engineer, EIT, RDH Building Science, Inc., Portland, Oregon
- 2015-2016 – Project Engineer, ig-bauphysik GmbH & Co. KG, Hohenbrunn, Germany

## Education

- Bachelors of Engineering: Interior Engineering, FH Rosenheim: University of Applied Sciences (Germany), 2017
- Study Abroad Program, École Supérieure du Bois: Research Wood Science and Technology (France), 2014

## Professional Certifications

- EIT Certification for Civil Engineering and Land Surveying in the State of Oregon

## Professional Memberships

- Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

## Project Experience

- |   |   |   |
|---|---|---|
| • Zoom+, Bridgeport Village Clinic, Portland, OR  | • Chiller Noise Control, Portland, OR   | • Oregon State University Cascades, AB2 STEM Building, Bend, OR         |
| • Hillsboro School District, Mooberry Elementary School, Chiller Noise, Hillsboro, OR   | • Oregon Humane Society, Portland, OR   | • Silco Site Apartments, Portland, OR                                   |
| • Godfrey Detroit Hotel, Detroit, MI  | • Kaiser Permanente, Sunnyside Medical Center, Clackamas, OR                            | • Kaiser Permanente, North Lancaster Medical Office Building, Salem, OR |
| • Schirle Elementary School, Salem, OR  | • United Natural Foods, Noise and Vibration Study, Ridgefield, WA                       | • University of Portland, Innovation Center, Portland, OR               |
| • Treasury Resiliency Building, Salem, OR   | • Sprague High School, Salem, OR  | • Salem-Keizer Public Schools, South Salem High School, Salem, OR       |
| • Victory Charter School, Performing Arts Center, Nampa, ID   | • Northwest Pipe Company, Open Office Acoustics, Vancouver, WA                          | • Scioto Peninsula Apartments, Columbus, OH                             |
| • Hermiston Schools (Theater Lane Elementary School, Rocky Heights Elementary School, High School Classroom Annex and CTE), Hermiston, OR | • Legacy Health, Emanuel Medical Center and Progressive Cardiac Care Unit, Portland, OR |   |
|   | • Casino Road Office Building, Everett, WA  |   |





John Kramer is an acoustical consultant, with a Master of Architectural Engineering from University of Nebraska, Lincoln. John's passion for music and performing arts led to his interest in acoustics and helping to create efficient, comfortable, and healthy acoustical environments. John leverages his experience in acoustics and building systems with an applied background in noise and vibration control in his project work.

John has excelled with both professional and student design teams, including a 1st place finish in the 2020 ASHRAE Student Design Competition (System Selection). He has designed mechanical systems on projects including secure government facilities, corporate headquarters, large scale healthcare, and education. Since joining ABD, John has begun working on projects across the country from wind turbine noise studies to residential acoustics. John is building his experience with acoustically sensitive spaces including: Healthcare, K-12 Schools, Churches, Corporate Offices, and Social Halls, and is quickly developing as a consultant.

In John's spare time he enjoys playing guitar and singing, playing chess, collecting comic books, and is learning his way around West Michigan.

## Professional Experience

- 2021-Present – Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2019-2021 – Mechanical Engineering Intern, HDR, Omaha, Nebraska

## Professional Memberships

- Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

## Education

- Master of Architectural Engineering, University of Nebraska, Lincoln, NE, 2021.
- Bachelor of Science of Architectural Engineering, University of Nebraska, Lincoln, NE, 2020.

## Project Experience

- |   |  |  |
|---|--|--|
| • Oregon State University<br>Fairbanks Hall<br>Corvallis, OR  | • Corewell Health Ambulatory<br>Grand Rapids, MI                                     | • Kellogg's Headquarters<br>Battle Creek, MI                 |
| • Minot State University<br>Hartnett Hall<br>Minot, ND  | • PeaceHealth Riverbend<br>Springfield, OR   | • LinkedIn Detroit<br>Detroit, MI                            |
| • Sinclair Community College<br>Distance Learning<br>Dayton, OH                                     | • Portland Providence Medical<br>Center Main Emergency<br>Department<br>Portland, OR | • Disability Advocates of Kent<br>County<br>Grand Rapids, MI |
| • Grand Rapids Community<br>College Secchia Institute for<br>Culinary Education<br>Grand Rapids, MI | • Interlochen Center for the Arts<br>Interlochen, MI                                 | • Wolverine Worldwide Broadcast<br>Studio<br>Rockford, MI    |
| • Oregon Health and Science<br>University Dispatch<br>Portland, OR                                  | • Jackson Hole Classical Academy<br>New High School<br>Jackson Hole, WY              | • Cannon Muskegon Noise Study<br>Muskegon, MI                |
|   | • Hudsonville Christian School<br>Hudsonville, MI                                    | • Grand Rapids Public Museum<br>Grand Rapids, MI             |
|   | • Wheaton Academy<br>West Chicago, IL  | • Southtown Guitar<br>Grand Rapids, MI                       |



Faulkner Bodbyl-Mast is an audiovisual and acoustical consultant, having earned a bachelor's degree in Sound Engineering, with a minor in Electrical Engineering. Faulkner is an AVIXA Certified Technical Specialist (CTS). You might work with him in either or both capacities at ABD.

Faulkner's interest in sound came from his passion for music. He started attending Grand Rapids Symphony Orchestra concerts as a child and developed as an instrumentalist through grade school and high school, picking up the euphonium and carrying it into college. Once exposed to electronic music, Faulkner's interest shifted from performance to technical arts. He combined his early musical training with technology and blossomed into composing, recording, and music production. Faulkner provided sound design for live theater productions and began 3D sound modeling to

create sound design for video games.

Acoustics and AV go together, as the inherent quality of the built environment is designed and tuned by engineering and supported and enhanced by the electronics. Faulkner notes the acoustics of a space and systems within it must compliment each other or they will undermine each other.

Aside from his work in acoustics and audiovisual design, Faulkner is passionate about music. Gifted in composing, performing, and recording electronic pieces, you might find his compositions on SoundCloud.

## Professional Experience

- 2022-Present – Audiovisual & Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2022 - Acoustical Intern, Kirkegaard, Chicago, Illinois
- 2019-2022 – Media Assistant, Duderstadt Center, Ann Arbor, Michigan
- 2019-2022 – Audio Director, Composer, Sound Designer, Wolverine Soft Studio, Ann Arbor, Michigan

## Professional Memberships and Certifications

- AVIXA (InfoComm International), Certified Technical Specialist
- CTS
- Audio Engineering Society
- American Institute of Architects, Professional Affiliate
- National Council of Acoustical Consultants

## Education

- Bachelor of Science in Sound Engineering, minor Electrical Engineering, University of Michigan, Ann Arbor, 2022.

## Project Experience

- |   |   |   |
|---|---|---|
| • Hope College<br>Dewitt Center for Economics and Business, Holland, MI | • City of Troy Council Chambers<br>Troy, MI                             | • Amity Middle School and High School<br>Amity, OR                    |
| • Oregon State University<br>Fairbanks Hall<br>Corvallis, OR            | • Portland Art Museum Rothko Pavilion, Portland, OR                     | • Spokane Pubic Schools<br>Lewis and Clark High School<br>Spokane, WA |
| • Oregon State University<br>Student Success Center<br>Corvallis, OR    | • Rogue Credit Union Community Complex Sports and Events<br>Medford, OR | • NAMI Oregon<br>Portland, OR   |
| • Columbia Gorge Community College Nursing SIM Lab<br>The Dalles, OR    | • Wheaton Academy<br>West Chicago, IL                                   | • Peace Church<br>Middleville, MI                                     |
| • Hillsboro Civic Center<br>Hillsboro, OR                               | • St Paul Center<br>Steubenville, OH                                    | • Gardens of Sun City Senior Living, Sun City, AZ                     |
| • Chehalem Cultural Center<br>Newberg, OR                               | • Ben Davis High School<br>Indianapolis IN                              | • Senior Living<br>Peoria AZ  |
|   | • Potter Elementary School<br>Flint, MI                                 | • Happy Valley Library<br>Happy Valley, OR                            |
|   | • Illiana Christian High School<br>Lansing, IL                          |   |





Lauren Slattery is an acoustical consultant newly located in Portland, OR. She is a graduate of Belmont University where she earned her bachelor's of science degree in Audio Engineering Technology, with a Physics minor.

Lauren comes to ABD Engineering & Design directly from her internships at NASA Ames Research Center and NASA Marshall Space Flight Center, where she performed acoustical testing and assisted with acoustical aspects of aircraft, satellites, engines, and their components. Lauren is building her architectural acoustical experience through mentoring with ABD staff. She is proving to be a quick study and is taking on her own project work.

Lauren describes herself as outdoorsy and enjoys hiking, climbing, and kayaking. She loves road trips and travel, reading, and baking - especially pastries.

## Professional Experience

- 2024-Present – Acoustical Consultant, ABD Engineering & Design, Inc., Portland, Oregon
- 2024 – Acoustic Support Intern, NASA Ames Research Center, Mountain View, California
- 2023-2024 – Acoustic Test Support Intern, NASA Marshall Space Flight Center, Huntsville, Alabama
- 2021-2024 – Audiovisual Technician, Columbus Zoo and Aquarium, Columbus, Ohio
- 2022 – School of Music Audio Crew, RF Technician, Stagehand, Belmont University, Nashville, Tennessee

## Education

- Bachelors of Science: Audio Engineering Technology, Physics Minor: Belmont University, Nashville, TN, 2023

## Professional Certifications

- ProTools User Certified
- Dante Certification 3

## Professional Memberships

- Audio Engineering Society
- Women in Audio
- Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

## Project Experience

- |  |   |   |
|--|---|---|
| • Oregon State University<br>Corvallis, Magruder Hall,<br>Corvallis, OR                      | • Colonia de Valle Prospero,<br>Affordable Housing,<br>Albany, OR                                 | • Wind Tunnel Acoustic Data<br>Processing,<br>Mountainview, CA  |
| • Sous La Rose Social Club and<br>Event Space,<br>Portland, OR                               | • RogueX Credit Union Community<br>Complex, Aquatics, Sports, and<br>Events Center<br>Medford, OR | • Ocean Way Recording Studios,<br>Final Recording Project for<br>Studio Recording II<br>Nashville, TN |
| • Micronesian Islander<br>Community's Voyagers' Village,<br>Affordable Housing,<br>Salem, OR | • Acoustic Test Stand Design,<br>Mountainview, CA   | • Foley and ADR group recording<br>project<br>Nashville, TN   |

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