

JAMES PATRICK RAND

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EDUCATION	Master of Architecture, University of Oregon Bachelor of Architecture, Virginia Polytechnic Institute	1975-77 1968-73
TEACHING AREAS	ARC 232 and ARC 232 Lab; Structures and Materials ARC 302 Architectural Design Studio- Technology ARC 432 and ARC 432 Lab; Architectural Construction Systems ARC 502; Professional Architecture Studio II ARC 534; Design of Architectural Details ARC 581; Final Project Preparation Seminar ARC 590; Special Topics: Materials for Design ARC 598; Final Project Studio ARC 697; Final Project Preparation	
TEACHING AND ADMINISTRATIVE EXPERIENCE	Professor, School of Architecture Associate Director of Architecture Director of Graduate Programs, School of Architecture Associate Dean for Research, College of Design, NCSU Assistant Dean, College of Design, NCSU Assistant Head, Department of Architecture Associate Professor of Architecture, College of Design, NCSU Assistant Professor of Architecture, College of Design, NCSU	1998-present 2000-2005 1995-2005 1993-95 1990-93 1988-90 1983-98 1977-83
MEMBERSHIPS AND ASSOCIATIONS	Sustainability Committee, The Masonry Society, chair Board of Directors, BuildSense, member American Institute of Architects Committee on Design, member The Masonry Society; member American Institute of Architects, member Board of Directors, Triangle AIA, member President, The Masonry Society Board of Directors, The Masonry Society, member	2005-present 2005-present 1997-present 1989-present 1977-present 2001-05 2000-03 1998-2004
ACADEMIC AND PROFESSIONAL HONORS	College of Fellows, American Institute of Architects AIGA "50 Books/50 Covers"; book <i>Materials for Design</i> selected Fellow, The Masonry Society President's Award, The Masonry Society Alumni Distinguished Graduate Professor, College Award AIA Education Honor Award, Honorable Mention Board of Governor's Teaching Award, Architecture Nominee Yorkdale Award (Best Masonry Paper in 3-year period), ASTM, Finalist Recognizing Teaching Excellence Award, College of Design Alumni Distinguished Undergraduate Professor; Univ. Award ACSA Service Award; for service as Regional Meeting Chair Alumni Distinguished Undergraduate Professor, College Award Education Commendation Award; CSI National Institute Scholar, American Institute of Architects National Award Outstanding Teacher Award, NCSU Academy of Outstanding Teachers, Inducted, NCSU Juror on nine national or regional design awards competitions	2007 2007 2006 2005 1997, 2003 2002 2000 1999 1999 1994 1994 1985, 1993 1991 1990 1983, 1986 1983 1988-2009

PUBLICATIONS (since 1990)	"Gallery Fixes Hall-less House"; article regarding Zaytoun House; <i>Southern Living</i> , May	1990
	"Architecture: The Act/Art of Building": Proceedings from the Southeast Region conference of the ACSA, Editor	1993
	"Teaching Architecture through Technology Courses": co-authored with Hunt McKinnon; paper accepted for presentation through a juried review process, in proceedings, ACSA Technology Conference, Roger Williams Univ.; Bristol, R. I.	1994
	"Teaching Architecture through Technology Courses": co-authored with Hunt McKinnon; Excerpts of paper presented at ACSA Technology Conference published in <i>Connector</i> , Volume III, number 2	1994
	"Read it and Weep"; Raleigh AIA Newsletter	1994
	"Industry Needs a 'System' Focus"; <i>Masonry Construction</i>	1994
	"Integrating Masonry Design and Construction Technology"; <i>Masonry Today</i>	1994
	"Masonry in the University Curriculum", Carolyn Schierhorn, Aberdeen's Magazine of <i>Masonry Construction</i> , pp. 163-171,	1996
	"Design Oriented Building Technology Courses"; article submitted to the Journal of Architectural Education, Aug.	1996
	"Brick Veneer Developments Research"; <i>Brick Quarterly</i> magazine, Summer; pp. 12-14	1997
	"Integrating Design and Construction"; Aberdeen's Magazine of <i>Masonry Construction</i> , October; pp. 519-522	1997
	"Teaching Architecture through Technology Courses"; co-authored with Hunt McKinnon, included in The Best of <i>Connector</i> , Volume IX	2000
	"Rethinking Masonry; A Call for Collaborative Innovation" invited paper, <i>Masonry</i> magazine, February, pp: 12-18.	2001
	<i>Materials for Design</i> ; Book co-authored with Victoria Ballard Bell. Rand responsible for analyses and technical critiques of 60 international contemporary architectural projects that are exemplary with regard to their use of construction materials. The materials investigated include glass, plastics, metals, concrete and wood. Published by Princeton Architectural Press in 2006. Selected for AIGA "50 Books/50 Covers" exhibit and publication in 2007; 1 of only 2 textbooks selected nationally. Ranked #1 architectural materials book on Amazon.	2003-2006
	<i>Architectural Detailing: Function, Constructability, Aesthetics</i> Book co-authored with Edward Allen. Second edition of book originally published in 1993. Edition includes substantial revisions in content, and addition of approximately 33% of new content. Published by John Wiley & Sons in 2007.	2004-2007
	"Books"; Review of <i>Materials for Design</i> , written by William Morgan, <i>Architectural Record</i> magazine, excerpt: "In short, this is the textbook that many of us wish we had in architecture school." August	2007

	<p>"Breathing Easy"; Invited by publisher to write article regarding new addition to Phipps Conservatory and Botanical Gardens; <i>Architect</i> magazine, Hanley-Wood, publisher. November</p>	2007
	<p>"Designing Leakproof Details"; online lesson now available on Wiley's Continuing Professional Education website. This lesson is among 10 that Wiley included in its initial offering of continuing education programs. This lesson addresses principles that building designers may use to control water leakage, and is intended chiefly for practicing professionals. The lesson is based on one chapter of the book <i>Architectural Detailing; Function, Constructibility, Aesthetics</i>, which Rand co-authored with Edward Allen. (http://www.wiley.com/WileyCDA/Section/id-320255.html)</p>	2008
	<p>"Buildings Don't Stand Still"; online lesson for Wiley's Continuing Professional Education website. At the publisher's request, Rand has prepared an online lesson that addresses principles that building designers may use to accommodate building movement. The lesson is based on one chapter of the book <i>Architectural Detailing; Function, Constructibility, Aesthetics</i>, which Rand co-authored with Edward Allen. To be available starting in Spring.</p>	2009
PAPERS and PRESENTATIONS (since 1990)	<p>"Project On-Site"; Presentation and panel discussion about efforts to integrate field experience and technical considerations into architectural construction classes. Presented at CSI Southeast Regional Conference</p>	1990
	<p>Two invited papers presented at the University Professor's Masonry Workshop; University of Florida: "Architecture: Teaching Masonry in the Design Studio" "Masonry Research: A Primer for Architecture Faculty"</p>	1992
	<p>Three invited papers presented at Education Conference of the N. C. Waterproofing Contractors Association: "Flashing and Anchors in Theory and Practice" "Cavity Construction and Drainage; How to Get the Water Out" "The Contemporary Wall: Identifying Problems/ Finding Solutions"</p>	1993
	<p>Two invited papers presented at the University Professor's Masonry Workshop; Washington University, St. Louis: "Architecture: Teaching Masonry in the Design Studio" "Masonry Research: A Primer for Architecture Faculty"</p>	1993
	<p>Three invited papers presented at the University Professor's Masonry Workshop; University of Texas at Arlington: "Architecture: Teaching Masonry through Design" "Why Teach Masonry" "Masonry Research: A Primer for Architecture Faculty"</p>	1994
	<p>Five invited papers presented annually at the University Professor's Masonry Workshop; various venues: "Why Teach Masonry Construction to Architecture Students" "Masonry Teaching Resources; An Annotated Bibliography of Books and Monographs" "Masonry Computing Software Survey" "Teaching Masonry Through Design" "Masonry Research: A Primer for Architecture Faculty"</p>	1996-01
	<p>"Integrating Design and Construction"; invited paper, Annual Meeting of The Masonry Society, Phoenix, Arizona</p>	1997

<p>“Detailing Masonry Wall Systems” “Creative Uses of Masonry Materials” Invited presentations, Architects’ Symposium at Mason Contractors Association of America Conference, Orlando, Florida</p>	<p>1998</p>
<p>“The Contemporary Masonry Wall: Problems and Solutions”; peer-reviewed paper presented Eighth North American Masonry Conference, Austin, Texas Paper selected as Finalist (top ten) for Yorkdale Award, recognizing best paper of the year regarding masonry design worldwide</p>	<p>1999</p>
<p>“Understanding and Specifying Masonry”; Invited paper presented at Masonry Industry Federal Officials Seminar; Washington, DC; Nov.</p>	<p>2001</p>
<p>Invited papers presented at the University Professor's Masonry Workshop; Ohio State University; Columbus, Ohio “Designing with Masonry” “Masonry Detailing” "Environmental Issues in Masonry"</p>	<p>2002</p>
<p>“The Significance of Masonry Construction Today”; Invited paper presented at Design Awards Program, Convention of the National Concrete Masonry Association; Kansas City, MO</p>	<p>2002</p>
<p>“The Masonry Wall as an Enclosure System; Findings and Recommendations” invited presentation; Masonry Institute of Northern Virginia, September</p>	<p>2002</p>
<p>“Flashing and Weeps in Contemporary Masonry Walls “; Building Inspector’s Seminar, Martinsville, Virginia, February</p>	<p>2003</p>
<p>“Incorporating Masonry into the Curriculum” “Masonry Teaching Resources” “Design and Detailing Masonry” "Materials Laboratory Courses and Other Hands-On Learning Events" Invited papers presented at the University Professor's Masonry Workshop; Arizona State University, Tempe, AZ, March</p>	<p>2003</p>
<p>Presentation of recommended masonry construction details and masonry research results to Building Inspectors in Virginia; February</p>	<p>2003</p>
<p>Presentation of masonry research results and experiment demo at research facility to Raleigh section of NC Mason Contractor’s Association; NCSU Research Annex, August</p>	<p>2003</p>
<p>“How to Make Masonry Walls that Work”; North Carolina Mason Contractor’s Association Annual Meeting, Myrtle Beach, SC; May</p>	<p>2003</p>
<p>“How to Make Masonry Walls that Work”; Washington Area Masonry Expo; Northern Virginia Masonry Association; Bethesda, MD, Sept.</p>	<p>2003</p>
<p>“How to Make Masonry Walls that Work”; Masonry Seminar to architects; Blue Ridge Masonry Association; Roanoke, VA, Oct.</p>	<p>2003</p>
<p>“The Masonry Wall as an Enclosure System; Findings and Recommendations”; peer-reviewed paper presented at Ninth North American Masonry Conference, Clemson, SC; June</p>	<p>2003</p>
<p>"Advancing the Knowledge of Masonry; Where Should We Go from Here?"; Plenary address; 9th North American Masonry Conference, Clemson SC; June</p>	<p>2003</p>

- “A Final Project Model; Optimal Independence to Address Three Basic Elements”; peer-reviewed paper presented at ACSA Regional Conference. Paper described and reflected on process for Final Projects in the Bachelor of Architecture degree program at NCSU; Univ. of South Florida, Tampa, FL, Nov. 2003
- “Incorporating Masonry into the Curriculum” 2004
 “Masonry Teaching Resources”
 “Design and Detailing Masonry”
 “Materials Laboratory Courses and Other Hands-On Learning Events”
 Invited papers presented at the University Professor's Masonry Workshop; NCSU College of Design, Raleigh NC. March
- “Incorporating Masonry into the Curriculum” 2005
 “Masonry Teaching Resources”
 “Design and Detailing Masonry”
 Invited papers presented at the University Professor's Masonry Workshop; Univ. of Minnesota College of Arch., Minneapolis, MN. March
- “Masonry Education in Colleges and Universities”; Presentation at The Masonry Society Annual Conference plenary session; Preliminary findings and methodology presented regarding comprehensive survey of architecture, engineering and related disciplines at institutions in North America. October 2005
- “Incorporating Masonry into the Curriculum” 2006
 “Masonry Teaching Resources”
 “Design and Detailing Masonry”
 “Laboratories and Other Hands-On Learning Events”
 Invited papers presented at the University Professor's Masonry Workshop; Portland St. Univ., Portland, OR. AIA CE credits. March
- “Incorporating Masonry into the Curriculum” 2007
 “Masonry Teaching Resources”
 “Masonry Design and Detailing”
 “Designing Masonry for Durability and Sustainability”
 Invited papers presented at the University Professor's Masonry Workshop; Georgia Tech, Atlanta, GA. AIA CE credits. March
- “Mastering the Details of Masonry Construction” 2007
 Invited presentation as part of a series of seminars in the first annual North Carolina Mason Contractors Association Certification Program. Presented in 2 locations in NC. December
- “Incorporating Masonry into the Curriculum” 2008
 “Masonry Teaching Resources”
 “Masonry Design and Detailing”
 “Designing Masonry for Durability and Sustainability”
 “Innovative Approaches to Masonry Education”
 Invited papers presented at the University Professor's Masonry Workshop; Drexel Univ., Philadelphia, PA. AIA CE credits. March
- “Mastering the Details of Masonry Construction” 2008
 Invited presentation as part of a series of seminars in the North Carolina Mason Contractors Association Certification Program. Presented in Greensboro, NC. February
- "Sustainable Masonry Design; Thinking beyond LEED" 2009
 Invited presentation to architects in St. Louis. Sponsored by the Masonry Institute of St. Louis. Presentation outlined qualities of masonry buildings that are currently recognized in the LEED rating system, but also several that are currently under-rewarded. January

	"Sustainable Masonry Design and Construction" Juried presentation to architects, builders and manufacturers attending Concrete / Masonry construction industry convention. Presentation provided continuing education credits to professionals; outlined qualities of masonry buildings that can be used to address sustainable design objectives, with an emphasis on life cycle analysis. February	2009
PATENT	"Inflatable Tent"; U. S. Patent 4,031,674, issued 28 June A lightweight camping tent that requires no poles for support.	1977
RESEARCH (sponsored)	"Alternatives for Housing Recovery Following an Earthquake Disaster"; Comprehensive research and design project addressing housing shortages anticipated in the Los Angeles area. Co-investigator with Prof. Donald Corner, University of Oregon. Sponsored by the National Science Foundation. (\$48,000)	1981-83
	"Brick Construction: A History of Craftsmanship"; documentation of exemplary historic and contemporary brick buildings in North Carolina; Sponsored by the Brick Association of North Carolina. (\$18,000)	1984-88
	"Wood in Architectural Education"; Report summarizing building technology courses and curricula present in ACSA-member schools; based on national survey of faculty teaching construction and structures courses; Sponsored by the American Wood Council, administered by ACSA. (\$5,000)	1985-87
	"New Technologies in Masonry Construction"; AIA Institute Scholars Program; awarded in competitive review process. Innovative construction materials and assemblies developed, tested, and documented. Supplementary funding from AKZO Industries, Brick Association of North Carolina, Brick Institute of America and Carolinas Concrete Masonry Association. (funding to date: \$51,650)	1988-present
	"Survey of Masonry Education at Universities and Colleges"; Co-Principal Investigator. Survey of faculty at universities and colleges in the US and Canada regarding the level of masonry education currently provided at their institutions. Gathered current information regarding needs in masonry education. This information was used by the University Professors' Masonry Workshop (UPMW) Steering Committee, the Education Committee of The Masonry Society (TMS), and by the masonry industry to help influence and enhance masonry education. Administered by The Masonry Society; sponsored by the Council of Masonry Research. (\$20,000)	2004-2006
PROFESSIONAL EXPERIENCE	All aspects of practice experienced during years of employment with various architectural, planning and structural engineering firms. Projects included offices, schools, religious and residential buildings.	
	Rand Architect; Principal	1980-present
	Commissions since 1990:	
	Sacred Heart Cathedral Elementary School; renovation	1990
	St. Bernadette Catholic Church; master plan and church, project	1990
	St. Mary's Catholic Church; master plan and parish hall, project	1990
	Haycock Residence	1992
	Barbercheck Residence	1998
	Padilla Residence	2001
	Rand Utility Building (Shed); design and construction; completed	2002-04
	Keith Residence; Analysis of masonry exteriors, arbitration, repair	2005

	Expert witness providing analyses in copyright infringement cases. (Wyche Burgess Freeman & Parham; Nexsen Pruet Jacobs & Pollard)	2006-09
	Design and technical consultant with various firms (Lucy Daniels Foundation; Duda Paine Architects, The Freelon Group)	1984-present
REGISTRATION	Registered Architect in North Carolina	1977-present
SERVICE TO PROFESSION AND COMMUNITY	NAAB Accreditation Team member, Washington State Univ.	1977
	Education Committees, Raleigh Section, AIA	1986-87; 1989-91
	Collaborator with Steve Wainwright, Zoology Dept., Duke Univ. on "Big Blue Marble" project; use of large scale air-supported structure to help teach elementary school students about scientific phenomena	1990
	Organized Architectural Construction Systems class to provide labor for construction of College of Design's Habitat for Humanity house in Orange County, NC.	1991
	Conducted Seminar "Preparing for the Architectural Registration Exam: Division H: Materials and Methods" for architecture interns practicing in the Baltimore area; sponsored by the Baltimore AIA	1992-96
	Presented Research findings and recommendations at Mason's Association meeting; Raleigh, NC	1994
	Reviewer of Papers, ACSA National Conference, Technology Session and Practice Sessions	1995
	Moderator; ACSA National Conference, Practice Session; Seattle, Washington	1995
	NAAB Accreditation: Exhibition of Student Work; with Roger Spears; collected, evaluated and exhibited student work from the previous five years for review by the public and by the NAAB Visiting Team.	1995
	American Institute of Architects (national) Committee on Design	1995-present
	Advisor to alums who are completing Intern Development Program; meet quarterly with each advisee to monitor progress toward completion of program; 3-6 advisees at any point in time.	1995-present
	Urban Design Assistance Team; Salisbury, NC: Participated in intensive weeklong design charrette as a member of a multi-disciplinary team. UDAT organized by Peter Batchelor. Carried out analysis of downtown district and proposed short term and long term improvements.	1995
	Center for Engineering Technologies Advisory Committee; Riverside High School, Durham North Carolina	1995
	Presented Research findings and recommendations at Mason's Association meeting; Raleigh, NC	1996
	Presentation about Research Project at College of Design Research Symposium	1996, 98, 02
	Review of Manuscript: provided pre-publication review of proposed monograph "The Tao of Detailing" by Paul A. Zorr; Van Nostrand Reinhold	1996

Continuing Education Seminar Series; presented recent developments in the design of masonry buildings to practicing architects; sponsored by the Brick Association of North Carolina; over 100 architects took part in Wilmington, Greensboro and Asheville, NC.	1996
Reviewer of Papers, ACSA National Technology Conference	1996
Review of Manuscripts: provided pre-publication review of proposed monographs "The Illustrated Building Code Handbook" and "The Architectural Design and CAD Working Drawing Handbook" by Terry L. Patterson; McGraw-Hill	1997
Reviewer of Papers, ACSA National Technology Conference, Moderator of paper session, Dallas TX	1997
Reviewer of Papers, ACSA National Technology Conference, Moderator of paper session, Cleveland, OH	1998
Reviewer of Papers, ACSA International Technology Conference, Moderator of paper session, Montreal, Quebec	1999
Board of Directors, AIA Triangle Section, AIA	1998-04
External Reviewer of credentials of candidates for promotion and and tenure in Architecture programs at: Univ. of Waterloo, Univ. of Oregon, Georgia Tech, Virginia Tech (2), Catholic University (2), Univ. of Washington, Pennsylvania State Univ., Univ. of Virginia, Univ. of Florida, UNC/Charlotte, Univ. of Illinois/ U-C, Univ. of Idaho, Univ. of Nebraska, Univ. of Utah	1996-present
Member, Editorial Board, <i>Masonry Construction</i> magazine, Hanley Wood Publications	2000-03
Reviewer of Papers, 9 th North American Masonry Conference	2002
Initiated American Institute of Architects/Triangle Section 'House Clinic'; Provided access by general public to architects for advice related to residential design; Served on committee to plan and execute Clinic; Event held during national 'Architecture Week' at Triangle Town Center, Raleigh; Sept.	2003
Hosted groups on three occasions to observe design and construction of Shed, designed by Patrick Rand. AREA Group (Arch. Research & Environmental Accelerant), July Young Architects' Forum (AIA Continuing Education credit given), Sept. American Institute of Architecture Students, NCSU	2003
Set forth agenda, presided over 6 meetings of The Masonry Society in various venues in US and Canada during tenure as President. Wrote column in bi-monthly newsletter. Initiated and implemented Strategic Planning process for Society. Enhanced international liaisons with similar organizations.	2001-03
Review of Book Proposal: provided pre-publication review of proposed monograph: "Exterior Masonry Wall Systems; Design & Detailing Recommendations and Guidelines for Architects, Engineers, Inspectors, Builders, and Building Owners." by Patrick Conway, AIA. At request of publisher, John Wiley & Sons	2003

- Exhibited summaries of teaching, research and practice in Architecture Faculty Exhibit, Brooks Hall Gallery, Nov. 2003
- Review of Book for Revision: provided review of existing monograph: "Fundamentals of Residential Construction" (c: 2000) by Edward Allen and Rob Thallon. At request of publisher, John Wiley & Sons 2004
- Host of University Professor's Masonry Workshop; national conference for architecture and engineering faculty; NCSU College of Design, Raleigh NC. March 2004
- Reviewer of technical papers for International Building Lime Symposium. At request of conference Chair 2004
- ARE Seminar "Preparing for the Architectural Registration Exam: Materials and Methods" full-day seminar for architecture interns. Organized by College of Design. 2003, 04, 05
- Reviewer of scholarly papers for Ethics in Construction sessions ACSA National Conference. At request of conference Chair. 2005
- Review of Book Proposal: provided pre-publication review of proposed monograph: "An Introduction to the Technology of Architecture" by Peter Silver and William McLean. At request of publisher, Elsevier Limited, Oxford, England 2006
- Reviewer of Posters, ACSA National Conference, Chair of poster session regarding Materials, Houston, TX, March 2008
- Panelist, "President's Roundtable"; ACSA National Conference, Discussion of taxonomy of environmental design; Houston, TX, March 2008
- Reviewer of Papers, ACSA West Region Conference, Chair of paper session regarding Materials, USC, Los Angeles, Oct. 2008
- Reviewer of Posters, ACSA National Conference, Chair of poster session regarding Materials, Portland, OR, March 2009
- Reviewer of Papers, 11th Canadian Masonry Symposium, Reviewer of papers regarding masonry as enclosure system, Toronto 2009

PERSONAL

Born: 23 November, 1950
Married: Christine Ann Nalepa
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