

RESUME: WALTER T. GRONDZIK

CURRENT POSITION

Professor, Department of Architecture, Ball State University, Muncie, IN

AREAS OF INTEREST AND EXPERTISE

Environmental Technologies in Architecture: Heating, Ventilating and Air-Conditioning Systems; Lighting Systems; Architectural Acoustics; Fire Protection; Plumbing Systems; Energy and Resource Conservation and Utilization; Building Performance; Building Case Studies

EDUCATIONAL BACKGROUND

M.S., Mechanical Engineering (Building Environmental Systems), Washington University, St. Louis, MO, 1980

B. Architectural Engineering (Environmental Systems), Pennsylvania State University, University Park, PA, 1971

PROFESSIONAL EXPERIENCE

Professor (2007-present), Department of Architecture, Ball State University (BSU), Muncie, IN

Associate Chair (2011-2015) and Interim Director Master of Architecture program (2013-2015), Department of Architecture, Ball State University

Professor (1997-2007) and Associate Professor (1990-1997), School of Architecture, Florida A&M University (FAMU), Tallahassee, FL

Visiting Professor (1999-2000 and 2006), Department of Architecture, University of Oregon (UofO), Eugene, OR

Associate Professor (1987-1990) and Assistant Professor (1984-1987), College of Environmental Design, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia

Associate Professor (1983-1984), Assistant Professor (1981-1983), and Visiting Assistant Professor (1977-1981), School of Architecture, Oklahoma State University (OSU), Stillwater, OK

Engineer — HVAC Systems (1973-1977), Sverdrup and Parcel and Associates, St. Louis, MO

Part-time practice as Walter T. Grondzik, P.E. (1979-1990; 2005), various locations

PROFESSIONAL MEMBERSHIPS

Registered Professional Engineer, Oklahoma

Life Member and Fellow ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers)

Life Member and Fellow ASES (American Solar Energy Society)

Life Member SBSE (Society of Building Science Educators)

Member IESNA (Illuminating Engineering Society of North America)

Member NFPA (National Fire Protection Association)

LEED-AP (LEED Accredited Professional), U.S. Green Building Council (USGBC);
Member Indiana Chapter USGBC

PROFESSIONAL SERVICE

President of Board of Directors, Passive House Institute US (PHIUS; 2011-present)

Vice-Chair, ASHRAE SSPC 300 (commissioning; 2018-present)

Voting Member, ASHRAE Standards Committee and Voting Member Standards Project Liaison Subcommittee (2016-present)

Member of Coordinating Committee, Built Environment Education (BEEnow; 2017-present)

Past-Member of Board of Directors, Society of Building Science Educators (SBSE; 2010-2017);
Past-Chair of Awards and Scholarships Committee; Past-President

Past-Member of Board of Directors, American Solar Energy Society (ASES; 2011-2012)

Past-Chair (2014), ASHRAE Technical Activities Committee

Past-Chair, ASHRAE GPC 1.3 (training for building commissioning; 2010-2017)

Past-Chair (2009), ASHRAE Handbook Committee; and Chair of 2008 Systems and Equipment volume subcommittee

Member, National Organizing Committee, Solar 2008, 2009, 2010 and 2011 Conferences,
American Solar Energy Society

Past-President (4 terms), Vice-President, and Board Member, Architectural Research Centers Consortium (ARCC; 1995-2005)

REPRESENTATIVE RESEARCH EXPERIENCE

Co-Investigator, *2013 Solar Decathlon (Phoenix House)*, Ball State University for U.S. Department of Energy

CERES Fellow, *Carbon Neutral Building Design*, Ball State University.

Trainer and Consultant, *Agents of Change Project*, Florida A&M University for U.S. Department of Education via University of Oregon

Co-Investigator, *Florida Sustainable Communities Center*, Florida A&M University for Florida Department of Community Affairs

Co-Investigator, *Florida Energy Update (Florida Energy Conservation Manual, State Energy Management Plan, and Energy Tracking Database)*, Florida A&M University for Florida Department of Management Services

Co-Investigator, *Florida Design Initiative*, Florida A&M University for Florida Department of Community Affairs, Florida Energy Office

Principal Investigator, *HVAC Components and Systems*, a Vital Signs resource package, Florida A&M University for University of California Berkeley

Co-Investigator, *Florida Standard for Radon-Resistant Construction of Large Buildings*, Florida A&M University for U.S. Environmental Protection Agency

Principal Investigator, *Thermal and Economic Performance of Insulation for Saudi Buildings*, King Fahd University of Petroleum and Minerals for King Abdulaziz City for Science and Technology

SELECTED PUBLICATIONS

Grondzik, W. and A. Kwok: *Mechanical and Electrical Equipment for Buildings* (13th ed.). John Wiley & Sons, Hoboken, NJ, in press.

Kwok, A. and W. Grondzik: *The Green Studio Handbook* (3rd ed.). Routledge, New York, 2018.

Grondzik, W. Major contributor to updating of the Services Chapter; *Architectural Graphic Standards* (12th ed.). John Wiley & Sons, Hoboken, NJ, 2016.

Kwok, A., W. Grondzik, et al.: "Toolkit for Passive House Education: Questions, Methods, Tools." *Future of Architectural Research* (Proc. 2015 ARCC Conference on Architectural Research—Chicago), Architectural Research Centers Consortium, Chicago, IL, 2015, pp. 671-677.

Grondzik, W. and A. Kwok: *Mechanical and Electrical Equipment for Buildings* (12th ed.). John Wiley & Sons, Hoboken, NJ, 2015.

Grondzik, W.: "Energy-Efficient HVAC Systems and Systems Integration," invited chapter in *Low-Carbon, Low-Energy Architecture*, K. Al-Sallal (ed.). CRC Press/Balkema, London, 2016.

Kwok, A., S. Tepfer, and W. Grondzik: "Zero Net Energy Education: Mind the Gap." In *Beyond Architecture: New Intersections & Connections* (proceedings of the 2014 ARCC/EAAE Architectural Research Conference, University of Hawai'i at Manoa, February). <http://www.arcc-journal.org/index.php/repository/issue/view/18>

Chiuni, M., W. Grondzik, et al.: "Architect and Engineer Collaboration: The Solar Decathlon As a Pedagogical Opportunity," AEI 2013: Building Solutions for Architectural Engineering (*Proceedings of the 2013 Architectural Engineering National Conference*), State College, PA.

Grondzik, W. (Editor): *HVAC Design Manual for Hospitals and Clinics* (2nd ed.). ASHRAE, Atlanta, GA, 2013.

Kwok, A. and W. Grondzik: *The Green Studio Handbook* (2nd ed.). Architectural Press, Oxford, UK, 2011.

Grondzik, W., A. Kwok, B. Stein, and J. Reynolds: *Mechanical and Electrical Equipment for Buildings* (11th ed.). John Wiley & Sons, Hoboken, NJ, 2009.

Grondzik, W.: *Principles of Building Commissioning*, John Wiley & Sons, Hoboken, NJ, 2009.

Kwok, A. and W. Grondzik: "Roddy/Bale Green Roof Study," *Proc. 2008 Conference of the Amer. Solar Energy Society* (San Diego, CA), Amer. Solar Energy Soc., Boulder, CO, 2008, CD-ROM not paginated.

Grondzik, W. (Editor): *Air-Conditioning System Design Manual* (2nd ed.). ASHRAE/Butterworth-Heinemann, Atlanta, GA, 2007.

Kwok, A. and W. Grondzik: *The Green Studio Handbook*. Architectural Press, Oxford, UK, 2007.

Grondzik, W.: "The Trouble with Sustainability," *Green Challenges in Research, Practice, and Design Education* (Proc. 2007 ARCC Conference on Architectural Research -- Eugene), Architectural Research Centers Consortium, Eugene, OR, 2007, on CD.

Stein, B., J. Reynolds, W. Grondzik and A. Kwok: *Mechanical and Electrical Equipment for Buildings* (10th ed.). John Wiley & Sons, Hoboken, NJ, 2006.

Grondzik, W. and A. Kwok: "Learning from the Library: Hood River, Oregon," *Proc. 2005 Conference of the Amer. Solar Energy Society* (Orlando, FL), Amer. Solar Energy Soc., Boulder, CO, 2004, CD-ROM not paginated.

Haglund, B., W. Grondzik and A. Kwok: "Tool Days: Translating Architectural Education Research to Practice," *Between Research and Practice* (Proc. 2004 EAAE/ARCC Joint Conference on Architectural Research -- Dublin), European Association for Architectural Education, Louvain, BE, 2005, pp. 41-48.

Kwok, A. and W. Grondzik: "Designing a Hypothesis for Case Studies," *Between Research and Practice* (Proc. 2004 EAAE/ARCC Joint Conference on Architectural Research -- Dublin), European Association for Architectural Education, Louvain, BE, 2005, pp. 325-332.

Kwok, A., W. Grondzik and B. Haglund: "Infusing POE into Architectural Education," *Proc. Closing the Loop: Ways Forward for Post Occupancy Evaluation* (Windsor, UK), in press.

Grondzik, W.: Technical Editor for *HVAC Design Manual for Hospitals and Clinics*, Amer. Soc. of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Atlanta, GA, 2003.

AWARDS

Passive Solar Pioneer Award, American Solar Energy Society (2018).

Distinguished Service Award, American Society of Heating, Refrigerating and Air-Conditioning Engineers (2012).

Mary Kihl Service Award, Architectural Research Centers Consortium (2007).

Outstanding Teacher (1986-1987 academic year) and *Outstanding Researcher* (1987-1988 academic year), College of Environmental Design, King Fahd University of Petroleum and Minerals, both with plaque and honorarium.