

CURRICULUM VITAE August 2021

Dennis R. Langer, PE Quetica, LLC 5775 Wayzata Boulevard, Suite 700 St. Louis Park, MN 55416

EMPLOYMENT

July 2018 to Present: Quetica. LLC. - St. Louis Park, Minnesota: Senior Mechanical Engineer / Forensic Engineering Consultant. Responsible for professional design consulting including architectural and engineering consulting services for various clients and design projects. These projects include educational, manufacturing, food process, industrial process, government, and residential facilities. Denny provides complete project design services, preparation of construction and bidding documents, and project management for both public and private owners and clients. Additionally, Denny is responsible for forensic engineering consulting services investigating fraud and related matters in design and construction insurance claim verification. He provides forensic architectural, engineering, construction defect claims, and health and safety accident investigations for litigation support to insurance carriers. Denny has performed more than 1,000 forensic evaluations of building design and construction claims. These evaluations include commercial, institutional, industrial, and residential projects. Denny's evaluations include performing site inspections, file documentation, preparation of expert reports and expert testimony. Paramount in these forensic evaluations are moisture intrusion claims and other design and construction defect issues.

<u>May 1989 to July 2018</u>: Environmental Process, Inc. (EPI) and epi Investigations, Inc. (epi) - Golden Valley, Minnesota: Architecture and Engineering Manager/Senior Project Engineer. Responsible for professional design consulting including Architectural / Engineering and Forensic Engineering consulting services for various clients and design projects. Provided complete project design services, preparation of Construction and Bidding Documents, Project Management, Project Commissioning, and Process System Startup for the Owner/Client. Forensic Engineering responsibilities included investigating fraud and related matters in design and construction insurance claim verification. Provided forensic architectural, engineering, construction defect claims, and health and safety accident investigations for litigation support to Insurance Carriers. Performed over 1,000 Forensic Evaluations of building design and construction claims. These evaluations include Commercial, Institutional, Industrial, and Residential projects. The evaluations included performing site inspections, file documentation, preparation of expert reports and expert testimony.

EDUCATION

University of Minnesota Bachelor of Science in Mechanical Engineering (BSME) Institute of Technology September, 1986 - March, 1989

University of Wisconsin - River Falls Pre-Engineering September, 1983 - May, 1986

PROFESSIONAL LICENSES, AFFILIATIONS, CONTINUING EDUCATION, AND OTHER PROFESSIONAL ACTIVITIES

Licensed Professional Engineer - Minnesota (42229), Wisconsin (42885-6), North Dakota (PE-8723), Iowa (22256), Texas (107044), and South Dakota (14025).

National Record with Model Law Engineer (MLE) designation with the National Council of Examiners for Engineering and Surveying (NCEES), (Record #25518).

Member, National Academy of Forensic Engineers, NAFE (#889).

Member, American Society of Heating, Refrigeration and Air-Conditioning Engineers, ASHRAE (#08000967).

Member, National Society of Professional Engineers, NSPE (#300184490).

Participating Member, International Code Council, ICC (#9633548).

AHERA Certified Asbestos Building Inspector (#AI8040).

TESTIFIED AND/OR DEPOSED AS AN EXPERT WITNESS IN THE FOLLOWING LEGAL PROCEEDINGS:

Village Homes of Grandview Square II Association v. R.E. C., Inc. d/b/a Ron Clark Construction, et al. (Trial Testimony) March 1, 2019.

Mr. George C. Hottinger (952-837-3245) for the Defendant Fox Valley Contractors, LLC.

Construction Defect / Moisture Intrusion Claim.

Hennepin County District Court, Fourth Judicial District, File 27-cv-16-2304 Judge Thomas M. Sipkins.

SRRT Properties, LP and IDC Properties, LLC v. Nova Consulting Group, Inc. **(Trial Testimony)** September 27, 2018. Mr. Michael W. Haag (612-349-9856) for the Defendant Nova Consulting Group, Inc.

Property Condition Assessment / Exterior Façade Evaluation Claim.

Hennepin County District Court, Fourth Judicial District, File 27-cv-17-9241 Judge Joseph Klein.

Joseph Garry v. Central Minnesota Renovations, Inc., Damage Assessment Division, Inc. and Andersen Corporation. (Trial Testimony) June 7, 2018.

Mr. David E. Camarotto and Ms. Janine M. Loetscher (612-333-3000) for the Defendant Central Minnesota Renovations, Inc., Damage Assessment Division, Inc.

Construction Defect / Moisture Intrusion Claim.

Dakota County District Court, First Judicial District, File 19HA-CV-17-679 Judge Cynthia L. McCollum.

Pat and Molly Suko v. Creative Homes (Arbitration Testimony) August 30 & 31, 2016.

Mr. Leonard J. Schweich, Partner. (651-290-6572) for the Defendant Creative Homes.

Construction Defect Claim.

Fabyanske Westra Hart & Thompson, 333 South 7th Street, Minneapolis, MN, National Center for Dispute Settlement (NCDS) File #16-N038-MN, Arbitrator Steven H. Berndt, Arbitrator Steven G. Hoffmeyer, and Arbitrator Ferdinand F. Peters.

Mille Lacs Power Sports, Inc., Julie Van Steenwyk and Dale Van Steenwyk v. Bradley J. Langerman d/b/a Langerman Roofing and Remodeling LLC and Minnesota Roofing Remodeling, Inc. **(Trial Testimony)** December 18, 2014. Mr. Douglas J. McIntyre, Partner. (612-338-8788) for the Defendant Bradley J Langerman d/b/a Langerman Roofing and Remodeling, Inc.

Construction Defect / Moisture Intrusion Claim.

Mille Lacs County District Court, Seventh Judicial District, File No. 48-CV-11-1657 Judge Leonard A. Weiler.

Redwood Falls Housing and Redevelopment Authority v. HAI Group, Inc. **(Appraisal Testimony)** June 3 & 4, 2014. Mr. Mark Bloomquist, Partner. (612-337-9651) for the Redwood Falls Housing and Redevelopment Authority. Fire Loss Claim.

Harens Mediation Center, Minneapolis, MN, Umpire John M. Harens.

Wayne Prowse v. Continental Cast Stone Manufacturing, Inc. **(Trial Testimony)** March 31, 2010. Mr. James M. Bratulich, Esq. (651-221-7769) for the Defendant Continental Cast Stone Manufacturing, Inc. Manufacturing Deficiency / Moisture Intrusion Claim

Washington County District Court, Tenth Judicial District, File No. 82-CV-09-1219 Judge Mary Hannon



ARCHITECTURE / ENGINEERING CONTINUING EDUCATION COURSES COMPLETED SINCE 1989:

Energy Efficient HVAC Controls (Course # CIV119), Engineering Continuing Education PDH Online Continuing Education (www.engineeringcontinuingeducationpdh.com), J. Paul Guyer, June 17, 2021. (3.0 hours).

Design of Industrial Ventilation Systems (Course # STR116-22), Engineering Continuing Education PDH Online Continuing Education (<u>www.engineeringcontinuingeducationpdh.com</u>), J. Paul Guyer, June 17, 2021. (3.0 hours).

<u>Solar Collectors: Heating & Cooling of Buildings (Course # MEC101-22)</u>, Engineering Continuing Education PDH Online Continuing Education (<u>www.engineeringcontinuingeducationpdh.com</u>), J. Paul Guyer, June 10, 2021. (8.0 hours).

Ethics Forum: Conflicts of Interest – Employers and Clients, National Society of Professional Engineers (NSPE) Online Web Seminar Series, Arthur E. Schwartz, May 24, 2021. (1.0 hour).

Engineering Ethics and the Law, National Society of Professional Engineers (NSPE) Online Web Seminar Series, Chris Corbitt, May 24, 2021. (1.0 hour).

Maintain Health, Safety, and Comfort with Proper Indoor Air Quality (IAQ), Belimo Webinar – Frank DiPaolo, March 17, 2021. (0.5 hours).

<u>Changes to the Minnesota Mechanical and Fuel Gas Code (ICC Course 26148)</u>, 65th Annual Institute for Building Officials, University of MN College of Continuing & Profession Studies via online Zoom, January 11, 2021. (3.0 hours).

<u>Minnesota 2020 Energy Code (ICC Course 26166)</u>, 65th Annual Institute for Building Officials, University of MN College of Continuing & Profession Studies via online Zoom, January 11, 2021. (1.5 hours).

<u>State of the State (ICC Course 26181)</u>, 65th Annual Institute for Building Officials, University of MN College of Continuing & Profession Studies via online Zoom, January 11, 2021. (1.5 hours).

<u>HVAC Systems for Medical Facilities (Course # CIV109-22)</u>, Engineering Continuing Education PDH Online Continuing Education (<u>www.engineeringcontinuingeducationpdh.com</u>), J. Paul Guyer, August 14, 2020. (5.0 hours).

<u>Central Heating Plant Planning (Course # CIV110)</u>, Engineering Continuing Education PDH Online Continuing Education (<u>www.engineeringcontinuingeducationpdh.com</u>), J. Paul Guyer, August 14, 2020. (3.0 hours).

<u>Gas Distribution (Course # REN112)</u>, Engineering Continuing Education PDH Online Continuing Education (<u>www.engineeringcontinuingeducationpdh.com</u>), J. Paul Guyer, August 14, 2020. (3.0 hours).

<u>Texts and Emails that Fuel Engineering Success</u>, National Society of Professional Engineers (NSPE) Online Web Seminar Series, Randy P. Wall, August 12, 2020. (1.0 hour).

Managing Risk through Arbitration and Dispute Resolution, National Society of Professional Engineers (NSPE) Online Web Seminar Series, Tim Austin and Rod Toben, March 25, 2020. (1.0 hour).

How Engineers Create Added Value, National Society of Professional Engineers (NSPE) Online Web Seminar Series, Mel Lester, March 25, 2020. (1.0 hour).

Engineering Ethics: Ethics, Forensics and the PE, National Society of Professional Engineers (NSPE) Online Web Seminar Series, E. Ross Curtis and Sam G. Sudler III, March 20, 2020. (1.0 hour).

Engineering Ethics: Serving as an Engineering Expert and Performing Forensic Engineering,



National Society of Professional Engineers (NSPE) Online Web Seminar Series, Arthur Edward Schwartz, March 20, 2020. (1.0 hour).

<u>Commercial Kitchen Ventilation</u>, 63rd Annual Institute for Building Officials, Earl Brown Heritage Center, Brooklyn Center, Minnesota, January 16, 2019. (3.0 hours).

<u>Life Safety Dampers:</u> Protecting Duct and Air Transfer Openings, 63rd Annual Institute for Building Officials, Earl Brown Heritage Center, Brooklyn Center, Minnesota, January 16, 2019. (3.0 hours).

Ethics and Engineering, National Society of Professional Engineers (NSPE) Online Web Seminar Series, Sam Sudler III, February 21, 2018. (1.0 hour).

Engineering Ethics: Signing and Sealing of Documents, National Society of Professional Engineers (NSPE) Online Web Seminar Series, Arthur Edward Schwartz, February 20, 2018. (1.0 hour).

2015 Minnesota Plumbing Code Essentials, 2018 ICC Upper Great Plains Region III Education Institute, Chaska, Minnesota, February 13, 2018 (7.0 hours).

<u>All About the Exterior Envelope: Facts and Fiction</u>, 62nd Annual Institute for Building Officials, Earl Brown Heritage Center, Brooklyn Center, Minnesota, January 10, 2018. (6.0 hours).

<u>2015 Minnesota Plumbing Code Drain, Waste, and Vent</u>, 62nd Annual Institute for Building Officials, Earl Brown Heritage Center, Brooklyn Center, Minnesota, January 3, 2018. (6.75 hours).

<u>Special Inspection: Administration and Application</u>, 2017 ICC Upper Great Plains Region III Education Institute, Chaska, Minnesota, February 8, 2017 (7.0 hours).

<u>Minnesota Residential Building and Energy Code Questions and Answers</u>, 61st Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul, Minnesota, January 12, 2017. (7.0 hours).

<u>Effective Compliance for Minnesota Commercial Energy Codes</u>, 61st Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul, Minnesota, January 11, 2017. (5.25 hours).

<u>The "State of the State" – Who's Who at DLI/CCLD and Delegation Agreements</u>, 61st Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul, Minnesota, January 11, 2017. (1.75 hours).

<u>Ethics in Professional Practice (Course # ETH102-22)</u>, Engineering Continuing Education PDH Online Continuing Education (www.engineeringcontinuingeducationpdh.com), April 8, 2016. (2.0 hours).

<u>2015 Minnesota Plumbing Code Essentials</u>, 2016 ICC Upper Great Plains Region III Education Institute, Chaska, Minnesota, February 10, 2016 (7.0 hours).

2015 MN Commercial Energy Code & Group R Radon Requirements, 60th Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul, Minnesota, January 11, 2016. (5.25 hours).

<u>The "State of the State" – Construction Regulations</u>, 60th Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul,



Minnesota, January 11, 2016. (1.75 hours).

<u>Are You Ready for the 2012 IRC</u>, Minnesota Department of Labor & Industry – Construction Codes and Licensing Division, Holiday Inn St. Paul East, St. Paul, Minnesota, November 13, 2014. (7.0 hours).

<u>Mechanical & Energy Code Changes for Residential Buildings in the IECC, IMC & IFGC</u>, Minnesota Department of Labor & Industry – Construction Codes and Licensing Division, Holiday Inn St. Paul East, St. Paul, Minnesota, September 24, 2014. (7.0 hours).

Ethics I and Ethics II for Professional Engineers, Engineer Educators, Inc. (www.engineereducators.com), March 31, 2014. (2.0 hours).

<u>Minnesota's Commercial Energy Code</u>, 58th Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul, Minnesota, January 14, 2014. (3.0 hours).

<u>Roofing Topics Du Jour</u>, 58th Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul, Minnesota, January 14, 2014. (1.5 hours).

<u>Air and Vapor Barriers:</u> Still Troubling Details, 58th Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul, Minnesota, January 14, 2014. (1.5 hours).

<u>Texas PE Ethics</u>, CPE Solutions, LLC – Dba (Professionals Publishing Group) – (Process Engineering Consultants), September 9, 2013. (2.0 hours).

<u>2012 IECC Energy Code Fundamentals</u>, 57th Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul, Minnesota, January 18, 2013. (6.0 hours).

<u>Air Barriers – Installation and Performance</u>, 57th Annual Institute for Building Officials, Continuing Education and Conference Center, College of Continuing Education-University of Minnesota, St. Paul, Minnesota, January 16, 2013. (3.0 hours).

DPLE-118 - Advanced Course in Contracts, RLI Design Professionals, Web Seminar, August 15, 2012 (1.0 hour).

DPLE-114 - Managing Risk and Providing Quality Services, RLI Design Professionals, Web Seminar, May 16, 2012 (1.0 hour).

<u>Plumbing Inspection Principles</u>, 2012 ICC Upper Great Plains Region III Education Institute, Chaska, Minnesota, February 9, 2012 (6.0 hours).

Ensuring Stronger Contractor Contacts, RFJ/Meagher & Geer, Golden Valley, Minnesota, February 3, 2011 (2.0 hours).

Ensuring Stronger Contractor Contacts, RFJ/Meagher & Geer, Golden Valley, Minnesota, March 3, 2010 (2.0 hours).

<u>Residential Energy Code, Combustion and Make-Up Air Requirements</u>, Building Codes and Standards Unit - Construction Codes and Licensing Division, Minnesota Department of Labor and Industry, Continuing Education and Conference Center, St. Paul, Minnesota, January 15, 2010. (6.0 hours).

<u>Commercial Energy Code and Mechanical Code Update</u>, Building Codes and Standards Unit - Construction Codes and Licensing Division, Minnesota Department of Labor and Industry, Continuing Education and Conference Center, St. Paul, Minnesota, January 13, 2010. (6.0 hours).

<u>Residential Accessibility and Commercial Accessibility</u>, Building Codes and Standards Unit - Construction Codes and Licensing Division, Minnesota Department of Labor and Industry, Continuing Education and Conference Center, St. Paul, Minnesota, January 13, 2009. (6.0 hours).

Confined Space Entry, Compliance Solutions, Minneapolis, Minnesota, February 25, 2008 (7.0 hours).

<u>Top 40 Questions Contractors are Asking</u>, Construction Codes and Licensing Division - Minnesota Department of Labor and Industry and Northwestern Lumber Association, Sheraton Bloomington Hotel, Bloomington, Minnesota, January 22, 2007. (3.5 hours).

<u>Residential Moisture Intrusion – Building Science and Forensic Investigations in Existing Housing</u>, Building Codes and Standards Unit - Construction Codes and Licensing Division, Minnesota Department of Labor and Industry, Continuing Education and Conference Center, St. Paul, Minnesota, January 12, 2007. (3.5 hours)

<u>Understanding Energy-Efficient Windows & Doors / Composite Materials & Extruded Fiberglass in the Window & Door</u> <u>Industry / Building Green</u>, Marvin Windows and Doors and Northwestern Lumber Association, Sheraton Bloomington Hotel, Bloomington, Minnesota, January 22, 2007. (3.5 hours)

ASHRAE 62.1 and 90.1, ICC Upper Great Plains Region III Education Center, The Northland Inn, Brooklyn Park, Minnesota, February 8, 2007. (7.5 hours).

<u>The Proposed Residential Energy Code and the Mechanical Code for Residential Construction</u>, Minnesota State Building Codes and Standards Division, St. Paul, Minnesota, April 5, 2005 (7.0 hours).

<u>ASHRAE Standard 62</u>, 49th Annual Institute for Building Officials – Building Codes and Standards Division, U of M, Continuing Education and Conference Center, St. Paul, Minnesota, January 10, 2005.

<u>The Residential Provisions of the New Mechanical & Fuel Gas Codes</u>, Minnesota State Building Codes and Standards Division, Maplewood, Minnesota, November 30, 2004 (2.5 CEU's).

A New Energy Code in 2005, AIA Minnesota, St. Paul, Minnesota, October 14, 2004 (2.75 CEU's).

Moisture Vapor Issues in a Building Envelope, AIA Minnesota, Minneapolis, Minnesota, October 12, 2004 (2 CEU's)

Lennox Benchmarking Seminar, Lennox Midwest Commercial District, Mendota Heights, Minnesota, May 16, 2003 (2 CEU's)

Mold Litigation in Minnesota, Lorman Educational Services, Minneapolis, Minnesota, March 26, 2003 (6 CEU's).

Boiler Code Requirements, Minnesota Building Codes and Standards Division, St. Paul, Minnesota, March 5, 2003 (8 CEU's).

<u>Wirsbo Multipurpose (Sprinkler and Plumbing) Piping System</u>, Lake County / North Star Chapters of ICBO and Wirsbo Staff, Maplewood, Minnesota, December 19, 2002 (8 CEU's).

Mold and Mold Remediation, College of Continuing Education, University of Minnesota, St. Paul, Minnesota, November 19-20, 2002. (1.5 CEU's, 15.0 Hours).

<u>Minnesota Energy Code</u>, Lake County / North Star Chapters of ICBO, State Building Codes and Standards, Maplewood, Minnesota, October 17, 2002 (2.5 CEU's).

<u>Mechanical Code (2000 IMC) and Minnesota Plumbing Code</u>, Lake County / North Star Chapters of ICBO, State Building Codes and Standards and Minnesota Department of Health, Maplewood, Minnesota, June 20, 2002 (8 CEU's).

<u>Understanding and Managing Risk - Level 1</u>, Schinnerer and Company, Inc., Chevy Chase, Maryland, February 21, 2001 (21 CEU's).

<u>Understanding and Managing Risk - Level 2</u>, Schinnerer and Company, Inc., Chevy Chase, Maryland, February 21, 2001 (15 CEU's).

Commercial Kitchen Ventilation Systems, Reliant Energy, Minneapolis, Minnesota, November 8, 1999 (3 CEU's).

<u>Design of Ammonia Refrigeration Systems</u>, Department of Engineering Professional Development, College of Engineering, University of Wisconsin, Madison, September 24-28, 1990. (4 CEU's).

Trane Air Conditioning Clinic, The Trane Company, Minneapolis, Minnesota, October 16 - December 18, 1989.

ENVIRONMENTAL CONTINUING EDUCATION COURSES COMPLETED SINCE 1995:

Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, March 12, 2021. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, March 13, 2020. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, February 18, 2019. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, February 9, 2018. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, February 1, 2017. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, January 28, 2016. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, February 3, 2015. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, February 4, 2014. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, September 5, 2012. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, September 6, 2011. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, August 16, 2010. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, August 25, 2009. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, August 25, 2008. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, August 27, 2007. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, September 13, 2006. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, September 14, 2005. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, September 15, 2004. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, September 18, 2003. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, September 19, 2002. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, September 20, 2001. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, September 21, 2000. Asbestos Building Inspector Refresher, Lake States Environmental, Woodbury, MM, October 5, 1999. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, October 20, 1998. Asbestos Building Inspector Refresher, Lake States Environmental, White Bear Lake, MN, November 5, 1997. AHERA Accredited, Asbestos Building Inspector, Lake States Environmental, White Bear Lake, MN, November 6-8, 1995.

REFERENCES

Personal references are available upon request.