DAVID COLLETTE, WACH

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QUALIFICATIONS SUMMARY

David Collette is a mechanical engineer (B.S., University of Manitoba, 1992; M.B.A., University of Chicago, 2008) and an ANSI/NFSI Certified Walkway Auditor (#31, 2014–present) with more than 25 years in the flooring and walkway-safety industry, including more than a decade providing services as a forensic consultant. He has been retained in over 300 walkway and pedestrian safety matters for both plaintiff and defense counsel and has been qualified in court as an expert witness. He has been deposed and provided trial testimony in both state and federal courts.

He has authored a peer-reviewed technical note in the Journal of Forensic Science (2025) and is a voting member of nine ASTM and ANSI standards-writing committees governing walkway, footwear, and surface-safety test methods. He served on the Board of the National Floor Safety Institute (2012–2014) and as a voting member of the ANSI/NFSI B101 main committee (2014–2016).

EDUCATION & CERTIFICATIONS

- Bachelor of Science, Mechanical Engineering — University of Manitoba, Canada, 1992
- Master of Business Administration (Finance, Marketing, and Entrepreneurship) — University of Chicago, Chicago, IL, 2008
- ANSI/NFSI Walkway Auditor Certificate Holder, #31 — 2014 to present (recertified 11/22/23; renewal due 11/22/26)
- Certificate in Assessing Walkway Safety — University of North Texas, 2015 (no expiration)
- Engineer-in-Training (EIT), Association of Professional Engineers and Geoscientists of Manitoba (APEGM) — 2020

FORENSIC INVESTIGATION EXPERIENCE

- Investigated slip, trip, and fall incidents for both plaintiff and defense counsel in over 300 cases nationwide
- Qualified in court as an expert witness in slip, trip, and fall matters, in both state and federal court
- Matter types have included walkways, bathing surfaces, pool decks, stairways, ramps, curb ramps, sidewalks, parking lots, handrails, guards, lighting, chair glides, bath and walk-off mats, walkway and bathing-surface coefficient of friction, material selection, surface roughness, cleaning procedures, wheel stops, and bollards
- Walkway surfaces examined include interior and exterior concrete, tile, vinyl, epoxy, and floor finish, under wet, dry, oily, icy, coated, treated, painted, and vertically/horizontally misaligned or uneven conditions
- Bathing-surface matters have involved bathtubs, showers, and barefoot surfaces including spas and pool decks

- Stairway investigations span interior and exterior stairs in concrete, metal, wood, and carpeted construction — one- and two-riser configurations, and wood and metal handrails and guards
- Coefficient-of-friction testing has covered wet and dry walkway and bathing surfaces, chair glides, and bath/walk-off mats, using both static and dynamic methods
- Site types investigated include retail (food and nonfood), commercial, residential, restaurant, office, education, healthcare, parking lots (paved and gravel), parking garages, aquariums, amusement venues, and theaters
- Investigations are grounded in applicable local ordinances and building codes, life-safety code, and ASTM, ANSI, NFSI, OSHA, ADA, and IES (Illuminating Engineering Society) standards

STANDARDS COMMITTEE LEADERSHIP

David is a voting member of nine ASTM and ANSI standards-writing committees that set the test methods and specifications used across the walkway- and life-safety industry:

- ANSI/NFSI B101.4 — Test Method for Measuring the Wet Barefoot Condition of Surfaces (2019)
- ASTM D21 — Polishes (manages D2047 standard) (2014)
- ASTM F06 — Resilient Floor Coverings (2018)
- ASTM F08 — Sports Equipment, Playing Surfaces, and Facilities (manages F1292, impact attenuation of playground surfacing) (2019)
- ASTM F12.1 — Security Systems and Equipment (manages F3016, vehicle impact protective devices) (2020)
- ASTM F13 — Pedestrian/Walkway Safety and Footwear (manages F2508, F1646, F1637, F2948, F2966) (2014)
- ASTM F15.03 — Consumer Products (manages F462, Safety Standards for Bathtubs and Shower Structures) (2016)
- ASTM D13 — Textiles (manages bathmat specifications and testing; developing bathmat COF test standard) (2019)
- ANSI A108 — Ceramic Tile Installation, Test Methods, and Physical Properties (manages A137.1, A326.3) (2016)
- ANSI D01 — Paint and Related Coatings, Materials, and Applications (2023)

Additional affiliations: Board Member, National Floor Safety Institute (2012–2014); voting member, ANSI/NFSI B101 main committee (2014–2016); Member, ICC (2018), NFPA (2021), ASSP (2021), HFES (2026), IES (Associate, 2021); Fellow, Claims and Litigation Management Alliance (2016); Adviser, Storefront Safety Council (2020).

PROFESSIONAL EXPERIENCE — FORENSIC & WALKWAY-SAFETY CONSULTING

President — Substratum Group, Loveland, OH 01/14–Present

- Provide walkway-management consulting and services to organizations designing, planning, building, maintaining, and insuring facilities
- Conduct walkway and bathing-surface safety audits, assessments, and incident investigations using ANSI/ASTM standards, building and life-safety codes, local ordinances, OSHA regulations, and ADA/accessibility code (A117.1)

- Provide testing services evaluating the frictional and roughness characteristics of walkway and bathing surfaces, coatings, bath mats, walk-off mats, and chair glides
- Research and develop test methodologies for frictional and roughness characteristics of chair glides, bath mats, walk-off mats, bathing surfaces, and hard-surface flooring
- Write and teach courses on slip-meter use, walkway auditing, flooring material selection, and pedestrian safety (see Courses Taught)
- Lead development of proprietary products and services for the selection, testing, care, and maintenance of walkways and bathing surfaces

PROFESSIONAL EXPERIENCE — WALKWAY SAFETY INDUSTRY LEADERSHIP

Product development and commercialization roles preceding walkway safety consulting; entries below are limited to work directly relevant to flooring chemistry, tools, and safety performance.

Director, Marketing and Strategy — Cintas, Cincinnati, OH 07/09–01/14

- Developed and launched the NFSI-certified "High-Traction" floor-care program (tools, chemicals, and training) — the same certification framework central to his forensic slip-resistance work today
- Directed testing and launch of commercial floor-care tools and chemistries, including autoscrubber systems, a floor-care agitation tool, and co-branded microfiber products
- Served on the National Floor Safety Institute Board (2012–2014)

Senior Marketing Manager, Tools, Machines and Carpet Care — JohnsonDiversey, Racine, WI 03/06–07/09

- Led development, field testing, and launch of floor-cleaning systems, including microfiber mops and wipes, floor-finish applicators, and autoscrubbers
- Wrote and launched an updated carpet-care chemical program and training manual

Senior Product Manager — JohnsonDiversey / DiverseyLever, Racine & Santa Cruz 10/00–03/06

- Managed system-innovation projects (chemical, equipment, packaging) for floor-care and chemical-dispensing equipment from concept through field roll-out

PRIOR CAREER BACKGROUND

Before entering the floor-care industry in 2000, Mr. Collette spent eleven years as a pilot with the Royal Canadian Air Force (1986–1997), serving as a Tactical Aircraft Commander, Aerospace Navigation School Instructor, and Flight Safety Officer, and subsequently as a commercial airline captain operating in the Caribbean and South America (1997–1998). He also held engineering and executive leadership roles in early-stage technology ventures (Liquid Image Corporation, 1993–1997; DisplayWear Inc., 1998–2000), including product development and safety-critical systems engineering. This background in human factors, safety-critical operations and systematic risk assessment underlies his approach to walkway-safety investigation and standards development today.

PUBLICATIONS & PRESENTATIONS

Peer-Reviewed Publications

- "Standardized Measurement of Surface Dry Particle Thickness for Walkway Slip Resistance," Journal of Forensic Science, 2025

Presentations & Lectures

- "Mat Testing — Analysis Using Static Coefficient of Friction," ASTM D13.63 Subcommittee Meeting, June 2019
- "Cleaning with Microfiber," ACUHO-I, 2013
- "Best Practices in Restroom Cleaning," ACUHO-I, 2012
- "Safe Floor Solutions for Foodservice," RFMA, 2011

Webinars

- "Safe Floors for Foodservice: Managing Slips, Trips, and Falls," Cintas, 2013

White Papers

- "Dual Tool Delivers Safer, Cleaner Floors in One Simple Solution," 2016

Trade Articles

- "Get Agitated About Mopping," Cleaning & Maintenance Magazine, May 2018
- "3 Ways to Avoid the Half-Million-Dollar French Fry: Stay Out of Court With a Walkway Audit," Cleaning & Maintenance Magazine, 2017
- "Get Agitated About Mopping," ISSA Today, 2016
- "Cintas Floor Care Management Program First to Earn NFSI High-Traction Certification," Reuters, 2013
- "Study Finds Americans Reluctant to Dine at Restaurants Where a Slip-and-Fall Accident Occurred," Cleaning and Maintenance Management, 2012

COURSES TAUGHT

- Walkway Safety Professional Course — 3-Day Course (meets ASTM F2948, Standard Guide for Walkway Auditor Qualifications)
- Flooring: Design Considerations and Material Selection for Health, Safety, & Welfare — 3-Hour Online CEU Course (approved by the International Design Continuing Education Council for ASID and IIDA members)
- American Slip Meter 825A Operator Certificate Course — Level I (Online); Level I & II (1-Day In-Person)
- American Slip Meter 925 Operator Certificate Course — Level I (Online); Level I & II (1-Day In-Person)
- Johnson Forensics GS-1 Operator Certificate Course — Level I (Online); Level I & II (1-Day In-Person)
- Regan Scientific BOT3000E Operator Certificate Course — Level I (Online); Level I & II (1-Day In-Person)