STATE OF NORTH CAROLINA

MECKLENBURG COUNTY

CRESCENT UNIVERSITY CITY VENTURE, LLC,

Plaintiff,

v.

AP ATLANTIC, INC. d/b/a ADOLFSON & PETERSON CONSTRUCTION,

Defendant,

v.

MADISON CONSTRUCTION GROUP, INC.; TRUSSWAY MANUFACTURING, INC.; T. A. KAISER HEATING & AIR, INC.; SEARS CONTRACT, INC.; MACEDO CONTRACTING CO.; WHALEYS DRYWALL, LLC; STALLINGS DRYWALL, LLC; MAYNOR PI, INC.; MATUTE DRYWALL, INC.; MANUEL BUILDING CONTRACTORS, LLC; EAGLES FRAMING COMPANY, INC.; DIAZ CARPENTRY, INC.; SOCORRO CASTILLE MONTLE; and GUERRERO CONSTRUCTION PRO, INC.

> Third-Party Defendants.

IN THE GENERAL COURT OF JUSTICE SUPERIOR COURT DIVISION 15 CVS 14745 (Master File)

ORDER AND OPINION ON DAUBERT MOTIONS IN LIMINE

MADISON CONSTRUCTION GROUP, INC.,	
Third-Party Plaintiff,	
V.	
MANUEL BUILDING CONTRACTORS, LLC,	
Fourth-Party Defendant.	
CRESCENT UNIVERSITY CITY VENTURE, LLC,	16 CVS 14844 (Related Case)
Plaintiff,	
v.	
ADOLFSON & PETERSON, INC.,	
Defendant.	
CRESCENT UNIVERSITY CITY VENTURE, LLC,	18 CVS 1642 (Related Case)
Plaintiff,	
v.	
TRUSSWAY MANUFACTURING, INC.; and TRUSSWAY MANUFACTURING, LLC,	
Defendants.	

1. This case arises from the construction of a multi-building apartment complex (the "Project") near the University of North Carolina at Charlotte and a

dispute over alleged floor truss defects at the Project. A jury trial of all remaining claims in this matter is set to commence on 9 May 2022.

2. Currently before the Court for decision are six motions *in limine* seeking exclusion of expert testimony under the principles first established in *Daubert v*. *Merrell Dow Pharms., Inc.,* 509 U.S. 579 (1993), each filed on 4 October 2021 (collectively, the "Motions"):

- (i) Defendants AP Atlantic, Inc. and Adolfson & Peterson, Inc.'s Motion to Exclude Expert Testimony, (ECF No. 605);
- (ii) Third-Party Defendant Sears Contract, Inc.'s Motion to Exclude Expert Testimony, (ECF No. 607);
- (iii) Third-Party Defendant Madison Construction Group, Inc.'s Daubert Motion in limine as to Plaintiff's Retained Expert Witnesses from Simpson Gumpertz & Heger, (ECF No. 609);
- (iv) Third-Party Defendant Madison Construction Group, Inc.'s Daubert Motion in limine as to Defendant AP Atlantic, Inc., d/b/a Adolfson & Peterson Construction's Retained Expert Witness Samuel A. Greenberg, (ECF No. 610);
- (v) Third-Party Defendant Madison Construction Group, Inc.'s Daubert Motion in limine as to Defendant AP Atlantic, Inc., d/b/a Adolfson & Peterson Construction's Non-Retained Expert Witnesses and Motion to Strike, (ECF No. 611); and

(vi) Third-Party Defendant Trussway Manufacturing, Inc.'s Daubert Motion in limine as to Plaintiff Crescent University City Venture, LLC's Retained Expert Witness Simpson Gumpertz and Heger ("SGH"), (ECF No. 615).

3. Having considered the Motions, the materials submitted in support of and in opposition to the Motions, the arguments of counsel at the hearing held on the Motions, and other appropriate matters of the record, the Court, in the exercise of its discretion, hereby **GRANTS in part** and **DENIES in part** the Motions as more specifically set forth below.

Troutman Pepper Hamilton Sanders LLP, by Kiran H. Mehta, William J. Farley, and Victoria A. Alvarez, for Plaintiff Crescent University City Venture, LLC.

Robinson Elliot & Smith, by William C. Robinson and Dorothy M. Gooding, Johnston, Allison, & Hord, P.A., by Greg C. Ahlum and Parker E. Moore, and Hall Booth Smith, P.C., by Robert McCune and Alan R. Belcher, for Defendant AP Atlantic, Inc. d/b/a Adolfson & Peterson Construction.

Wolfe, Campbell, Gunst & Hinson, PLLC, by Robert C. Gunst, Jr. and Brian E. Wolfe, for Third-Party Defendant Madison Construction Group, Inc.

Fox Rothschild LLP, by Jeffrey P. MacHarg, and Pagel, Davis & Hill, P.C., by Martyn B. Hill and Kent J. Pagel, for Third-Party Defendant Trussway Manufacturing, LLC f/k/a Trussway Manufacturing, Inc.

Goodman McGuffey LLP, by W. James Flynn, for Third-Party Defendant T.A. Kaiser Heating & Air, Inc.

Hedrick Gardner Kincheloe & Garofalo LLP, by David L. Levy and Matthew R. Lancaster, for Third-Party Defendant Sears Contract, Inc.

Bledsoe, Chief Judge.

BACKGROUND

4. The background facts and procedural history related to this matter are set forth in detail in *Crescent University City Venture, LLC v. AP Atlantic, Inc. (Crescent I*), 2019 NCBC LEXIS 46, at *3–18 (N.C. Super. Ct. Aug. 8, 2019) (ECF No. 576) and *Crescent University City Venture, LLC v. AP Atlantic, Inc. (Crescent II*), 2019 NCBC LEXIS 49, at *3–11 (N.C. Super. Ct. Aug. 14, 2019) (ECF No. 577), aff'd sub nom. *Crescent University City Venture, LLC v. Trussway Manufacturing, Inc.*, 376 N.C. 54 (2020).

5. Plaintiff Crescent University City Venture, LLC ("Crescent") is the owner and developer of the Project, and hired Defendant AP Atlantic, Inc. d/b/a Adolfson & Peterson Construction ("AP Atlantic") to serve as the general contractor for the Project. Crescent has asserted claims against AP Atlantic and its parent company, Adolfson & Peterson, Inc. ("A&P"; with AP Atlantic, the "AP Parties"), for breach of contract and action on performance of guaranty.

6. AP Atlantic in turn has filed third-party claims against certain of its subcontractors, including Madison Construction Group, Inc. ("Madison"); T.A. Kaiser Heating & Air, Inc.; Sears Contract, Inc. ("Sears"); and Trussway Manufacturing, Inc. ("Trussway").¹ These third-party defendants have responded by denying liability and filing cross claims against one another. While AP Atlantic's claims against Trussway

¹ Although AP Atlantic initially brought third-party claims against Interior Distributors, a division of Allied Building Products Corporation, the Court dismissed those claims on summary judgment. *See Crescent I*, 2019 NCBC LEXIS 46, at *146.

were dismissed, s*ee id*. at *142, Madison maintains a breach of contract claim against Trussway.

A. <u>Procedural History</u>

7. The Motions were timely filed consistent with the Court's Amended Scheduling Order and Second Amended Notice of Hearing addressing motions *in limine* raising *Daubert* challenges to expert testimony. (ECF No. 604.)

8. Through the Motions, (i) the AP Parties, Sears, Madison, and Trussway seek to exclude testimony from Crescent's retained expert witnesses employed by Simpson Gumpertz & Heger ("SGH"); (ii) Sears and Madison seek to exclude testimony from the AP Parties' retained expert witness Samuel A. Greenberg ("Greenberg"); (iii) Madison seeks to exclude expert testimony from the AP Parties' non-retained experts and employees; and (iv) Sears seeks to exclude testimony from Trussway's expert witness Kirk Grundahl ("Grundahl") and from Madison's expert witness Richard Rogers ("Rogers").

9. After full briefing, the Court held a hearing on 4 November 2021 (the "Hearing"), at which all parties were represented by counsel. The Motions are now ripe for resolution.

II.

LEGAL STANDARD

10. "A motion *in limine* seeks pretrial determination of the admissibility of evidence proposed to be introduced at trial[,]" *Buchanan v. N.C. Farm Bureau Mut. Ins. Co.*, 270 N.C. App. 383, 392 (2020) (quoting *Luke v. Omega Consulting Grp., LC*, 194 N.C. App. 745, 750 (2009)), and "is customarily defined as one seeking 'to avoid injection into trial of matters which are irrelevant, inadmissible and prejudicial,'" State v. Fearing, 315 N.C. 167, 168 (1985) (quoting Black's Law Dictionary 914 (5th ed. 1979)).

11. "A ruling on a motion *in limine* is a preliminary or interlocutory decision which the trial court can change if circumstances develop which make it necessary." *State v. Lamb*, 321 N.C. 633, 649 (1988); *see Lail v. Bowman Gray Sch. of Med.*, 196 N.C. App. 355, 363 (2009) ("A trial court's ruling on a motion *in limine* is subject to change during the course of trial, depending upon the actual evidence offered at trial." (quoting *Kor Xiong v. Marks*, 193 N.C. App. 644, 647 (2008))). "The decision to either grant or deny a motion *in limine* is within the sound discretion of the trial court." *State v. Fritsch*, 351 N.C. 373, 383 (2000).

12. "Expert testimony is governed by North Carolina Rule of Evidence 702, which is now virtually identical to its federal counterpart and follows the *Daubert* standard for admitting expert testimony."² Insight Health Corp. v. Marquis

(2) The testimony is the product of reliable principles and methods.

² North Carolina Rule of Evidence ("Rule(s)") 702 provides in pertinent part:

⁽a) If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form on an opinion, or otherwise, if all of the following apply:

⁽¹⁾ The testimony is based upon sufficient facts or data.

⁽³⁾ The witness has applied the principles and methods reliably to the facts of the case.

Diagnostic Imaging of N.C., LLC, 2017 NCBC LEXIS 14, at *39 (N.C. Super. Ct. Feb.

24, 2017) (citations and internal quotation marks omitted). "In other words, North Carolina trial courts now perform the same 'gatekeeping role' that federal district courts have long performed." *Kerry Bodenhamer Farms, LLC v. Nature's Pearl Corp.*, 2018 NCBC LEXIS 239, at *4 (N.C. Super. Ct. Dec. 27, 2018) (citing *Daubert*, 509 U.S. at 597). In applying the *Daubert* standard, North Carolina courts may seek guidance from federal case law. *State v. McGrady*, 368 N.C. 880, 888 (2016).

13. As Judge Adam M. Conrad of this Court has explained:

The purpose of this gatekeeping role "is to ensure the reliability and relevancy of expert testimony." *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152, 119 S. Ct. 1167, 143 L. Ed. 238 (1999). Expert testimony can be helpful. At times, it is essential. Even so, courts have long worried about the effect of questionable expert testimony on a jury. "Experts famously possess an 'aura of special reliability' surrounding their testimony." *United States v. Upton*, 512 F.3d 394, 401 (7th Cir. 2008) (quoting *United States v. Brown*, 7 F.3d 648, 655 (7th Cir. 1993)); see also United States v. Jones, 107 F.3d 1147, 1161 (6th Cir. 1997) (noting "the mystique attached to 'experts'"). It is up to the trial court to ensure that expert testimony serves its legitimate purpose—to aid the jury with specialized knowledge—without compromising the jury's ability to independently evaluate all the evidence.

. . . .

More generally, expert "testimony must meet the minimum standard for logical relevance" under Rule 401. *State v. McGrady*, 368 N.C. 880, 889, 787 S.E.2d 1, 8 (2016). And it must satisfy the three-part test set out in Rule 702(a): (1) the "testimony must be based on specialized knowledge"; (2) "the expert must be qualified"; and (3) "the testimony must be reliable." *Insight Health Corp.*, 2017 NCBC LEXIS 14, at *39 (citation omitted). Testimony is reliable if it "is based upon sufficient facts or data," if it "is the product of reliable principles and methods," and if "[t]he witness has applied the principles and methods reliably to the facts of the case." N.C. R. Evid. 702(a)(1)–(3). "The precise nature of the

N.C. R. Evid. 702(a).

reliability inquiry will vary from case to case depending on the nature of the proposed testimony." *McGrady*, 368 N.C. at 890, 787 S.E.2d at 9.

Potts v. KEL, LLC, 2019 NCBC LEXIS 61, at *4-5 (N.C. Super. Ct. Sept. 27, 2019).

14. The focus of the trial court's inquiry "must be solely . . . [the] principles and

methodology" used by the expert, "not . . . the conclusions that they generate."

Daubert, 509 U.S. at 595. As our Court of Appeals has explained:

Subsection (a)(1) of Rule 702 "calls for a quantitative rather than qualitative analysis." See Fed. R. Evid. 702, Advisory Committee Notes on the 2000 Amendments. That is, the "requirement that expert opinions be supported by 'sufficient facts or data' means 'that the expert considered sufficient data to employ the methodology.'" Manpower, Inc. v. Ins. Co. of Pa., 732 F.3d 796, 808 (7th Cir. 2013) (quoting Stollings v. Ryobi Techs., Inc., 725 F.3d 753, 766 (7th Cir. 2013)). See also United States v. Crabbe, 556 F. Supp. 2d 1217, 1223 (D. Col. 2008) ("[T]he inquiry examines only whether the witness obtained the amount of data that the methodology itself demands.").

Consequently, "'[a]s a general rule, questions relating to the bases and sources of an expert's opinion affect only the weight to be assigned that opinion rather than its admissibility.'" Southwire Co. v. J.P. Morgan Chase & Co., 528 F. Supp. 2d 908, 934 (W.D. Wis. 2007) (quoting Loeffel Steel Prods., Inc. v. Delta Brands, Inc., 372 F. Supp. 2d 1104, 1119 (N.D. Ill. 2005)). "In other words, th[is] Court does not examine whether the facts obtained by the witness are themselves reliable -- whether the facts used are qualitatively reliable is a question of the weight to be given the opinion by the factfinder, not the admissibility of the opinion." Crabbe, 556 F. Supp. 2d at 1223.

Pope v. Bridge Broom, Inc., 240 N.C. App. 365, 374 (2015).

15. Further, "[t]he requirement that expert testimony must be based on scientific knowledge means that the principles and methods used to form that testimony must be grounded in the scientific method." *Id.* at 376 (cleaned up). Said differently, "the principles and methods must be capable of generating 'testable hypotheses that are then subjected to the real world crucible of experimentation,

falsification/validation, and replication.' " Id. (quoting Perry v. Novartis Pharms. Corp., 564 F. Supp. 2d 452, 459 (E.D. Pa. 2008)). "In addition, even if expert scientific testimony might be reliable in the abstract, to satisfy Rule 702(a)'s relevancy requirement, the trial court must assess 'whether that reasoning or methodology properly can be applied to the facts in issue.' " State v. Babich, 252 N.C. App. 165, 168 (2017) (quoting Daubert, 509 U.S. at 593). "This ensures that 'expert testimony proffered in the case is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute.' " Id. (quoting Daubert, 509 U.S. at 591). "The Supreme Court in Daubert referred to this as the 'fit' test." Id. (citation omitted).

III.

ANALYSIS

A. <u>SGH Experts</u>

16. The AP Parties, (ECF No. 605), Sears, (ECF No. 607), Madison, (ECF No. 609), and Trussway, (ECF No. 615), seek to exclude testimony from Crescent's three retained expert witnesses from SGH: Dr. Milan Vatovec ("Vatovec"), Daniel Valentine ("Valentine"), and Donald Dusenberry ("Dusenberry) (collectively, the "SGH Experts").³

³ While the AP Parties seek to exclude all of SGH's opinions and testimony at trial, (4 November 2021 Hearing Tr. 14:14–15 [hereinafter "Tr."], ECF No. 629), Madison, (Tr. 19:9–14), Sears (Sears' Mem. Law Supp. Mot. Exclude Expert Test. 2 [hereinafter "Sears Br."], ECF No. 608), and Trussway, (Trussway's Br. Supp. *Daubert* Mot. *in limine* Pl. Crescent's Retained Expert Witness Simpson Gumpertz and Heger ("SGH") 2 [hereinafter "Trussway Br."], ECF No. 616), seek narrower exclusions.

17. The SGH Experts submitted a final report outlining their opinions regarding the Project (the "SGH Report") on 12 September 2017. In that report, they summarize their intended opinions at trial as follows:

- The design loads specified and used in the design of the [Project] comply with all code requirements and are suitable for the intended use of the [Project].
- The floor trusses throughout the [Project] had significant and systemic defects, deficiencies, and failures resulting from defective truss manufacturing, improper handling, overloading during construction, and post-installation damage, which rendered them inadequate to reliably support the specified, code-prescribed loads.
- Truss manufacturing defects and deficiencies, such as inadequately pressed plates, misplaced plates, missing plates, and poor-quality or unacceptably waned wood members are principal causes of the observed damage, deficiencies, and connection failures throughout the [Project].
- Improper truss-handling practices, including but not limited to improper storage and handling, handling and installation damage, excessive construction loads, and intentional damage during HVAC installation and other construction activities, also contributed to the observed damage, deficiencies, and connection failures throughout the [Project].
- The vast majority of observed and documented floor truss deficiencies, defects, and failures occurred during truss fabrication and Project construction, and predated occupancy.
- The extensive, [Project]-wide truss repairs were designed and performed to meet the requirements of the NC State Building Code both to maintain public safety and provide satisfactory long-term floor performance.
- The Project-wide truss repairs that were initiated and performed in the summer of 2015 were prudent, justified, and the only responsible course for Crescent to have taken.⁴

⁴ (*See* AP Parties' Br. Supp. Mot. Exclude Expert Test. Ex. F, at 19–20 [hereinafter "SGH Report"], ECF No. 606.7.) For purposes of this Order and Opinion, the Court cites to the SGH

18. The AP Parties, Sears, Madison, and Trussway seek to exclude testimony by the SGH Experts regarding the standard of care applicable to general contractors, drywall installation, truss manufacturing, and framing.⁵

19. The AP Parties separately seek to exclude the SGH Experts' opinions and testimony that were "rendered in the Trussway Action,"⁶ including those "not previously proffered by [the SGH Experts] prior to their designation in the Trussway Action[,]" (AP Parties' Br. 16), as well as any opinions and testimony regarding the reasonableness of AP Atlantic's response to Crescent's demand for remediation and whether Crescent properly provided AP Atlantic an opportunity to cure, (AP Parties' Br. 15).

20. The AP Parties and Madison each move to exclude any opinions by the SGH Experts regarding the cost of implementing any repairs to the trusses. (*See* AP Parties' Br. 12–14; Madison SGH Br. 10–13.)

Experts' Report located at ECF No. 606.7. The SGH Report can also be accessed at ECF Nos. 616.5 and 620.4.

⁵ (See AP Parties' Br. Supp. Mot. Exclude Expert Test. 9–12 [hereinafter "AP Parties' Br."], ECF No. 606; Sears Br. 10–12; Third-Party Def. Madison's Br. Supp. *Daubert* Mot. *in limine* Pl.'s Retained Expert Witnesses from Simpson Gumpertz & Heger 5–7 [hereinafter "Madison SGH Br."], ECF No. 612; Trussway Br. 5–9.)

⁶ The "Trussway Action" refers to Crescent's single-count negligence action filed against Trussway in 2018 in Mecklenburg County Superior Court (18 CVS 1642). The Court permitted discovery to proceed in the Trussway Action, over objection, but ordered that "should the Court eventually dismiss the Trussway Action, the discovery ordered [in the Trussway Action] will be excluded from any trial of the remaining consolidated action." *Crescent University City Venture, LLC v. AP Atlantic, Inc.*, 2018 NCBC LEXIS 92, at *10 (N.C. Super. Ct. Aug. 29, 2019) (ECF No. 469). The Court subsequently dismissed the Trussway Action, which the Supreme Court thereafter affirmed on appeal. *See Crescent II*.

21. Finally, the AP Parties, Sears, Madison, and Trussway seek to exclude any opinions by the SGH Experts regarding the cause of the alleged truss defects, the reasonableness of repairs to the defective trusses, and the design load of the defective trusses. (*See* AP Parties' Br. 15; Sears Br. 10–12; Madison SGH Br. 8; Trussway Br. 9–12.)

22. As an initial matter, the parties agree on certain aspects of the Motions. In particular, Crescent has agreed that the SGH Experts will not offer opinions and testimony: (i) on the standard of care for general contractors, drywall installation, truss manufacturing, or framing, (Tr. 57:23–25); (ii) offered in the Trussway Action;⁷ (iii) on whether AP Atlantic or Crescent met their contract obligations concerning demand for remediation and opportunity to cure, (Tr. 87:7–19, 90:7–10); and (iv) on the reasonableness of the cost of implementing the repairs to the trusses, (Tr. 87:7–19).⁸ Crescent has also indicated that while the SGH Experts intend to offer opinions and testimony concerning possible and likely causes of the truss defects, they will not offer opinions concerning the actual cause of those defects "on an individual basis."

⁷ (See Crescent's Resp. AP Parties' Mot. Exclude Expert Test., Sears' Mot. Exclude Expert Test., Madison's *Daubert* Mot. *in limine* Pl.'s Retained Expert Witnesses Simpson Gumpertz & Heger, and Trussway's *Daubert* Mot. *in limine* Pl.'s Retained Expert Witness Simpson Gumpertz and Heger ("SGH") 6 n.1 [hereinafter "Crescent Resp."], ECF No. 620.) Citations to the page numbers of this document refer to the electronic PDF page numbers as there are no page numbers on the pages themselves.

⁸ Sears also moves to exclude opinions and testimony from Madison's expert witness Rogers and Trussway's expert witness Grundahl regarding the standard of care related to drywall and whether Sears caused any truss damage. (*See* Sears Br. 12.) At the Hearing, Madison's counsel agreed that Rogers, (Tr. 144:22), and Trussway's counsel agreed that Grundahl, (Tr. 136:16–20), will not opine on these topics. Thus, the Court will grant Sears' motion to this extent, and Rogers and Grundahl will not be permitted to offer testimony or opinions concerning these matters at trial.

(Crescent Resp. 17.) Accordingly, the Court grants the Motions with respect to these matters, and the SGH Experts will not be permitted to offer opinions or testimony concerning these issues.

23. That said, the parties vigorously dispute the qualifications of the SGH Experts to testify concerning the identification of truss defects, the cause of alleged truss defects, the adequacy of design loads, and the reasonableness of repairs to the trusses as well as the reliability of their methods in forming their opinions on causation and the necessity of the truss repairs. The Court addresses each challenge in turn.

1. <u>Qualifications</u>

24. The moving parties first argue that the SGH Experts are not qualified to opine and offer testimony concerning trusses and the truss industry generally and the metal plate connected ("MPC") floor trusses used in the Project specifically, including alleged manufacturing and other defects in the Project's trusses, the reasonableness of repairs to those trusses, and the actual and possible causes of any truss defects. They argue that while the SGH Experts are qualified engineers, the SGH Experts do not have experience or training concerning trusses, the truss industry, and, in particular, MPC trusses or their remediation and repair, rendering these experts unqualified to testify to these matters under *Daubert*.⁹

⁹ (See Trussway Br. 6–8; Trussway's Reply Supp. Daubert Mot. in limine Pl. Crescent's Retained Expert Witness Simpson Gumpertz and Heger 5 [hereinafter "Trussway Reply"], ECF No. 626; AP Parties' Reply Supp. Mot. Exclude Expert Test. 3–5 [hereinafter "AP Parties' Reply"], ECF No. 624; Madison SGH Br. 6–7.)

25. Crescent argues in response that the SGH Experts satisfy *Daubert*, both because they will offer opinions and testimony concerning the trusses that "falls within their general competence as trained, practicing engineers," (Crescent Resp. 9–11; *see also* Tr. 68:19–69:2), and because the SGH Experts have specific, relevant knowledge concerning trusses generally and MPC trusses specifically, (Crescent Resp. 12).

26. "The requirement that an expert must be qualified has been 'liberally construed.'" *Kerry Bodenhamer Farms, LLC*, 2018 NCBC LEXIS 239, at *5 (quoting *United States v. Velasquez*, 64 F.3d 844, 849 (3d Cir. 1995)). "Whenever a trial court assesses an expert witness's qualifications under Rule 702(a), the court must look to see whether the witness's knowledge and experience are sufficient to qualify the witness in the particular field of expertise at issue." *McGrady*, 368 N.C. at 896. "Whatever the source of the witness's knowledge, the question remains the same: Does the witness have enough expertise to be in a better position than the trier of fact to have an opinion on the subject?" *Id.* at 889.

27. "Different fields require different 'knowledge, skill, experience, training, or education.'" *McGrady*, 368 N.C. at 896 (quoting N.C. R. Evid. 702(a)). While "an expert who is a [civil] engineer is not necessarily qualified to testify as an expert on any issue within the vast field of [civil] engineering[,]" the expert may testify concerning "general engineering principles that any [civil] engineer would know[.]" *Shreve v. Sears, Roebuck & Co.*, 166 F. Supp. 2d 378, 392 (D. Md. 2001). However, this Court has noted that "[d]ifferences in expertise bear chiefly on the weight to be

assigned to the testimony by the trier of fact, not its admissibility." *Kerry Bodenhamer Farms, LLC*, 2018 NCBC LEXIS 239, at *5 (quoting *Huss v. Gayden*, 571 F.3d 442, 452 (5th Cir. 2009)). "As is true with respect to other aspects of Rule 702(a), the trial court has the discretion to determine whether the witness is sufficiently qualified to testify in that field." *McGrady*, 368 N.C. at 890.

28. As an initial matter, Trussway and the AP Parties frame the requisite expertise for a testifying expert in this action differently from Crescent. For Trussway and the AP Parties, the focus of this case is on the failure of various MPC trusses at the Project and thus experts seeking to opine on truss matters in this action must have specific expertise in MPC trusses. They argue the SGH Experts lack this expertise, requiring exclusion under *Daubert*. (Trussway Reply 7; AP Parties' Reply 4.)

29. Crescent, on the other hand, contends that while the SGH Experts have expertise with trusses and with MPC trusses, "the proper framework for assessing . . . experience is not that it 'relates to trusses' but that it relates to the investigation and remediation of failed structures[.]" (Crescent Resp. 12.) Crescent argues that the SGH Experts have that expertise in abundance, rendering them qualified under *Daubert*. (*See* Crescent Resp. 12.)

30. Bearing these competing frameworks in mind, the Court turns to an examination of the SGH Experts' qualifications.

a. <u>Vatovec</u>

31. Vatovec is a certified structural and civil engineer working as a Consulting Principal at SGH. (Crescent Resp. Ex. D, at 1 [hereinafter "Vatovec CV"], ECF No. 620.5.)¹⁰ He has spent over 20 years at SGH, where he has been involved in numerous "design, investigation, forensic analysis, repair and rehabilitation, and research projects[,]" including working "on more than 400 different projects involving evaluation and structural design for repair or modification of various existing wood, concrete, masonry, and steel structures in the United States." (Vatovec CV 1.)

32. Vatovec also has extensive education in wood products, including earning a bachelor's degree in Wood Processing Engineering at Belgrade University in 1988, a master's degree in Forest Products at the University of Illinois in 1991, and a Ph.D. in Structural Engineering and Wood Science and Engineering at Oregon State University in 1995, where he focused his dissertation on MPC trusses.¹¹

33. Vatovec served as a faculty research assistant at Oregon State's Forest Research Laboratory, where he conducted and coordinated wood engineering research, and he worked as a graduate research assistant at both Oregon State and the University of Illinois conducting research and experiments on wood. (Vatovec CV 4.) Since 2007, Vatovec has served as an adjunct professor at Manhattan College,

¹⁰ For purposes of this Order and Opinion, the Court cites to Vatovec's CV located at ECF No. 620.5. The CV can also be found at ECF Nos. 606.8 and 612.1.

¹¹ (See Vatovec CV 1, 7–8; Crescent Resp. 12; Crescent Resp. Ex. G, Dep. Milan Vatovec, Ph.D., P.E., dated Oct. 2, 2017, at 108:11–15, ECF No. 620.8.)

where he teaches a graduate-level wood design class focusing on wood engineering and advanced structural timber design. (Vatovec CV 4.)

34. Since 1993, he has made numerous presentations and published many articles on wood-related issues, including publishing six articles on MPC trusses. (Vatovec CV 5–8.) Vatovec is also active in professional associations focused on wood and wood products. (Vatovec CV 4.)

b. <u>Dusenberry</u>

35. Dusenberry is a civil engineer and has worked as an engineer at SGH since 1975. (Crescent Resp. Ex. E, at 1 [hereinafter "Dusenberry CV"], ECF No. 620.6.)¹² He joined SGH after obtaining bachelor's and master's degrees in civil engineering at Cornell University and currently serves as a Senior Principal at the firm. (Dusenberry CV 1.) During his career, Dusenberry "has taken part in numerous complex investigations, analyses, and peer reviews of buildings, building components, and infrastructures" and has "extensive experience in investigations of failed structures," including of the World Trade Center towers in New York City. (Dusenberry CV 1, 3.) He has also designed repairs to a wooden truss system.¹³ Dusenberry has been very active in professional organizations, including serving as President of the Board of Governors of the Structural Engineering Institute of the American Society of Civil Engineers, (Dusenberry CV 6–7), and has also published

¹² For purposes of this Order and Opinion, the Court cites to Dusenberry's CV located at ECF No. 620.6. It can also be found at ECF Nos. 606.8 and 612.1.

¹³ (*See* Crescent Resp. 14; Crescent Resp. Ex. H, Dep. Donald Dusenberry, dated Oct. 4, 2017, at 23:13–24, ECF No. 620.7.)

numerous articles and made many presentations concerning structural engineering issues, (Dusenberry CV 7–13).

c. <u>Valentine</u>

36. Valentine is a civil engineer and, except for a brief stint between 2000 and 2003 to earn a law degree at Arizona State University, has worked at SGH since 1995, where he is currently a Senior Project Manager. (Crescent Resp. Ex. F, at 1 [hereinafter "Valentine CV"], ECF No. 620.7.)¹⁴ Valentine has a bachelor's degree and master's degree in civil engineering from Tufts University College of Engineering and has spent his career with SGH specializing in "soil-structure-interaction analysis of buried structures" and "finite-element modeling of complex structural behavior and performing linear- and nonlinear-structural analysis." (Valentine CV 1.) Valentine's work has specifically involved investigations, design projects, structural analyses, and inspections of various structures, including projects involving the "[i]nspection of severe settling and lateral displacement of [a] wood-framed gable roof[,]" (Valentine CV 5), and a "strength check of [a] 150-year-old wood-framed structure," (Valentine CV 8).

37. The moving parties do not dispute that the SGH Experts are well-educated and highly trained civil engineers with impressive credentials and experience. Their dispute is with what they contend is a disqualifying lack of experience with the truss industry, trusses, and MPC trusses in particular. After careful consideration and review, the Court concludes, in the exercise of its discretion, that the SGH Experts'

¹⁴ For purposes of this Order and Opinion, the Court cites to Valentine's CV located at ECF No. 620.7. It can also be found at ECF Nos. 606.8 and 612.1.

qualifications satisfy *Daubert*'s standard to render the opinions they intend to offer at trial.

a. <u>Opinions Concerning Trusses and Truss Defects</u>

38. First, as to truss and MPC truss experience, Vatovec has specialized knowledge, education, and experience that qualify him to render his intended opinions regarding trusses and the MPC trusses at issue in this litigation. Not only did he write his Ph.D. dissertation on MPC trusses and publish six additional articles on the subject, but he also has remarkably extensive experience in the design, investigation, forensic analysis, and repair and rehabilitation of wood structures and systems as reflected in his CV. Dusenberry, too, has documented experience with trusses, if not MPC trusses specifically, having designed repairs to a wooden truss system. And Valentine, while not reflecting truss-specific experience in his CV, has demonstrated experience in inspecting and analyzing wood-frame structures as part of his work at SGH.

39. Moreover, all three of the SGH Experts have extensive experience in the design of structural systems and the investigation of failed structures, and each has experience designing wood structures, investigating the failures of wood structures, or both. (*See* Vatovec CV 1–3; Dusenberry CV 1–4; Valentine CV 1–2, 8.) Although the moving parties argue that this expertise is insufficient to permit the SGH Experts to express truss-related opinions under *Daubert*, the Court disagrees. Not only is the central fact of this litigation the failure of a structural system—the Project's trusses—but it cannot be reasonably disputed that trusses and truss systems are foundational

concepts in structural engineering that are well-known to civil engineers. Indeed, Trussway itself has recognized that "an engineer may understand certain elements of truss manufacturing," (Trussway Br. 9), and basic engineering texts and other foundational engineering literature include chapters on trusses and truss systems and describe trusses as involving basic principles of civil engineering. *See, e.g.*, Kenneth Leet et al., *Fundamentals of Structural Analysis* 121 (2nd ed. 2005); M.L. Gambhir, *Fundamentals of Structural Mechanics and Analysis* 158 (2011); James Ambrose, *Design of Building Trusses* 3, 18 (1994).

40. Considering all of the above, the Court concludes, in the exercise of its discretion, that while the moving parties may certainly attack the SGH Experts' truss- and MPC-truss-related experience at trial, those experts' knowledge, experience, and training in civil engineering generally—particularly when combined with their wood, truss, and MPC truss knowledge, experience, and training specifically—qualify them to opine to the jury about trusses, truss systems, and truss defects. *See, e.g., Friendship Heights Assocs. v. Vlastimil Koubek, A.I.A.*, 785 F.2d 1154, 1159–60 (4th Cir. 1986) (affirming admission of testimony from expert without practical experience to testify based on expert's education, training, and knowledge); *Garrett v. Desa Indus., Inc.*, 705 F.2d 721, 724 (4th Cir. 1983) (overruling exclusion of testimony from expert without experience with item at issue based on expert's education, knowledge, training, and skill).

b. Opinions Concerning Reasonableness and Design of Repairs

41. The Court further concludes, in the exercise of its discretion, that the SGH Experts' extensive education, training, and experience investigating, analyzing, and restoring failed structures, combined with their wood-, truss-, and MPC-truss-related knowledge and experience, renders them competent to offer opinions and testimony concerning the reasonableness of the repairs to the trusses and the design of the repair process.

c. Opinions Concerning Loads and Design Load

42. The moving parties also challenge the SGH Experts' qualifications to offer opinions and testimony concerning the design load of the trusses, and Sears specifically disputes the SGH Experts' competency to opine concerning alleged overloading of drywall during construction. The Court disagrees.

43. While none of the SGH Experts appears to have substantial specific experience with drywall loading and the impact of such loading on trusses, including MPC trusses, each of the SGH Experts has experience in investigating, analyzing, and testing design loads and examining whether structures have deteriorated or failed due to overloading. Indeed, Valentine's CV reflects fifteen separate engagements involving the investigation, analysis and/or testing of loads. (*See* Valentine CV 1–2.) Dusenberry, in addition to testing loads in at least one engagement, has served on two committees—the Structural Engineering Institute's Standards Committees on Minimum Design Loads for Buildings and Other Structures and on Design Loads on Construction Related Structures—that set standards for design loads and minimum design loads. (*See* Dusenberry CV 6.) He has also presented on loads, published chapters on loads in four structural engineering textbooks, and published several articles on loads in professional engineering journals. (*See* Dusenberry CV 7–13.) Vatovec, for his part, has engaged in load testing on at least four projects and has likewise presented to a professional industry group and written at least one article for an industry magazine concerning loads and load testing.¹⁵ (*See* Vatovec CV 2, 5–8.)

44. Based on the above, the Court concludes, in the exercise of its discretion, that the SGH Experts are qualified by their knowledge, education, training, and experience to offer opinions and testimony concerning the design loads specified and used in the Project, the code compliance and project suitability of those design loads, and any alleged overloading during construction of the Project. Any lack of specific experience the SGH Experts may have with drywall loading goes to the weight of these experts' opinions and is a proper subject for cross-examination at trial.

d. **Opinions Concerning Causation**

45. The SGH Experts intend to offer opinions and testimony concerning the causes or possible causes of the truss failures on the Project, including "defective truss

¹⁵ Moreover, loads and load calculations are basic topics typically covered and discussed in civil engineering handbooks and textbooks and therefore are subjects that would be within the knowledge and training of structural engineers like the SGH Experts. *See, e.g.*, August W. Domel, Jr., *Basic Engineering Calculations for Contractors* 2 (1997); Tyler G. Hicks, *Handbook of Civil Engineering Calculations* 2-86 (3d ed. 2016); G. Shanmugam and M.S. Palanichamy, *Basic Civil and Mechanical Engineering* 4.6 (2018) (discussing loads on foundations); W.F. Chen and J.Y. Richard Liew, *The Civil Engineering Handbook* 2-16 (2nd ed. 2002).

manufacturing, improper handling, overloading during construction, and postinstallation damage[.]" (SGH Report 19.) As with the SGH Experts' other opinions, the AP Parties, Trussway, Madison, and Sears contend that the SGH Experts are not qualified to render these opinions under *Daubert*. The Court again disagrees and is satisfied that the SGH Experts' knowledge, training, and experience as discussed in detail above qualifies these experts to testify concerning the likely or possible causes of the truss failures experienced at the Project. The moving parties' arguments again go more properly to weight, and they will be able to cross-examine the SGH Experts on their qualifications at trial.

2. <u>Reliability of Methods</u>

46. The moving parties also challenge the SGH Experts' methodology as unreliable, requiring exclusion of their opinions. Trussway, Madison, the AP Parties, and Sears argue that because the SGH Experts "conflate[] numerous different potential causes," (Madison SGH Br. 9; *see also* Sears Br. 11–12; Trussway Br. 11), their opinions cannot be offered "to a reasonable degree of certainty," (Madison SGH Br. 10), and are therefore too speculative to assist the trier of fact, (AP Parties' Br. 15). Madison and Trussway further contend that the SGH Experts' failure to calculate the residual strength of the trusses, (Madison SGH Br. 11; Trussway Br. 11), or use the "tooth count method" to determine the necessity of the repairs made to the trusses, (Madison SGH Br. 9), as well as the SGH Experts' failure to test more broadly renders their opinions unreliable, (Madison SGH Br. 9–10; Trussway Br. 11– 12).¹⁶

47. Crescent argues in opposition that the SGH Experts' methodology is sound and reliable. The Court agrees with Crescent.

48. When the court considers reliability of an expert's opinion, "[t]he primary

focus of the inquiry is on the reliability of the witness's principles and methodology[.]"

McGrady, 368 N.C. at 890 (citing Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997)).

The *McGrady* court goes on to note that

The court has discretion to consider any of the particular factors articulated in previous cases, or other factors it may identify, that are reasonable measures of whether the expert's testimony is based on sufficient facts or data, whether the testimony is the product of reliable principles and methods, and whether the expert has reliably applied those principles and methods in that case.

Id. at 892.¹⁷ "*Daubert* is a flexible test and no single factor . . . is dispositive."

Nease v. Ford Motor Co., 848 F.3d 219, 232 (4th Cir. 2017). To be considered

¹⁶ Trussway additionally contends that while measuring the gaps between the trusses and the plates may be used to determine that the gaps exist, this method is not sufficient for determining whether manufacturing was a specific cause of the alleged defects. (Trussway Br. 10–11.) Sears and the AP Parties make arguments to similar effect regarding the SGH Experts' methodology to determine specific causation. (Sears Br. 11–12; AP Parties' Br. 15.)

¹⁷ "In the context of scientific testimony, *Daubert* articulated five factors from a nonexhaustive list that can have a bearing on reliability: (1) whether a theory or technique... can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) the theory or technique's known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; and (5) whether the theory or technique has achieved general acceptance in its field." *McGrady*, 368 N.C. at 890–91 (quoting *Daubert*, 509 U.S. at 593–94) (cleaned up). Additional factors that may be considered include: "(1) Whether experts are proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying. (2) Whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion. (3) Whether the expert has adequately

reliable, an "expert opinion must be based on scientific, technical, or other specialized knowledge and not on belief or speculation, and inferences must be derived using scientific or other valid methods." *Oglesby v. Gen. Motors Corp.*, 190 F.3d 244, 250 (4th Cir. 1999) (citing *Daubert*, 509 U.S. at 590, 592–93). "[N]othing in . . . *Daubert* or the Federal Rules of Evidence requires a . . . court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is . . . too great an analytical gap between the data and the opinion proffered." *Joiner*, 522 U.S. at 146.

49. Here, the SGH Experts report that they investigated "over 60,000 floor truss connections," (SGH Report 2), and inspected, documented, and photographed "all visible conditions of defects, deficiencies, and failures, as well as general observations related to the MCPs [sic] and wood truss members[,]" (SGH Report 4).¹⁸ They indicate that they engaged in an extensive document review, including a review of the North Carolina Building Code, TPI 1,¹⁹ shop drawings provided by Trussway, and other

accounted for obvious alternative explanations. (4) Whether the expert is being as careful as he would be in his regular professional work outside his paid litigation consulting. (5) Whether the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give." *Id.* at 891.

¹⁸ (See also AP Parties' Br. Ex. I, Dep. Daniel Valentine, P.E., dated Nov. 28, 2017, at 334:11–16, 30(b)(6) Dep. Crescent, dated June 14, 2017, at 137:1–19, ECF No. 606.10; Trussway Br. Ex. A, Dep. Milan Vatovec, Ph.D., P.E., dated Oct. 2, 2017, at 63:6–9, 103:18–104:8, 174:14–22 [hereinafter "Trussway Br. Ex. A"], ECF No. 616.2; Trussway Br. Ex. B, Dep. Donald Dusenberry, dated Oct. 4, 2017, at 32:11–17, 36:12–20, 93:1–9 [hereinafter "Trussway Br. Ex. B"], ECF No. 616.3.)

¹⁹ TPI 1 is the "National Design Standard for Metal Plate Connected Wood Truss Construction" that is specified in the contract between Crescent and the AP Parties as the truss standard. (*See* SGH Report 3; Tr. 59:15–19, 81:25–82:3.)

relevant reports and documents, as well as a literature review, including a review of "relevant published papers and industry literature," "publicly available documents and literature referencing design loads for various college and university student housing structures[,]" and published literature on similar projects.²⁰ The SGH Experts described in the SGH Report and testified at deposition how they observed the trusses, measured the gaps in the metal plates connecting the trusses, and calculated design loads.²¹ They also explained how they applied the codes and guidelines to this data and compared the codes and guidelines to similar building projects in reaching their conclusions.²²

50. Based on the above, the Court concludes, in the exercise of its discretion, that the SGH Experts' methodology, including through their observations, literature review, and application of their experience in wood, trusses, structural systems, and the remediation and restoration of failed structures, is sufficiently verified, directly tied to the SGH Experts' conclusions, and sufficient to satisfy *Daubert*. The moving parties' arguments as to methodology largely go to weight, rather than admissibility, as discussed below.

²⁰ (*See* SGH Report 3–4, 6; *see also* Sears Br. Ex. B, Dep. Milan Vatovec, dated Oct. 3, 2017, at 482:20–483:8, ECF No. 608.3; Sears Br. Ex. C, Dep. Daniel Valentine, P.E., Vol. II, dated Nov. 29, 2017, at 338:1–23, ECF No. 608.4.)

²¹ (See SGH Report 6–7; see also Madison SGH Br. Ex. C, Dep. Daniel Valentine, P.E., dated Nov. 28, 2017, at 222:5–24, ECF No. 612.3; Trussway Br. Ex. A, at 42:8–13; Trussway Br. Ex. C, Dep. Daniel Valentine, P.E., dated Nov. 28, 2017, at 48:2–10, ECF No. 616.4.)

²² (See SGH Report 6–7; see also Trussway Br. Ex. A, at 223:16–21; Trussway Br. Ex. B, at 26:4–9, 65:1–3.)

a. <u>Reliability of Method to Opine on Causation</u>

51.First, the moving parties challenge the SGH Experts' methodology for their causation opinions because the SGH Experts have identified multiple causes or likely causes for the alleged truss failures and Crescent has acknowledged that "[p]roving causation for those defects on an individual basis would not just be uneconomical, it would be impossible." (Crescent Resp. 17; see also Tr. 67:9–19, 77:17–23.) The Court concludes, however, that the fact that the SGH Experts cannot tie the failure of a specific truss to a specific cause and instead opine more broadly that a set of trusses with a specific observed type of defect were likely caused by a particular process or action-and not caused by a design or other process for which Crescent was responsible-does not render the proffered opinions inadmissible in this breach of contract action. See Kingsley v. Brenda & Gene Lummus, Inc., No. 1:11cv32, 2012 U.S. Dist. LEXIS 29015, at *17-23 (W.D.N.C. Mar. 6, 2012) (admitting expert testimony where the expert identified multiple possible causes); see also Johnson v. Piggly Wiggly of Pinetops, Inc., 156 N.C. App. 42, 48–49 (2003) (discussing that an expert's testimony regarding "possible" causes of a health issue went to the weight of the testimony rather than admissibility).

52. The methods employed by the SGH Experts for determining these multiple likely causes are reliable and meet the standard required by *Daubert*. Indeed, those methods—observation, combined with training and experience, document and literature review, and performing calculations based on observed and compiled data—when subject to verification, are appropriate and reliable methodologies under Daubert. See, e.g., Sardis v. Overhead Door Corp., No. 20-1411, 2021 U.S. App. LEXIS 24960, at *33 (4th Cir. Aug. 20, 2021) (noting that a literature review can be an important part of an expert witness's methods); Bitler v. A.O. Smith Corp., 400 F.3d 1227, 1235 (10th Cir. 2004) (finding "personal experience, training, method of observation, and deductive reasoning sufficiently reliable to constitute 'scientifically valid' methodology"); Ovella v. B&C Constr. & Equip., LLC, Cause No. 1:10CV285 LG-RHW, 2011 U.S. Dist. LEXIS 160076, *6 (S.D. Miss. Jul. 8, 2011) (concluding that differences in engineering experts' calculations go to weight and credibility, not admissibility); Doe v. Ortho-Clinical Diagnostics, Inc., 440 F. Supp. 2d 465, 472 (M.D.N.C. 2006) ("[A] literature review can be an appropriate part of a method of determining general causation.").

53. Moreover, the SGH Experts were not required to engage in the specific or extensive testing the moving parties argue is a condition of reliability under *Daubert*. In fact, courts have recognized that a lack of testing or a failure to use specific types of testing only goes to the weight of the testimony and is not grounds for exclusion when an expert reaches an opinion through other reliable methods. *See, e.g., Kingsley,* 2012 U.S. Dist. LEXIS 29015, at *23 ("While [the expert's] lack of testing may be relevant to the weight attributed to his opinions, it does not render his opinions inadmissible *per se* under *Daubert*."); *see also Nease*, 848 F.3d at 232 ("*Daubert* is a flexible test and no single factor, even testing, is dispositive.").

54. Because the Court concludes that the SGH Experts' chosen methodology is otherwise reliable, the Court further concludes that their failure to engage in specific or extensive testing does not render that methodology unreliable here. *See, e.g., Rice* v. *SalonCentric Inc.*, No. SAG-18-1980, 2020 U.S. Dist. LEXIS 1014, at *14 (D. Md. Jan. 3, 2020) (admitting expert's opinion that "rest[ed] on his extensive engineering background, basic engineering principles, the relevant building codes, and the manufacturer's installation instructions" without requiring testing).

Thus, the Court concludes, in the exercise of its discretion, that the SGH 55.Experts' extensive investigation, documentation, and review of photographs and other information concerning over 60,000 trusses at the Project, combined with their exhaustive review of relevant published literature and other documents, provides an ample basis on which the SGH Experts may apply their knowledge, training, and experience to render the causation opinions they intend to offer at trial. Those methods and conclusions, both as expressed in the SGH Report and at the SGH Experts' depositions, are subject to review and verification as well as challenge on cross-examination at trial. As such, the Court concludes that the SGH Experts have applied "reliable principles and methods" to "sufficient facts or data" to permit the admissibility of their causation opinions at trial under Daubert. See McGrady, 368 N.C. at 892. Based on the SGH Experts' acknowledgements at their depositions and Crescent's statements in its briefing and at the Hearing, however, the SGH Experts will not be permitted to render opinions and testimony identifying that a defect in a specific truss was actually caused by a specific act or process.²³

²³ To avoid confusion in the application and enforcement of the Court's ruling at trial, the Court will discuss with the parties prior to trial permissible phrasing for the rendering of the SGH Experts' causation opinions at trial. For example, it may be most appropriate for the SGH Experts to testify, when describing a category of truss defect, that X was "a likely cause,"

b. Reliability of Method to Opine on Reasonableness of Repairs

56. Trussway also challenges the reliability of the methods the SGH Experts used to conclude that repairs to the trusses were necessary. The SGH Experts observed the trusses, measured the gaps between the trusses and the plates, recorded their observations, and described in the SGH Report their application of the TPI 1 guidelines to pinpoint where repairs were needed, based on the application of their experience and their consideration of the relevant literature. (SGH Report 4–5.) Contrary to Trussway's arguments, this process is sufficiently described by the SGH Experts and is subject to challenge through "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof[.]" *Daubert*, 509 U.S. at 596. The Court concludes, therefore, in the exercise of its discretion, that the SGH Experts' opinions and testimony concerning the reasonableness of the repairs to the Project are the product of reliable principles and methods under *Daubert*.

3. The Balancing Test of Rule 403

57. Madison and Sears also argue that the SGH Experts' opinions and testimony concerning causation should be excluded under Rule 403 because of the potential for jury confusion. They note that Crescent seeks to establish through the SGH Experts that any truss defects and failures at the Project were caused by acts or processes that were not Crescent's responsibility under its contract with the AP

that X was a "possible cause," that Y damage "was consistent with" X cause, or some other similar phrasing to make clear that the SGH Experts do not offer opinions and testimony that X was the specific cause of the defect in a specific, identified truss.

Parties, (see Tr. 49:7–50:7, 54:23–55:7, 91:25–92:6), and that, according to Crescent, "[s]orting out those potential causes is a task AP Atlantic and its subcontractors, Madison, Sears, and Trussway, need to resolve amongst themselves." (Crescent Resp. 20.)²⁴ At the same time, Madison and Sears contend that because the AP Parties have the burden to show that the subcontractors breached their respective contracts, the AP Parties will attempt to use the SGH Experts' opinions to establish their individual responsibility for defects in certain trusses. (See Tr. 91:25–92:6.) Thus, Madison and Sears contend that the SGH Experts' opinions concerning likely or possible causes may confuse the jury when considering whether the AP Parties have met their burden to show actual or specific causation. (See Tr. 49:7–50:7, 54:23–55:7, 91:25–92:6)

58. Under Rule 403, relevant evidence may be excluded if its probative value "is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence." N.C. R. Evid. 403. "In general, the exclusion of evidence under the balancing test of Rule 403 of the North Carolina Rules of Evidence is within the trial court's sound discretion." *State v. Hennis*, 323 N.C. 279, 285 (1988). Courts frequently issue limiting instructions to the jury in lieu of excluding evidence under Rule 403. *See, e.g., State v. Hyatt*, 355 N.C. 642, 662 (2002) (holding admission of prior bad acts not unfairly prejudicial under Rule 403 when

²⁴ In the same vein, Crescent asserts that its burden is to "prove that AP Atlantic delivered defective trusses, not which of the [m]oving [p]arties are to blame for each defect." (Crescent Resp. 17.)

trial court gave extensive limiting instruction regarding permissible uses of Rule 404(b) evidence); *State v. Miller*, 197 N.C. App. 78, 91–92 (2009) (finding no abuse of discretion in admitting evidence over defendant's Rule 403 objection where an appropriate limiting instruction was given to the jury).

59. After careful review and consideration, the Court concludes that any potential jury confusion or prejudice concerning the SGH Experts' causation opinions can be addressed through an appropriate limiting instruction. As a result, the Court, will not exercise its discretion to exclude the SGH Experts' opinions and testimony concerning causation under the Rule 403 balancing test at this time.

60. For each of the reasons set forth above, therefore, the Court concludes, in the exercise of its discretion, that the motions by AP Atlantic, Trussway, Madison, and Sears seeking to exclude the SGH Experts' opinions and testimony at trial should be denied such that the SGH Experts should be permitted to offer opinions and testimony, consistent with the SGH Report and their deposition testimony, as limited by this order, concerning design loads specified and used in the design of the Project; the identification of truss defects at the Project; the likely or possible causes of the alleged truss defects (but not the actual cause of a specific truss defect); and the reasonableness of the design of the truss repairs.

B. <u>Greenberg</u>

61. Sears and Madison also move to exclude testimony from the AP Parties' expert witness Greenberg. They argue that Greenberg should not be permitted to offer opinions and testimony concerning whether the actions of Sears or Madison or

both caused alleged defects to the trusses, both because Greenberg has not been designated to testify concerning specific, non-design-related causes of alleged truss defects at the Project and because he has not employed a reliable methodology to support any such opinions.²⁵

- 62. The AP Parties designated Greenberg to offer three opinions:
 - i. The buildings constituting the [Project] were not designed appropriately for their intended use by the design professionals of record;
 - ii. The inspection of the [MCPs] by SGH was incompetently done according to the guidance of the Truss Plate Institute; and
- iii. The repairs, while apparently working well, are over-designed and overly-costly and provide the owners with a significant degree of betterment.

(Madison Greenberg Br. Ex. A, at 3, ECF No. 613.1.) No party seeks to preclude Greenberg from offering these opinions at trial.

63. The AP Parties acknowledge that they have not designated Greenberg to testify concerning specific, non-design-related causes of the Project's alleged truss defects and have indicated that they do not intend to elicit such opinions at trial. (Tr. 108:1–16, 114:23–25.) The issue that divides the parties is what Greenberg will be permitted to say on cross-examination should he be asked, likely by Crescent but potentially by others, about evidence purporting to show non-design-related truss failures at the Project. The AP Parties contend that Greenberg should be permitted to defend his design-related opinions by offering, without restriction, any opinions he

²⁵ (See Sears Br. 12; Third-Party Def. Madison's Br. Supp. Daubert Mot. in limine Def. AP Atlantic's Retained Expert Witness Samuel A. Greenberg 10–12 [hereinafter "Madison Greenberg Br."], ECF No. 613.)

may have concerning the cause of alleged truss defects that may be reflected in photographs or other evidence that he may be shown on cross-examination.²⁶ Madison and Sears contend that to permit Greenberg to offer such undisclosed opinions, which they argue are not the product of reliable methods and simply rely upon and parrot the opinions of the SGH Experts, will be unfairly prejudicial. (Madison Greenberg Br. 10–11; Sears Br. 12; Tr. 97:24–98:6.)

64. Having considered the parties' written and oral arguments concerning this dispute, the Court concludes, in the exercise of its discretion, that while a definitive ruling must await the context provided by cross-examination of Greenberg at trial, Greenberg should not be permitted to testify as to specific, non-design-related causes of the Project's alleged truss defects, both because he has not been designated to offer such opinions and because he has testified that he does not intend to offer such causation-specific opinions. Greenberg should therefore limit his non-design-related causation opinions elicited on cross-examination at trial to explaining whether certain photographs and other evidence reflect design-related defects or non-design-related defects, occupancy damage, or some other broad category of non-design-related activity rather than a specific, non-design related cause.

C. The AP Parties' Use of the SGH Experts at Trial

65. Madison also moves to preclude the AP Parties from offering opinions and testimony from the SGH Experts at trial on grounds that the AP Parties failed to

²⁶ (See AP Parties' Br. Opp'n Madison's Daubert Mot. in limine Retained Expert Witness Greenberg 7, ECF No. 618.)

designate the SGH Experts properly under the Case Management Order.²⁷ The Court disagrees.

66. As an initial matter, the AP Parties stated in their expert disclosures nearly five years ago that they "reserve[d] the right to utilize experts retained and designated by other parties in this matter including the SGH designations by Crescent."²⁸ The AP Parties have subsequently clarified that their intention is to offer "the same opinions SGH has already expressed via [the SGH] Report and deposition" only if "Crescent fails to present SGH as its expert witness in its case-inchief."²⁹

67. Given that the AP Parties timely designated the SGH Experts, those experts have timely provided their expert report, and each SGH Expert has been deposed by all parties, including Madison, concerning the substance of the opinions that the AP Parties would intend to elicit at trial, Madison's claims of undue surprise and unfair prejudice by the AP Parties' designation of the SGH Experts ring hollow.

68. Accordingly, the Court concludes, in the exercise of its discretion, that Madison's motion should be denied and that the AP Parties should be permitted to elicit opinions and testimony from the SGH Experts at trial. Recognizing, however,

²⁷ (See Third-Party Def. Madison's Br. Supp. *Daubert* Mot. in *limine* Def. AP Atlantic's Non-Retained Expert Witnesses and Mot. Strike 7 [hereinafter "Madison Non-Retained Expert Br."], ECF No. 614.)

²⁸ (See AP Parties' Expert Disclosure 3, ECF No. 271.)

²⁹ (See AP Parties' Br. Opp'n Madison's *Daubert* Mot. *in limine* Non-Retained Expert Witnesses and Mot. Strike 4 [hereinafter "AP Parties' Opp'n Non-Retained Expert Witnesses"], ECF No. 619.)

that the AP Parties have designated four experts (Greenberg, Vatovec, Dusenberry, and Valentine) and that the Case Management Order only permits the designation of three, (*see* Case Management Order 23, ECF No. 94), the Court will permit the AP Parties to offer opinions and testimony from only three of its four designated experts at trial.

D. <u>Testimony from AP Parties' Lay Witnesses as Experts</u>

69. The AP Parties' expert disclosure provides, in part, that:

The AP Parties also expect that there will be *various lay witnesses that may give expert testimony* within their respective fields and trades. These persons are not retained experts, and their opinions may be based upon their professional experience, fields, trades, training, and their observations on the Crescent Circle University City project and similar construction projects.

(Madison Non-Retained Expert Br. 5 (citing AP Parties' Expert Disclosure 4).)

70. Madison moves to exclude expert opinion testimony from the "unidentified 'lay' or hybrid expert witnesses" described by the AP Parties in their disclosure. (Madison Non-Retained Expert Br. 9.) In response, the AP Parties argue that the lay witnesses they describe include former employees who may qualify as expert witnesses and therefore should be able to offer expert opinion at trial. (AP Parties' Opp'n Non-Retained Expert Witnesses 5.)

71. The Court concludes that Madison's motion should be granted. The AP Parties' failure to designate the unidentified witnesses at issue as experts consistent with the Court's Case Management Order and North Carolina Rule of Civil Procedure 26 precludes their effort to offer expert testimony from these witnesses at trial. Whether these witnesses may offer lay opinion testimony at trial under Rule 701 is not an issue currently before the Court.

V.

CONCLUSION

5. WHEREFORE, for the reasons set forth above, the Court, in the exercise of its discretion, hereby ORDERS that the Motions are GRANTED in part and DENIED in part as follows:

- a. The Motions are **GRANTED** as to the SGH Experts to the extent those experts seek to offer opinions and testimony concerning (i) the standard of care for a general contractor, drywall installation, truss manufacturing, or framing; (ii) the opinions they proffered in the Trussway Action; (iii) whether AP Atlantic or Crescent met their contract obligations concerning demand for remediation and opportunity to cure; and (iv) the reasonableness of the cost of implementing the repairs to the trusses; and the SGH Experts will not be permitted to offer opinions and testimony as to these matters at trial.
- b. The Motions are **DENIED** as to the SGH Experts to the extent the Motions seek to exclude opinions and testimony from these experts concerning (i) the design loads specified and used in the design of the Project; (ii) the identification of truss defects at the Project; (iii) the likely or possible causes of the alleged truss defects (but not the specific actual cause of a specific truss defect); and (iv) the reasonableness of the

design of the truss repairs; and the SGH Experts will be permitted to offer opinions and testimony as to these matters at trial.

- c. The Motions are **GRANTED** as to Rogers and Grundahl, and Rogers and Grundahl may not offer opinions and testimony concerning the standard of care or specific causation of the alleged truss defects at trial.
- d. The Motions are **GRANTED** in part as to Greenberg, and Greenberg may not offer opinions and testimony concerning specific, non-designrelated causes of the Project's alleged truss defects; provided, however, that on cross-examination at trial, Greenberg may explain whether certain photographs and other evidence reflect design-related defects or non-design-related defects, and if the latter, whether that evidence reflects construction activities, occupancy damage, or some other broad category of non-design-related activity.
- e. The Motions are **DENIED** as to the AP Parties' designation of the SGH Experts, and the AP Parties shall be permitted to offer expert testimony from the SGH Experts at trial; provided, however, that the AP Parties shall not be permitted to offer opinions and testimony from more than three of their four designated experts.
- f. The Motions are GRANTED as to the AP Parties' designation of unidentified lay witnesses as expert witnesses at trial, and the AP Parties shall not be permitted to solicit expert opinions and testimony

from any unidentified, undesignated expert witness at trial, including from AP Atlantic employees.

SO ORDERED, this the 8th day of February, 2022.

<u>/s/ Louis A. Bledsoe, III</u> Louis A. Bledsoe, III Chief Business Court Judge