UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
REDACTED CIVIL MINUTES – GENERAL 'O'

Case No.	8:15-cv-01985-CAS(Ex); C/W: 2:18-cv-07030-CAS(Ex)	Date	May 18, 2020
Title	STEVE ODDO ET AL. v. AROCAIRE AIR CONDITIONING AND HEATING ET AL.; Consolidated with: PAUL CORMIER ET AL. v. CARRIER CORPORATION		

Present: The Honorable	CHRISTINA A. SNYDER	
Catherine Jeang	Not Present	N/A
Deputy Clerk	Court Reporter / Recorder	Tape No.
Attorneys Present for Plaintiffs:	Attorneys Present for Defendants:	
Not Present	Not Present	

Proceedings: (IN CHAMBERS) - PLAINTIFFS' RENEWED MOTION FOR CLASS CERTIFICATION (Dkt. [213], filed July 22, 2019)

DEFENDANTS' MOTION TO EXCLUDE OPINIONS OF THOMAS J. MARONICK (Dkt. [232], filed September 23, 2019)

DEFENDANTS' MOTION TO EXCLUDE OPINIONS OF PAUL J. SIKORSKY (Dkt. [233], filed September 23, 2019)

PLAINTIFFS' MOTION TO LIMIT CONSIDERATION OF THE EXPERT REPORT AND TESTIMONY OF PROFESSOR RAVI DHAR (Dkt. [248], filed November 4, 2019)

PLAINTIFFS' MOTION TO LIMIT CONSIDERATION OF THE EXPERT REPORT AND TESTIMONY OF DR. JOHN H. JOHNSON, IV (Dkt. [249], filed November 4, 2019)

PLAINTIFFS' MOTION TO LIMIT CONSIDERATION OF THE EXPERT REPORT AND TESTIMONY OF WAYNE SCHNEYER (Dkt. [250], filed November 4, 2019)

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I. INTRODUCTION AND BACKGROUND[1]

Plaintiffs in these consolidated[2], putative class actions allege that heating ventilation and air conditioning ("HVAC") systems manufactured by defendants United Technologies Corporation ("UTC"), Arcoaire Air Conditioning and Heating ("Arcoaire"), Bryant Heating and Cooling Systems ("Bryant"), Comfortmaker Air Conditioning & Heating ("Comfortmaker"), International Comfort Products LLC ("ICP"), and Carrier Corporation ("Carrier Corp.") (collectively, "Carrier") suffer from faulty thermal expansion valves ("TXVs").[3] See generally Dkt. 27 ("Oddo Compl."). Plaintiffs seek to certify separate classes of California, Missouri, and Massachusetts purchasers, consisting of both: (1) purchasers that obtain a Carrier HVAC system in connection with the purchase of a residential new construction home ("RNC purchasers"); and (2) purchasers that obtain an add-on or replacement Carrier HVAC system for an existing home ("AOR purchasers"). See generally Dkt. 219 ("Mot."). In the alternative, plaintiffs seek to certify separate California and Missouri classes, consisting of only AOR purchasers. Id.

The Court held a hearing on March 17, 2020. Having carefully considered the parties' arguments, the Court finds and concludes as follows.

A. The Alleged Defect and Carrier's Attempts to Remedy the Defect

HVAC systems rely on three primary components: (1) a compressor, which compresses refrigerant and causes the refrigerant's temperature to change; (2) a condenser coil, over which air is blown to change the refrigerant's temperature; and (3) an evaporator

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[1] Because the parties are familiar with this dispute's procedural and factual background, the Court only sets forth those facts necessary to resolve the parties' present motions. In addition, for the sake of clarity and convenience, the following references are to the record and docket in Steve Oddo et al. v. Arcoaire Air Conditioning and Heating el al., 8:15-cv-01985-CAS-Ex (C.D. Cal.), unless otherwise specified.

[2] In May 2019, the Court consolidated, for pre-trial purposes, the Oddo action with Paul Cormier et al. v. Carrier Corporation, 2:18-cv-07030-CAS-Ex (C.D. Cal.).

[3] UTC is ICP's parent entity, and ICP manufactures HVAC systems under the Arcoaire, Bryant, Carrier Corp., and Comfortmaker brands. Oddo Compl. ¶¶ 51–56. Because the parties refer to defendants collectively as "Carrier," the Court does so as well.

coil, over which air is blown to change the temperature of the indoor air. Oddo Compl. ¶ 58. A TXV is "a precision valve that controls the expansion of refrigerant central to the cooling process[.]" Id. ¶ 1. A TXV "meters the refrigerant's flow rate in proportion to the rate of evaporation of the refrigerant in the evaporator" and therefore acts, "by nature, [as] a 'bottleneck' in the HVAC system." Id. ¶¶ 11–12. The TXV "typically operates by using a movable valve pin to precisely control the flow of liquid refrigerant[.]" Id. ¶ 12. As such, "[a]ny contaminants or impurities that may be flowing through the system are likely to collect around the TXV pin." Id. And, "[i]f such contaminants collect on the TXV it may operate inefficiently, or the system may cease to function altogether." Id.

Plaintiffs aver that the use of "Ryconox," a chemical rust inhibitor, in the compressors that Carrier purchased from non-party Emerson Climate Technologies, Inc. ("Emerson") and which Carrier incorporated into Carrier's HVAC systems, "is incompatible with the refrigerant and lubricating oil used in the HVAC systems." Oddo Compl. ¶¶ 1, 16. According to plaintiffs, Ryconox "reacts with the refrigerant and/or oil and causes a tar or sludge to form when the systems are put into service." Id. ¶ 1. "This sticky substance then circulates through the system, and builds up layers of deposits on the inside of the system." Id. As such, "within just weeks or months of installation of a brand-new HVAC system, the tar can cause the TXV to become stuck, rendering the system inoperable." Id. However, "[e]ven where the contamination has not yet resulted in a complete TXV or system failure, this known defect is likely to cause a failure at some point in the future." Id. ¶ 2. Moreover, "even a partial clog can impact system performance and efficiency, and the tar can coat the inside of the heat-exchangers and other components, such that the defective HVAC systems are not capable of performing to the efficiency standards advertised . . . even when there is not an acute failure." Id.

Plaintiffs contend that Carrier "ha[s] been aware of the defect since at least 2013, but continued to sell affected units unabated." Oddo Compl. ¶ 4. Although Carrier "admitted the existence of the manufacturing defect in dealer service bulletins in 2014, [it] never pulled the affected systems from the shelves of distributors." Id. Instead, Carrier undertook various steps to attempt to remediate allegedly defective TXVs, none of which "cure the defect." Id. ¶ 19. Between July 2014 and October 2014, Carrier "provided replacement TXVs (*i.e.*, the part itself) under warranty and a labor credit of $400." Id. ¶ 20. According to the Oddo plaintiffs, however, "[t]his credit was insufficient because it failed to cover the entire labor and material costs involved in replacing the TXVs or otherwise repairing the underlying defect. Further, simply replacing the gunked-up TXVs

did not, and could not, clear the contaminants fully from the affected HVAC systems." Oddo Compl. ¶ 20. Accordingly, "the systems continued to fail, and even those that did not experience an immediate failure are at risk of future failure because the contaminants remain in the HVAC system." Id.

According to plaintiffs, Carrier thereafter adopted a new approach on October 23, 2014, "instructing service personnel that the 'sole solution' for this defect was to inject another chemical, called A/C Re-New, into the systems in an attempt to break apart the sludge that was clogging the TXV."[4] Oddo Compl. ¶ 21. Plaintiffs contend that Carrier "agreed to provide contractors with the A/C Re-New at no cost and a $195 labor credit" but that "this course of action manifestly fails to remedy the defect -- *i.e.*, remove the contamination -- and creates a whole host of other problems." Id. That is because injecting A/C Re-New, which is "an after market chemical additive that is marketed as a way to squeeze out some extra life of HVAC equipment that is on its last legs, . . . does *not* remove the pre-existing contamination. To the contrary, adding A/C Re-New *merely adds more contamination*, none of which should be in a brand-new air conditioning system." Id. ¶¶ 22–23 (emphases in original). Although "[t]he long-term effects of this so-called fix are, at best, unknown[,] . . . it is likely that adding A/C Re-New will merely forestall problems to a future date, at which time [Carrier] hope[s] the systems will no longer be under warranty." Id. ¶ 25. At worst, "the injection of A/C Re-New itself may shorten the lifespan of the equipment or cause other issues in the future, after the warranty has expired, while the original contamination still remains in the system." Id. Plaintiffs urge that contractors and Carrier "have acknowledged that A/C Re-New can be harmful" and that, in a dealer service bulletin ("DSB"), Carrier "emphatically warned contractors servicing systems . . . '**DO NOT** inject a system twice with the additive. A second injection could have negative long term system effects.'" Id. ¶¶ 25–26.

B. The Court's Prior Orders

1. The Court Dismisses Plaintiffs' Warranty-Based Claims and Plaintiffs' Claims Based on Affirmative Misrepresentations

Prior to the Court's consolidation of the Oddo and Cormier actions, plaintiffs in each case previously asserted various state and federal warranty-based claims, as well as various

[4] The parties use the terms "A/C Re-New" and "Zerol Ice" interchangeably.

state-law fraud and state-law consumer protection claims based on both affirmative misrepresentation and omission theories. See Oddo Compl.; see also Cormier, Dkt. 1 ("Cormier Compl."). On January 24, 2017, the Court granted in part, and denied in part, Carrier's motion to dismiss in Oddo. Dkt. 57 ("Oddo MTD Order"). In pertinent part, the Court's order allowed plaintiffs' California unjust enrichment, negligent misrepresentation, fraudulent concealment, Unfair Competition Law ("UCL"), False Advertising Law ("FAL"), and Consumer Legal Remedies Act ("CLRA") claims, as well as plaintiffs' Missouri fraudulent concealment, negligent misrepresentation, and Missouri Merchandising Practices Act ("MMPA") claims to proceed. Id.

On October 22, 2018, the Court likewise granted in part, and denied in part, Carrier's motion to dismiss in Cormier. See Cormier, Dkt. 52 ("Cormier MTD Order"). The Court's order allowed plaintiffs' Massachusetts unjust enrichment and Massachusetts Consumer Protection Act ("MCPA") claims to proceed. Id.

2. The Court Denies Plaintiffs' Motions for Class Certification Without Prejudice in March 2019

a. Oddo Plaintiffs' Motion for Class Certification

On March 22, 2019, the Court denied the Oddo plaintiffs' motion for class certification without prejudice, determining that "the Proposed Classes are not sufficiently cohesive." Dkt. 202 ("Oddo Cert. Order") at 12. The Court concluded that the Oddo plaintiffs "cannot meet the typicality, commonality, and predominance requirements of Rule 23, because among other things, the Proposed Classes include purchasers of new homes which already had a Carrier HVAC system installed and who did not directly purchase a Carrier HVAC system." Id.

With respect commonality, the Court noted that "the gravamen of [the Oddo] plaintiffs' fraudulent omission claims is that Carrier failed to disclose the defect to purchasers of Carrier HVAC units, and that the purchasers were injured when they spent more to purchase their Carrier HVAC systems than they would have had they known of the defect." Oddo Cert. Order at 12. However, the Court determined that the Oddo plaintiffs had "fail[ed] to show that homebuyers suffered the same injury as purchasers of HVAC systems." Id. Accordingly, the Court concluded that the Oddo plaintiffs' proposed classes, which included both AOR and RNC purchasers, lacked the requisite commonality

because "it appears that homebuyers, if they suffered any injury at all, suffered an injury of a different nature than purchasers of new HVAC units." Id. at 13.

As to typicality, the Court noted that named plaintiffs and proposed class representatives—Steve Oddo, Norman Klinge, Linda Lamm, and Dan Gallagher—"purchased new HVAC units[.]" Oddo Cert. Order at 13. Thus, the Oddo plaintiffs failed to satisfy Rule 23(a)'s typicality requirement because, as AOR purchasers, their claims differed from the claims of others who fell within the proposed classes, including RNC purchasers, who are "new homebuyers who may have never been exposed to any Carrier materials during the homebuying process, much less attached the same level of importance, if any, to a disclosure of the alleged defect as would a purchaser of an HVAC unit." Id. at 13–14.

Regarding predominance under Rule 23(b), the Court concluded that "individualized questions regarding reliance, materiality, and causation would overwhelm each of plaintiffs' claims." Oddo Cert. Order at 16. The Court first noted that "[r]eliance and causation are susceptible to common proof only if the state law at issue follows a 'reasonable person' standard for assessing the materiality of the misstatement." Id. (internal citation and quotation marks omitted). The Court recognized that "[t]he laws governing plaintiffs' California and Missouri consumer protection and common law claims . . . do follow a 'reasonable person' standard." Id. Thus, assuming *arguendo* that these claims could be adjudicated on a class-wide basis, the Court determined that the Oddo plaintiffs "have not provided any evidence demonstrating that a homebuyer would have attached the same level of importance, if any, to a disclosure of the alleged defect if one had been made, compared with purchasers of Carrier HVAC systems." Id. The Court therefore concluded that, "based on the proposed class definitions before the Court, . . . individualized questions of materiality predominate over common issues." Id. at 17.

The Court also determined that "individualized issues . . . predominate with respect to whether any given class member would have been exposed to Carrier's disclosure of the alleged defect if it had made one." Oddo Cert. Order at 19. The Court noted that the Oddo plaintiffs provided no "evidence or expert testimony . . . that no consumer acquires an HVAC system without being exposed to some information from the manufacturer." Id. (internal citation and quotation marks omitted). Even had the Oddo plaintiffs presented some evidence, the Court rejected plaintiffs' contention "that virtually any class can be certified in an omissions-based case as long as the defendant could have, in theory, ensured

that a disclosure would reach its consumers." Id. at 18. The Court distinguished the Oddo plaintiffs' fraudulent omission claims from those in another case, Daniel v. Ford Motor Co., where another district court certified a class of automobile purchasers on the basis that "because plaintiff's class includes only purchasers of new Focuses who, presumably, interacted with Ford dealers prior to purchase, that inquiry is amenable to class-wide resolution." See 2:11-cv-02890-WBS-EFB, 2016 WL 8077932, at *8 (E.D. Cal. Sept. 23, 2016) ("Daniel II"). In contrast, the Oddo plaintiffs' proposed classes included "persons who bought homes with HVAC systems already installed" and "purchasers of HVAC systems who relied on a contractor to select an HVAC system for them," meaning that "there does not appear to be a meaningful classwide method here for determining whether any disclosure by Carrier would have reached class members." Oddo Cert. Order at 19.

b. Cormier Plaintiffs' Motion for Class Certification

The Court denied the Cormier plaintiffs' motion for class certification without prejudice on March 25, 2019. Dkt. 103 ("Cormier Cert. Order"). The Court noted that the Cormier plaintiffs' "proposed class . . . also includes both homebuyers and purchasers of HVAC units . . . [and] suffers from the same defects the Court identified [with respect to] . . . plaintiffs' class certification motion in Oddo." Cormier Cert. Order at 7. With respect to the Cormier plaintiffs' MCPA claim, the Court recognized that "[a]lthough [MCPA] does not require a showing of reliance, it does require a showing of causation." Id. Accordingly, the Court concluded that individual questions predominated since the Cormier plaintiffs had not demonstrated "that class members were exposed to the same misrepresentations or omissions." Id.

The Court also determined that certification of the Cormier plaintiffs' proposed class was not warranted because the Cormier plaintiffs failed to satisfy Rule 23(a)'s typicality requirement. Cormier Cert. Order at 8. That is because Cormier, the proposed class representative, "was not exposed to any of Carrier's materials until after he had already negotiated and agreed to purchase the price of his new home." Id. at 7. Accordingly, the Court concluded that Cormier "is unlikely to establish causation" and "is thus subject to a unique defense of failure to demonstrate causation[.]" Id. at 7–8.

3. The Court Consolidates the Oddo and Cormier Actions, Plaintiffs Bring a Renewed Motion for Class Certification, and the Parties Move to Limit Consideration of Various Experts' Testimony

In May 2019, after denying the Oddo and Cormier plaintiffs' respective motions for class certification without prejudice, the Court consolidated the Oddo and Cormier actions for pre-trial purposes. Dkt. 206; Cormier, Dkt. 104. Plaintiffs subsequently filed a renewed, consolidated motion for class certification on July 22, 2019. See Mot. Carrier filed an opposition on September 20, 2019. Dkt. 236 ("Opp."). Plaintiffs filed a reply on November 4, 2019. Dkt. 252 ("Reply").

Carrier filed a motion to exclude the opinions of plaintiffs' survey expert, Thomas J. Maronick, on September 23, 2019. Dkt. 237 ("Maronick Mot.") Plaintiffs filed an opposition on November 4, 2019. Dkt. 253 ("Maronick Opp."). Carrier filed a reply on December 4, 2019. Dkt. 267 ("Maronick Reply").

Carrier filed a motion to exclude the opinions of plaintiffs' engineering expert, Paul J. Sikorsky, on September 23, 2019. Dkt. 238 ("Sikorsky Mot."). Plaintiffs filed an opposition on November 4, 2019. Dkt. 254 ("Sikorsky Opp."). Carrier filed a reply on December 4, 2019. Dkt. 268 ("Sikorsky Reply").

Plaintiffs filed a motion to exclude the opinions of Carrier's survey expert, Professor Ravi Dhar, on November 4, 2019. Dkt. 248 ("Dhar Mot."). Carrier filed an opposition on December 4, 2019. Dkt. 269 ("Dhar Opp.") Plaintiffs filed a reply on December 20, 2019. Dkt. 280 ("Dhar Reply").

Plaintiffs filed a motion to exclude the opinions of Carrier's damages expert, Dr. John H. Johnson IV, on November 4, 2019. Dkt. 255 ("Johnson Mot."). Carrier filed an opposition on December 4, 2019. Dkt. 270 ("Johnson Opp."). Plaintiffs filed a reply on December 20, 2019. Dkt. 282 ("Johnson Reply").

Plaintiffs filed a motion to exclude the opinions of Carrier's HVAC expert, Wayne Schneyer, on November 4, 2019. Dkt. 256 ("Schneyer Mot."). Carrier filed an opposition on December 4, 2019. Dkt. 263 ("Schneyer Opp."). Plaintiffs filed a reply on December 20, 2019. Dkt. 281 ("Schneyer Reply").

II. LEGAL STANDARDS

A. Motion for Class Certification

"Federal Rule of Civil Procedure 23 governs the maintenance of class actions in federal court." Briseno v. ConAgra Foods, Inc., 844 F.3d 1121, 1124 (9th Cir. 2017). "Parties seeking class certification must satisfy each of the four requirements of Rule 23(a)—numerosity, commonality, typicality, and adequacy—and at least one of the requirements of Rule 23(b)." Id. "Under Rule 23(b), the proposed class must establish that: (1) there is a risk of substantial prejudice from separate actions; (2) declaratory or injunctive relief benefitting the class as a whole would be appropriate; or (3) common questions of law or fact predominate such that a class action is superior to other methods available for adjudicating the controversy at issue." Morgan v. United States Soccer Fed'n, Inc., No. 2:19-cv-01717-RGK-AGR, 2019 WL 7166978, at *2 (C.D. Cal. Nov. 8, 2019).

"The district court's Rule 23(a) and (b) analysis must be 'rigorous.'" In re Hyundai & Kia Fuel Econ. Litig., 926 F.3d 539, 556 (9th Cir. 2019) (en banc) (internal citation omitted). "Such an analysis will frequently entail overlap with the merits of the plaintiff's underlying claim." Comcast Corp. v. Behrend, 569 U.S. 27, 33–34 (2013) (internal citation and quotation marks omitted). The United States Supreme Court has made clear, however, that "Rule 23 grants courts no license to engage in free-ranging merits inquiries at the certification stage." Amgen Inc. v. Connecticut Ret. Plans & Tr. Funds, 568 U.S. 455, 466 (2013). Accordingly, "[m]erits questions may be considered to the extent—but only to the extent—that they are relevant to determining whether the Rule 23 prerequisites for class certification are satisfied." Id. Ultimately, "[t]he decision to grant or deny class certification is within the trial court's discretion." Bateman v. Am. Multi-Cinema, Inc., 623 F.3d 708, 712 (9th Cir. 2010).

B. Motion to Exclude Expert Opinions and Testimony

"[I]n evaluating challenged expert testimony in support of class certification, a district court should evaluate admissibility under the standard set forth in Daubert." Sali v. Corona Reg'l Med. Ctr., 909 F.3d 996, 1006 (9th Cir. 2018). That standard requires that the Court "perform a 'gatekeeping role' of ensuring that the testimony is both 'relevant' and 'reliable' under Rule 702." United States v. Ruvalcaba-Garcia, 923 F.3d 1183, 1188 (9th Cir. 2019) (citing Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 597 (1993) ("Daubert I")). "Relevancy simply requires that the evidence logically advance a material

aspect of the party's case." Estate of Barabin v. AstenJohnson, Inc., 740 F.3d 457, 463 (9th Cir. 2014) (en banc) (internal alterations and citations omitted).

Rule 702's "reliability" requirement mandates that the expert have "a reliable basis in the knowledge and experience of the relevant discipline." Kumho Tire Co. v. Carmichael, 526 U.S. 137, 149 (1999). When an expert's testimony is not scientific or technical, the reliability of that testimony need not be based on "a particular methodology or technical framework," but instead can be found reliable based on the expert's knowledge and experience alone. Hangarter v. Provident Life & Acc. Ins. Co., 373 F.3d 998, 1018 (9th Cir. 2004).

Where the expert's testimony is scientific or technical, however, "[t]he district court must assess whether the reasoning or methodology underlying the testimony is scientifically valid and properly can be applied to the facts in issue, with the goal of ensuring that the expert employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field[.]" Ruvalcaba-Garcia, 923 F.3d at 1189 (internal citations and quotation marks omitted). "The test is not the correctness of the expert's conclusions but the soundness of his methodology, and when an expert meets the threshold established by Rule 702, the expert may testify and the fact finder decides how much weight to give that testimony." Pyramid Techs., Inc. v. Hartford Cas. Ins. Co., 752 F.3d 807, 814 (9th Cir. 2014) (internal citations and quotation marks omitted). "Although Daubert identifies several factors that may be used for evaluating the reliability of an expert—whether the scientific theory or technique has been tested, peer reviewed, identified as having a particular rate of error, and generally accepted in the scientific community—district courts are not required to consider all (or even any) of these factors, nor are they required to hold a Daubert hearing." Ruvalcaba-Garcia, 923 F.3d at 1189 (internal citations and quotation marks omitted). Accordingly, "[t]he reliability analysis is 'a malleable one tied to the facts of each case,' and 'district courts are vested with broad latitude to 'decide *how* to test an expert's reliability' and '*whether or not* an expert's relevant testimony is reliable.'" Ruvalcaba-Garcia, 923 F.3d at 1189 (emphases in original) (citing Murray v. S. Route Mar. SA, 870 F.3d 915, 922–23 (9th Cir. 2017)).

In addition to evaluating an expert's reliability, a trial court must also determine whether an expert has "appropriate qualifications – i.e., some special knowledge, skill, experience, training or education." United States v. Hankey, 203 F.3d 1160, 1168 (9th Cir. 2000). "Rule 702 contemplates a broad conception of expert qualifications." Hangarter,

373 F.3d at 1015. "Thus, the admissibility of expert testimony is 'a subject peculiarly within the sound discretion of the trial judge, who alone must decide the qualifications of the expert on a given subject and the extent to which his opinions may be required.'" In re Live Concert Antitrust Litig., 863 F. Supp. 2d 966, 972 (C.D. Cal. 2012) (citing United States v. Chang, 207 F.3d 1169, 1172 (9th Cir.2000)).

III. DISCUSSION

A. The Parties' Motions to Exclude

1. Dr. Maronick

Carrier moves to exclude the opinions of plaintiffs' survey expert Dr. Thomas J. Maronick. See generally Maronick Mot. According to Carrier, "Dr. Maronick's survey utterly fails to address the relevant questions under plaintiffs' own theories, violates well-accepted principles of survey practice, and is therefore neither relevant nor reliable." Id. at 1. The Court addresses Carrier's contentions in turn.

a. Expert Qualifications

Pursuant to Rule 702, an expert must be "qualified as an expert by knowledge, skill, experience, training, or education[.]" Fed. R. Evid. 702. "Under Ninth Circuit law, an expert may be qualified through either practical training or academic experience. The threshold for qualification is low for purposes of admissibility; minimal foundation of knowledge, skill, and experience suffices." PixArt Imaging, Inc. v. Avago Tech. Gen. IP (Singapore) Pte. Ltd., No. 10-cv-00544-JW, 2011 WL 5417090, at *4 (N.D. Cal. Oct. 27, 2011) (internal citations omitted).

Here, Dr. Maronick holds a Master of Science in Business Analytics from the University of Denver, a Doctorate in Business Administration from the University of Kentucky, and a Juris Doctor from the University of Baltimore School of Law. Dkt. 214-15 ("Maronick Report") at 2. As an Emeritus Professor of Marketing at Towson University, Dr. Maronick "taught undergraduate and graduate courses in strategic marketing, consumer behavior, and marketing research." Id. at 2. Dr. Maronick previously served as the Director of Impact Evaluation in the Bureau of Consumer Protection at the Federal Trade Commission, where he served as "the in-house marketing expert for all divisions of the Bureau, advising attorneys and senior management on marketing aspects of cases being considered . . . by Commission attorneys." Id. As such, Dr. Maronick was

"responsible for the evaluation of research submitted by firms being investigated by the Commission and for the design and implementation of all consumer research undertaken by the Bureau[.]" Id. Based on these credentials, the Court concludes that Dr. Maronick is a qualified expert and therefore satisfies Rule 702's requirements.

b. Relevance

In its previous order denying the Oddo plaintiffs' motion for class certification, the Court determined that the Oddo plaintiffs failed to satisfy Rule 23(b)(3)'s predominance requirement. Oddo Cert. Order at 11. With respect to Carrier's contention that "there is no evidence that every class member would view as material the fact that a small and continually decreasing percentage of systems could develop temporary and remediable TXV clogs and then work without complaint for years," the Court noted that "plaintiffs' only evidence to this effect are Carrier's surveys showing that, generally, 'reliability' and 'quality' are the two most important factors considered by purchasers." Id. at 15. The Court also determined that the Oddo plaintiffs asserted "without any evidence or expert testimony, that 'no consumer acquires an HVAC system without being exposed to some information from the manufacturer.'" Id. at 17. The Court also concluded that "[p]laintiffs do not explain how homebuyers could have suffered an injury in the form of paying a premium price for their HVAC units when they purchased a home that already had the Carrier HVAC system installed" and "it appears that homebuyers, if they suffered any injury at all, suffered an injury of a different nature than purchasers of new HVAC units." Id. at 13.

An expert's testimony is relevant when the testimony is "relevant to the task at hand," meaning "that it logically advances a material aspect of the proposing party's case." Daubert v. Merrell Dow Pharm., Inc., 43 F.3d 1311, 1315 (9th Cir. 1995) ("Daubert II"). In other words, "the expert testimony must assist the trier of fact." Kennedy v. Collagen Corp., 161 F.3d 1226, 1230 (9th Cir. 1998).

Here, Dr. Maronick was retained "to design an online consumer study to determine consumers' experience with the acquisition of residential central air conditioning systems for existing homes and newly constructed homes in the prior three years, including the channels through which they were exposed to information about the air condition prior to acquisition, an assessment of how they could have viewed a disclosure about the presence of the chemical rust inhibitor at issue in this case, and their likely behavior if it had been disclosed in connection with their acquisition." Maronick Report at 3. Based on his study,

Dr. Maronick opines that: (1) "most consumers who purchased a new air conditioner saw the air conditioner itself prior to payment . . . regardless of whether the air conditioner was acquired in connection with an RNC purchase or an AOR purchase"; (2) "the vast majority of consumers who purchased a new air conditioner obtained information about the air condition from the seller prior to purchase . . . regardless of whether the air conditioner was acquired in connection with an RNC purchase or an AOR purchase"; (3) "aside from the brand name, the efficiency rating of their air condition was the most common piece of information purchasers learned from their seller or homebuilder prior to purchase"; (4) "most consumers would have considered a disclosure about the alleged defect in this case to be an important, if not decisive, factor in their purchasing decision, regardless of whether they were purchasing an air condition alone or a new home"; and (5) "if the alleged defect had been disclosed prior to sale, the vast majority of consumers would have demanded a unit that did not contain the rust inhibitor, or a price discount equal to the cost of removing the rust inhibitor." Maronick Report at 4–5.

Accordingly, the Court concludes that Dr. Maronick's expert report is relevant to the issues of exposure, materiality, and injury, which are elements of several of plaintiffs' fraudulent concealment and consumer protection claims. And, Dr. Maronick's report is also relevant in that it addresses the deficiencies that the Court previously identified as to lack of class-wide proof regarding exposure, materiality, and injury.

c. Reliability

Carrier also challenges the reliability of Dr. Maronick's survey on the grounds that it: (1) failed to survey "the relevant target universe"; (2) asked the wrong questions "because the survey did not ask whether purchasers reviewed any labels on the product itself prior to deciding the unit"; (3) failed to approximate market conditions and asked ambiguous, leading questions; and (4) "failed to provide a control to isolate the effect of the disclosure of the alleged defect." Maronick Mot. at 6–7. Carrier's objections to the admissibility of Dr. Maronick's report do not require exclusion.

"A trial court has broad latitude not only in determining whether an expert's testimony is reliable, but also in deciding how to determine the testimony's reliability." Ellis v. Costco Wholesale Corp., 657 F.3d 970, 982 (9th Cir. 2011). "In determining the reliability of a proffered expert, courts scrutinize not only the principles and methods used by the expert, but also whether those principles and methods have been properly applied to the facts of the case." Morales v. Kraft Foods Group, Inc., No. 2:14-cv-04387-JAK-PJW,

2017 WL 2598556, at *10 (C.D. Cal. June 9, 2017) (internal citation and quotation marks omitted). "As the Ninth Circuit has repeatedly held, 'challenges to survey methodology typically go to the weight given the survey, not its admissibility.'" In re NJOY, Inc. Consumer Class Action Litig., 120 F. Supp. 3d 1050, 1077 (C.D. Cal. 2015) (citing Wendt v. Host Int'l, Inc., 125 F.3d 806, 814 (9th Cir.1997)).

Here, Dr. Maronick conducted his survey by means of the Qualtrics.com internet survey platform, using a nationwide universe of sample individuals who had purchased a central air conditioning system for their residence in the previous three years. Maronick Report at 6. According to Dr. Maronick, "[t]he survey diverged along two paths: one for respondents who purchased a new air conditioner for an existing home within 3 years, and the other for respondents who bought a new construction home with a new air conditioner within 3 years." Id. at 7. "144 AOR and 147 RNC home-owner respondents completed the survey." Id. Respondents were then asked questions, in random order, regarding: (1) "whether they saw the unit itself prior to purchase"; (2) "whether and from what sources they received information prior to purchasing HVAC units"; (3) "what types of information they received from the seller prior to purchase"; (4) "whether a disclosure of the alleged defect would have been material to their purchasing decision"; and (5) "what they would have done if they would have received information—prior to completing their purchase—about the defect and also about the chemical injection process the manufacturer ultimately adopted[.]" Maronick Report at 7–9.

The Court concludes that each of Carrrier's challenges to Dr. Maronick's survey relates to the survey's weight, rather than its admissibility. For example, Carrier's argument that Dr. Maronick failed to survey "the relevant target universe" affects the weight, not the admissibility of Dr. Maronick's survey. See PixArt 2011 WL 5417090, at *5 ("PixArt contends that the survey and resulting analysis should nonetheless be excluded because the survey . . . fails to address the correct universe[.] . . . [T]hese are precisely the sorts of technical considerations that affect only the weight, and not the admissibility of a survey."). Similarly, with respect to Carrier's contentions that Dr. Maronick's survey asked "the wrong questions" as well as "leading questions," "the framing of questions for purposes of surveys is generally an issue of weight, not admissibility." Apple, Inc. v. Samsung Elecs. Co., No. 12-cv-00630-LHK, 2014 WL 794328, at *18 (N.D. Cal. Feb. 25, 2014). Moreover, whether Dr. Maronick used a control group affects the survey's weight, not its admissibility. See Mattel, Inc. v. MCA Records, Inc., 28 F. Supp. 2d 1120, 1135 (C.D. Cal. 1998) ("Defendants also object that plaintiff did not use a control group[.] . . .

Although the survey contains flaws, 'technical unreliability' goes to the weight the Court is to afford the survey, rather than its admissibility."); accord Moroccanoil, Inc. v. Marc Anthony Cosmetics, Inc., No. 2:13-cv-2747-DMG-AGR, 2014 WL 5797541, at *9 (C.D. Cal. Oct. 7, 2014) ("In any case, the lack of a control group alone does not render a confusion survey so fatally flawed as to be inadmissible.").

Although, as discussed below, the Court has doubts regarding Dr. Maronick's opinions, the Court **DENIES** Carrier's motion to exclude Dr. Maronick's opinions.

2. Sikorsky

Carrier moves to exclude the opinions of Paul J. Sikorsky, plaintiffs' damages expert, that: (1) all units containing Ryconox are defective; (2) Zerol Ice additive causes damages to HVAC systems; (3) the cost of remediating the alleged defect is calculable on a class-wide basis; and (4) the "high superheat observed" in each named plaintiff's systems "was caused by Ryconox." See generally Sikorsky Mot. According to Carrier, Sikorsky "seeks to offer the opinion that '*all* Carrier HVAC systems containing Ryconox are defective even if a TXV failure has not yet been reported to Carrier,' because 'most systems containing Ryconox have or will suffer performance decline even though the consumer may not be aware of a performance loss.'" Sikorsky Mot. at 1. Carrier further contends that "Sikorsky performed no testing or analysis to arrive at these opinions" and that "[c]lass certification has been denied in every case in which . . . Sikorsky's opinions have been offered." Id. at 1–2. For the reasons discussed below, the Court **DENIES** Carrier's motion to exclude Sikorsky's opinions.

a. Expert Qualifications

Plaintiffs retained Sikorsky "to provide . . . opinions concerning the alleged defect involving the presence of Ryconox in certain HVAC systems manufactured by Carrier[.]" Dkt. 219-7 ("Sikorsky Report") ¶ 1. Sikorsky is a registered Professional Engineer with over 30 years of experience in manufacturing, having worked for 27 years as a Senior Principal Materials Engineer in Materials and Chemistry, Project Manager, and Director of Strategic Supply Engineering at Trane Inc., a leading HVAC manufacturer. Id. ¶ 2. During his time at Trane and as a private consultant, Sikorsky "conducted hundreds of failure analyses of HVAC machines and components to determine root causes and recommend remedial action." Id. ¶ 5. Sikorsky holds "a B.S. degree in Metallurgical

Engineering from The University of Michigan and an M.S. degree in Metallurgical Engineering from Michigan Technological University." Id. ¶ 6.

Here, Carrier challenges Sikorsky's qualifications as an expert to the extent that Sikorsky opines on damages. Sikorsky Mot. at 14–16. According to Carrier, "Sikorsky does not have the necessary education or experience to be an economic damages expert" and is "[not] even an expert even with respect to the costs and methods of repairing HVAC systems." Id. at 15. In response, plaintiffs contend that "repair cost is an acceptable class-wide damages model for claims based on failure to disclose product defects" and that "Sikorsky is well qualified to opine as to the method and cost of repair[.]" Sikorsky Opp. at 4. Because Sikorsky is a professional engineer with over 27 years of experience regarding HVAC systems, including "conduct[ing] hundreds of failure analyses of HVAC machines and components to determine root causes and recommend remedial action," Sikorsky Report ¶ 5, the Court concludes that Sikorsky is qualified to opine on the method and cost of repair of the alleged defects at issue here. See PB Prop. Mgmt., Inc. v. Goodman Mfg. Co., L.P., No. 3:12-cv-1366-HES-JBT, 2016 WL 7666179, at *10 (M.D. Fla. May 12, 2016) ("Sikorsky is objectively well qualified; he holds a bachelor's and master's degree in metallurgical engineering and has over 30 years of experience in the HVAC industry" and "has extensive experience performing failure analyses on evaporator coils.").

b. Relevance

Sikorsky opines that: (1) the presence of Ryconox in the HVAC systems constitutes a "material" defect; (2) all Carrier HVAC systems containing Ryconox are defective, even if a TXV failure has not yet been reported to Carrier; (3) all 1.5 to 5 ton systems are defective; (4) the cost to remove or remediate the Ryconox at the time of purchase can be determined on a class-wide basis; (5) injecting Zerol Ice does not provide consumers a defect-free HVAC system; and (6) the cost of remediating Zerol Ice can be calculated on a class-wide basis. Sikorsky Report at 3–6. Materiality and the presence of a defect are elements essential to plaintiffs' fraudulent omission claims, and Sikorsky's opinions regarding these elements are therefore relevant to plaintiffs' assertion that they can prove Carrier's alleged liability on a class-wide basis. Similarly, Sikorsky's opinions that the costs of remediating Ryconox and Zerol Ice can be calculated on a class-wide basis is relevant to the Court's predominance inquiry with respect to damages.

c. Reliability

Carrier challenges the reliability of several of Sikorsky's opinions. The Court addresses these challenges in turn.

i. Opinion that All Units Containing Ryconox are Defective

Sikorsky opines that "in reality, all of the systems containing Ryconox are defective, even if no acute TXV failure has been reported to Carrier." Sikorsky Report ¶ 18(B). That is because, according to Sikorsky, "[d]ue to the nature of defect, all or virtually all of the units containing Ryconox have, or likely will, suffer performance losses due to Ryconox deposits." Id.

Carrier first moves to exclude this opinion on the basis that "[g]iven the acknowledged trends—the vast majority of purchasers reporting no failures, larger units having a normal failure rate, and failure rates going down over time—it is simply untenable for . . . Sikorsky to opine that 'all or virtually all of the units containing Ryconox have, or likely will, suffer performance losses." Sikorsky Mot. at 6. Carrier's argument, however, ignores Sikorsky's opinion, based on Carrier's own documents, that the mere *presence* of Ryconox is a defect that may cause the HVAC systems at issue to fail, and that all, or virtually all HVAC units, containing Ryconox, have, or likely will, suffer performance losses due to Ryconox deposits, regardless of whether the system's owner reports a failure to Carrier or not. Sikorsky Report ¶¶ 18, 64–67. That Carrier contends, based on different documents, that "trends" establish that Ryconox does not cause damage does not require the Court to exclude Sikorsky's contrary opinion. See DSU Med. Corp. v. JMS Co., 296 F. Supp. 2d 1140, 1148 (N.D. Cal. 2003) ("when the parties' experts rely on conflicting sets of facts, an expert may testify on his party's version of the disputed facts."); accord In re NJOY, 120 F. Supp. 3d at 1071 ("All that NJOY has shown is that, under its view of the facts, Harris's testimony may not be convincing; that is not a valid basis for excluding Harris as an expert.").

Carrier also challenges Sikorsky's opinion that all units containing Ryconox are defective on the grounds that "Sikorsky did no testing at all in connection with his work in this case[.]" Sikorsky Mot. at 7. In response, plaintiffs contend that "Carrier's argument . . . is a red herring and not legally supportable." Sikorsky Opp. at 7. That is because, according to plaintiffs, "[i]t is a common and accepted practice for an expert to interpret

the Defendant's and third parties' own test results and technical data, and the fact that an expert relied on the results of tests that Defendant and a third party had already performed rather than running his own tests does not render his opinion unreliable, particularly where the Defendant does not dispute the reliability of the underlying data." Id. at 8. Indeed, Sikorsky appears to base his opinion, at least in part, on Carrier and Emerson's own documents and studies. See, e g., Sikorsky Report ¶ 39 ("Ryconox is known in the industry to cause sticky deposits to form on TXVs, which results in high superheat, low suction pressure, and loss of performance. In fact, according to documents produced by Carrier and Emerson, it appears that every manufacturer in the industry who utilized Ryconox compressors experienced similar problems with debris formation on the TXV."). Accordingly, the Court declines to exclude Sikorsky's opinion on this basis. See Romero by & through Ramos v. S. Schwab Co., Inc., No. 15-cv-815-GPC-MDD, 2017 WL 5885543, at *5 (S.D. Cal. Nov. 29, 2017) ("An expert may rely on data that she did not personally collect . . . and need not have conducted her own tests.") (internal citations omitted).

ii. Opinion that Zerol Ice Additive Causes Damage to HVAC Systems

Sikorsky also opines that "injecting Zerol Ice does not provide consumers a defect-free HVAC system; instead, while it addresses the symptoms of Ryconox, it causes damage and creates new risks." Sikorsky Report ¶ 18(E). According to Sikorsky, while injecting Zerol Ice "often addresses the high-superheat symptoms of Ryconox deposits on the TXV, (1) it does not actually remove the Ryconox from the system; (2) it adds further contaminants into the system; and (3) most importantly, it causes damage, premature wear, and other risks to the system." Id. ¶ 143.

Carrier seeks to exclude this opinion because, according to Carrier, "Sikorsky posited a variety of supposed harms caused by Zerol Ice—copper plating, zinc leaching, higher acidity, and so on—but as to each one acknowledged he was not aware of any system that had encountered such an issue." Sikorsky Mot. at 12–13. In response, plaintiffs argue that Sikorsky's argument is a "red herring" because "Carrier and Emerson conducted extensive testing, and . . . Sikorsky's opinion is based on those results as well as his extensive engineering experience." Sikorsky Opp. at 13.

For example, Sikorsky refers to "[a] Technical Information Communication drafted by Carrier around September 4, 2014, concerning the 'Use of System Additives to Correct

TXV Contamination Issue' [which] noted that, though some field technicians were using Zerol Ice to fix Ryconox clogs, Carrier '**strongly recommended against** the use of any aftermarket additives," because 'these chemicals increase the acidity of the system' and 'long-term impact on system reliability is unknown.'" Sikorsky Report ¶ 146 (emphasis in original) (internal alterations omitted). Moreover, Sikorsky relies on a document [redacted] Id. ¶ 167 (internal alterations and citations omitted). Accordingly, the Court cannot say that Sikorsky's opinion that Zerol Ice additive causes damage is so unreliable so as to require exclusion at the class certification stage.

iii. Remediation Models

Sikorsky "opine[s] as to the cost to repair the defective HVAC units at the time of purchase as a means of calculating class-wide economic damages arising from the alleged omissions." Sikorsky Report ¶101. To do so, Sikorsky "calculate[s] the average cost to repair or remediate Ryconox contamination using two models." Id.

Sikorsky's "first model assumes that the Ryconox defect can be remediated by injecting Zerol Ice as a preventative and calculates the average cost to consumers to obtain such injections in the market." Sikorsky Report ¶ 102. This model is based on Carrier's contention "that Zerol Ice is an effective preventative for the Ryconox defect" but accounts for the fact that Carrier "declined to provide *preventative* injections due to cost and supply concerns, among other reasons." Id. Sikorsky contends that, "in reality, Zerol Ice causes harm and creates new risks," but that Sikorsky "calculate[d] this amount as a floor for estimating economic damages from Carrier's failure to disclose the Ryconox defect."[5] Id. Based on his first model, Sikorsky calculates a "total cost of $150 for preventative application of Zerol Ice, consisting of $85 for the part and $65 in labor." Id. ¶ 124. The $150 figure is based on an estimate that "injecting Zerol Ice as a preventative during installation would take 40-45 minutes of time multiplied by Carrier's [redacted] per hour

[5] Plaintiffs clarify that "injecting Zerol Ice is not a valid repair because it causes additional damage to the system, but [Sikorsky] calculated that cost nevertheless because *if* Carrier can persuade a jury that Zero Ice is not harmful[,] . . . then the cost of injecting Zerol Ice would be the minimum repair cost." Sikorsky Opp. at 16 n.11.

nationwide average labor rate" and an estimated "average retail price of $85 for the Zerol Ice itself[.]" Id. ¶ 127. According to Sikorsky, "[n]o matter what population of units is ultimately included in the class, however, this damages model can be applied on a class-wide basis simply by multiplying the $150 amount times the number of units in the class." Id. ¶ 129.

Sikorsky's "second model proceeds based on the reality that . . . injecting Zerol Ice is harmful to the HVAC systems . . . [and] does not constitute an adequate remediation of the Ryconox defect." Sikorsky Report ¶ 103. Accordingly, Sikorsky's second model "calculate[s] the average cost to consumers to remove Ryconox from their systems at the time of purchase, which essentially requires replacing the Ryconox-contaminated compressor before the system is run." Sikorsky Report ¶ 103. Sikorsky contends that "removing Ryconox from a new system before it has run in the field would require the following steps: (1) recovering refrigerant from the outdoor unit; (2) removing the suction and high side Schrader valve cores; (3) removing the contaminated compressor by disconnecting all electrical wires, unbrazing the suction and discharge lines at the joints closest to the compressor, and unbolting the compressor from the base; (4) installing a new, non-contaminated compressor by bolting the compressor to the base, brazing the suction and discharge lines, and connecting the electrical wiring; (5) replacing the Schrader valve cores and evacuate the unit; and (6) [r]echarg[ing] the unit with refrigerant." Id. ¶ 135. "Performing this process involves two primary costs: the cost of the part (*i.e.,* the replacement compressor) and the cost of the labor required to perform it." Id. Sikorsky estimates the labor component to be [redacted] per unit, "based on the conservative [redacted] per hour national average labor rate times the number of hours[.]" Id. ¶ 138. Sikorsky estimates, based on lists of parts and prices for the compressors used in the affected units, a weighted average parts cost of $709. Id. ¶ 139. Sikorsky's second model therefore calculates "an average cost of $1,029 per unit" based on the [redacted] labor component and the $709 parts component" and "can be applied on a class-wide basis." Id. ¶¶ 140–41.

Carrier seeks to exclude Sikorsky's remediation models on bases that the "'cost of repair' model contravenes Comcast, has no support in the record, and would result in improper windfalls for the uninjured or already-compensated class members—which is virtually all of the class here." Sikorsky Reply at 16. None of Carrier's arguments is availing, as each relates to the merits of plaintiffs' motion for class certification or the weight the fact-finder should afford Sikorsky's damages models, *not* the models' reliability. See, e.g., In re ConAgra Foods, Inc., 90 F. Supp. 3d 919, 946 (C.D. Cal. 2015)

("Admissibility turns on whether Weir's methodology is sufficiently reliable; whether it satisfies Comcast and shows that a class should be certified is another question altogether[.]"); Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., No. 09-cv-5235-MMC, 2013 WL 6185434, at *1 (N.D. Cal. Nov. 26, 2013) ("challenges to Dr. Putnam's methodology in calculating damages go to the weight of his opinions and not to their admissibility.").

iv. Opinions Regarding Named Plaintiffs' Units

In his rebuttal report, Sikorsky seeks to refute the opinions of Carrier's HVAC systems expert, Wayne Schneyer, with respect to the HVAC systems belonging to named plaintiffs Oddo, Klinge, Lamm, and Gallagher. See Dkt. 214-11 ("Sikorsky Rebuttal Report") ¶¶ 1–50. According to Sikorsky, "Schneyer proposes several different potential causes of frozen coils/high superheat and states that determining the cause of any TXV failure requires individual inspection" and "posits that various installation factors may have contributed to [Oddo, Klinge, Lamm, and Gallagher's] TXV failures." Id. ¶¶ 2, 48. Sikorsky contends, however, that "[g]iven the well-known mechanism by which Ryconox causes TXV failures and the extremely high failure rate, it is not necessary to examine individual systems to conclude with a high degree of certainty that a TXV failure in a unit containing Ryconox was caused by Ryconox." Id. ¶ 8.

Carrier seeks to exclude Sikorsky's rebuttal opinions as to HVAC units belonging to Oddo, Klinge, Lamm, and Gallagher. Sikorsky Mot. at 23–24. Carrier contends that "Sikorsky is not qualified to offer these opinions" because, according to Carrier, "Sikorsky has never personally installed an HVAC system, has never been involved in performing maintenance on an HVAC system, has never installed ductwork in a home, and has never diagnosed a TXV failure or performed a TXV replacement[.]" Sikorsky Mot. at 24 (internal citations omitted). The Court has already concluded that Sikorsky is qualified as an expert, based on, *inter alia*, Sikorsky's 27 years of experience at Trane Inc., a leading HVAC manufacturer, "conduct[ing] hundreds of failure analyses of HVAC machines and components to determine root causes and recommend remedial action." Sikorsky Report at ¶¶ 2, 5. Nor does the Court find availing Carrier's contention that Sikorsky's rebuttal opinions should be excluded as unreliable on the grounds that "Sikorsky did not attend the inspections in this case . . . and . . . performed no testing of the named plaintiffs' HVAC systems[.]" Sikorsky Mot. at 24. That is because Sikorsky prepared his rebuttal report based on Schneyer's report, the documents Schneyer relied on in preparing his report, and

photographs taken during the inspection of the named plaintiffs' HVAC systems. See Sikorsky Report, Exh. A. Sikorsky's rebuttal opinions as to the named plaintiffs' HVAC units therefore clear Daubert's reliability bar. See Castaic Lake Water Agency v. Whittaker Corp., No. 2:00-cv-12613-AHM-RZX, 2002 WL 34700741, at *8 (C.D. Cal. Oct. 25, 2002) (rejecting defendants' argument that expert's report was unreliable where expert "did not himself test the groundwater velocity" since "expert is permitted to rely on data provided to him" and "an expert may rely on data she did not personally collect.").

3. Dr. Dhar

Plaintiffs "request that the Court give little, if any, weight to Dr. Dhar's Report in connection with [Carrier]'s Opposition to [p]laintiffs' Renewed Motion for Class Certification." Dhar Mot. at 14. In response, Carrier contends that "[p]laintiffs' challenges to Dr. Dhar's survey consist of semantic nitpicking, misplaced attacks on Dr. Dhar's well-supported methodologies, or else turn on plaintiffs' pressing of their own evidence-free theories[.]" Dhar Opp. at 2. According to Carrier, "Dr. Dhar's survey confirms that individual inquiry would be necessary to determine both whether consumers would have reviewed information from Carrier prior to purchase and the materiality of that information." Id.

a. Expert Qualifications

Carrier retained Dr. Dhar "to provide an opinion on aspects of consumer behavior relating to consumers' selection of their HVAC systems" including "the proportion of owners who acquire their HVAC system in each of several different ways: those who personally select the HVAC system, those who rely on professionals such as a contractor or dealer to select the HVAC system, and those who acquire an HVAC system because they purchased a home that had an HVAC system already installed." Dkt. 236-1 ("Dhar Report") ¶ 19. In addition, Dr. Dhar "was also asked to opine on the sources of information that consumers who have a role in selecting the brand of their air condition or heat pump review before making a purchase." Id. "Specifically, [Dr. Dhar] was asked to determine empirically, for those who have a role in selecting the brand of their air conditioner or heat pump, the proportion of relevant owners who were not exposed to and hence could not have considered a manufacturer's printed brochure or website, and/or who did not speak to a manufacturer directly before purchasing or acquiring their unit." Id. ¶ 20.

Dr. Dhar is a Professor of Management and Marketing, Professor of Psychology, and the Director of the Center for Customer Insights at Yale University. Dhar Report ¶ 1. Dr. Dhar holds a Ph.D. and M.S. in Business Administration from the University of California at Berkeley, and his work focuses on "consumer and customer behavior and consumer psychology, branding, marketing management, marketing strategy, and survey methodology and evaluation." Dhar Report ¶¶ 2, 4. In other words, Dr. Dhar's "research focuses on consumers' decision making—the manner in which consumers acquire and process information when forming product perception and preferences, the effect of product attributes and information presentation on consumer purchase and consumption decisions, and the effect of different marketing mix activities (such as promotions and advertising) on consumer purchase decisions." Id. ¶ 4. In his capacities as a marketing professor and a corporate consultant, Dr. Dhar "ha[s] conducted, supervised, or evaluated more than 350 surveys, as well as analyzed questions relating to different aspects of consumer behavior." Id.

Based on these credentials, the Court concludes that Dr. Dhar is qualified to opine on consumer behavior.

b. Relevance

In its previous order denying the Oddo plaintiffs' motion for class certification, the Court determined that "there does not appear to be a meaningful classwide method here for determining whether any disclosure by Carrier would have reached class members." Oddo Cert. Order at 19. The Court specifically noted that the Oddo plaintiffs asserted "without any evidence or expert testimony, that 'no consumer acquires an HVAC system without being exposed to some information from the manufacturer.'" Id. at 17. Plaintiffs thereafter retained Dr. Maronick who, in connection with plaintiffs' renewed motion for class certification, opines that: (1) the vast majority of HVAC system purchasers saw the air conditioner itself prior to completing the purchase and therefore would have been exposed to a disclosure placed there; and (2) the vast majority of purchasers received information about the air conditioner prior to purchase. See Maronick Report at 4–5, 29. Given Dr. Maronick's opinions on these issues, Dr. Dhar's contrary opinions that "exposure to and consideration of product information from an HVAC manufacturer is highly variable across consumers," Dhar Report ¶ 137, are relevant, proper rebuttal. See LG Elecs. v. Whirlpool Corp., No. 08-cv-00242, 2010 WL 2921633, at *3 (N.D. Ill. July 22, 2010)

("Given the opinions offered by LG's expert—Reitter—Dr. Dhar's opinions are relevant and proper rebuttal.").

c. Reliability

Plaintiffs contend that: (1) Dr. Dhar's study does not support his conclusion that most class members were not exposed to Carrier's omissions; (2) Dr. Dhar's tables are "grossly misleading" because he includes respondents who were never asked the applicable question; and (3) Dr. Dhar's conclusion that individual inquiry would be required to determine the impact of disclosing the defect is unreliable. Dhar Mot. at 14. Plaintiffs' arguments, however, go to the weight of Dr. Dhar's survey rather than its admissibility. See Sentius Int'l, LLC v. Microsoft Corp., No. 5:13-cv-00825-PSG, 2015 WL 331939, at *2 (N.D. Cal. Jan. 23, 2015) (denying Daubert motion to exclude expert's survey and related testimony because "issues of methodology, survey design, reliability, the experience and reputation of the expert, critique of conclusions, and the like go to the weight of the survey rather than its admissibility.").

The Court therefore **DENIES** plaintiffs' motion to limit the consideration of Dr. Dhar's survey, report, and testimony.

4. Schneyer

Plaintiffs contend that "Schneyer's opinions about design and installation are irrelevant and based on unreliable methodology and . . . should be given little or no weight at this stage." Schneyer Mot. at 7–8. In response, Carrier contends that Schneyer's opinions elucidate "the individualized issues surrounding injury and the typicality requirement that preclude certification here of plaintiffs' broad classes." Schneyer Opp. at 1. The Court addresses the parties' contentions in turn.

a. Expert Qualifications

Carrier retained Schneyer to: (1) "review various materials, offer [his] expertise on technical matters related to HVAC equipment, and visit the named plaintiffs' homes to perform various non-destructive testing and evaluations in their equipment"; (2) "evaluate the inspection data and form an opinion as to the operation of the named plaintiffs' equipment" and as to "the reasons an HVAC system might develop a frozen coil or experience inefficiencies"; and (3) "review Carrier's communications with dealers, distributors, and customers in connection with the high superheat/frozen coil issue . . . and

to assess those communications from [his] perspective as a former Carrier and Bryant dealer and distributor [with] . . . 45 years of experience in the HVAC industry." Dkt. 226-28 ("Schneyer Report") ¶¶ 1–3. In addition to serving as an HVAC technician, Schneyer founded and operated an HVAC dealership, where Schneyer sold, installed, and serviced residential and commercial HVAC systems. Id. ¶¶ 5–8. Schneyer received training from the Refrigeration Service Engineers Society and several trade schools, where Schneyer "learned building and gas code requirements, factory-required installation requirements for equipment, system design principles, various refrigeration processes, residential air duct requirements, troubleshooting residential air conditioning, [and] understanding the [TXV valve]." Id. ¶ 9.

After selling his dealership, Schneyer "began working as a Service and Application Manager" for a Bryant regional distributor, where he "assist[ed] Bryant dealers with all service and application inquiries" and "train[ed] Bryant dealers on the installation of Bryant equipment." Schneyer Report ¶ 10. During this time, Schneyer "made hundreds of field visits to customer's [sic] homes assisting the dealer in troubleshooting" and "educat[ed] [him]self on new products, installation manuals, service manuals, and product data sheets, as well as changes in the industry regarding methods and design." Id. ¶ 11. He subsequently transitioned to a similar position with Peirce-Phelps, an independently-owned regional distributor of Carrier equipment. Id. ¶ 14. In 1999, Schneyer became a full-time trade school instructor at Pennco Tech in Blackwood, New Jersey, where he later became "department head of the HVAC School[.]" Id. ¶ 1999. After returning to Peirce-Phelps as Training Manager, Schneyer retired in 2012, though he "continue[s] to assist dealers with training." Id. ¶¶ 16, 19. Schneyer notes that he "ha[s] not previously testified as an expert at trial or by deposition." Id. ¶ 20.

Plaintiffs characterize Schneyer as an individual who "has a high-school diploma, owned a small HVAC company from 1974-1986, and then, aside from a brief two-year stint as a trade school teacher, worked as a service manager for a Carrier distributor . . . for two and a half decades." Schneyer Mot. at 3. The Court does not find availing plaintiffs' challenges to Schneyer's qualifications as an expert. See United States v. Merritt, No. 01-cr-081-JTD, 2002 WL 1821821, at *3 (S.D. Ind. June 26, 2002) ("There are many areas of expertise for which advanced schooling is unnecessary, for example a car mechanic. These areas of expertise are no less valid because the people that practice them learned their skills through apprenticeships rather than in universities.").

b. Relevance

Plaintiffs contend that "Schneyer's opinions that the named [p]laintiffs' HVAC systems do not meet industry standards for design and installation are wholly irrelevant to the omission claims in this case[.]" Schneyer Mot. at 4. That is because, plaintiffs contend, they "do not assert claims based on HVAC design or installation issues" but instead "assert claims based on Carrier's failure to disclose a known defect at the time of purchase" and "based on the presence of the undisclosed defect, *regardless of manifestation*." Id. Thus, "[t]he named [p]laintiffs have the exact same omission claim as a class member who purchased a class air conditioner and has not yet installed it and the same claim as a class member who purchased one and installed it perfectly." Id. at 5.

The Court notes that Sikorsky, plaintiffs' cost-of-repair expert, explicitly relies on Schneyer's inspection of the named plaintiffs' HVAC units as part of the basis for Sikorsky's rebuttal opinion that "[g]iven the well-known mechanism by which Ryconox causes TXV failures and the extremely high failure rate, it is not necessary to examine individual systems to conclude with a high degree of certainty that a TXV failure in a unit containing Ryconox was caused by Ryconox." Sikorsky Rebuttal Opinion at ¶ 8. And, notwithstanding plaintiffs' argument that Schneyer's opinions that the named plaintiffs' ineffective installation of their HVAC units may have caused TXV failure is "irrelevant" since plaintiffs' theory of damages is based on the mere presence of Ryconox, rather than subsequent failure attributable to Ryconox, Schneyer's opinions may be germane to the Court's typicality analysis since Carrier intends to argue that any damage to the named plaintiffs' HVAC systems was caused or exacerbated by issues attributable to installation of those systems. See Smyth v. China Agritech, Inc., No. 2:13-cv-03008-RGK-PJW, 2013 WL 12136605, at *3 (C.D. Cal. Sept. 26, 2013) ("Even an arguable defense peculiar to the named plaintiff or a small subset of the plaintiff class may destroy the required typicality of the class as well as bring into question the adequacy of the named plaintiff's representation.").

Accordingly, the Court declines to limit its consideration of Schneyer's opinions regarding the named plaintiffs' HVAC systems on the basis of relevancy. See Messick v. Novartis Pharm. Corp., 747 F.3d 1193, 1196 (9th Cir. 2014) ("The relevancy bar is low, demanding only that the evidence 'logically advances a material aspect of the proposing party's case.'") (citing Daubert II, 43 F.3d at 1315).

c. Reliability

Plaintiffs move to exclude "Schneyer's opinion that none of the named [p]laintiffs' systems 'met industry standard[s] for design and installation" on the basis of reliability. Schneyer Mot. at 5. Plaintiffs contend that Schneyer's opinion in this regard "is based primarily on his conclusion that all named [p]laintiffs' systems suffer from inadequate air flow through the ductwork, which can sometimes contribute to frozen coils." Id. Plaintiffs assert, however, that "Schneyer never measured air flow, the very metric he claims is problematic. He only looked at air *pressure* data." Id. (emphasis in original). Plaintiffs' argument is not a proper basis for excluding Schneyer's opinion, however. See IceMOS Tech. Corp. v. Omron Corp., No. 17-cv-02575-PH-JAT, 2019 WL 6075361, at *4 (D. Ariz. Nov. 15, 2019) ("[D]isagreement over which facts an expert decided to rely on is not an appropriate ground for exclusion of expert testimony. Rather, any perceived fault in Bratic's methodology goes to weight, not admissibility.").

In accordance with the foregoing, the Court **DENIES** plaintiffs' motion to limit consideration of Schneyer's opinions.

5. Dr. Johnson

Plaintiffs contend that "Dr. Johnson's opinions should be given little to no weight." Johnson Mot. at 12. That is because, according to plaintiffs, Dr. Johnson's opinion is a "thinly veiled legal opinion" and "ventures far from [Dr. Johnson's] field of expertise in opining about engineering issues[.]" Id. at 1.

a. Expert Qualifications

Carrier retained Dr. Johnson "to review and respond to the report submitted by [p]laintiffs' engineering expert, Paul. J. Sikorsky," including "Sikorsky's theory of economic injury and damages and his models attempting to determine class-wide damages." Dkt. 236-13 ("Johnson Report") ¶ 5. In preparing his report, Dr. Johnson, "and economists working under [his] direction, reviewed . . . Sikorsky's report, conducted an economic analysis of the industry at issue, and reviewed deposition testimony, data and documents in the record, and publicly available information." Id.

Dr. Johnson is the President and CEO of Edgeworth Economic, L.L.C., "a consulting firm that provides clients with objective expert economic and financial analysis for complex litigation and public policy debates." Johnson Report ¶ 1. Dr. Johnson holds a

B.A. in Economics from the University of Rochester and a Ph.D. in Economics from the Massachusetts Institute of Technology[.]" Id. ¶ 2. During his career as a professional economist, Dr. Johnson has "provided economic analyses in a wide range of litigation matters involving class certification, antitrust, labor and employment, damages calculation, and statistics." Id. He previously served as an Assistant Professor of Economics and Labor and Industrial Relations at the University of Illinois at Urbana-Champaign and as an Affiliated Professor at Georgetown University. Id. A "substantial portion" of Dr. Johnson's consulting practice and academic research "has focused on the economic issues relating to class certification and associated damages calculations, including issues arising in disputes related to false advertising, false claims, misrepresentations, and omissions." Id. ¶ 3.

Plaintiffs challenge Dr. Johnson's qualifications as an expert to the extent that Dr. Johnson opines that Sikorsky, plaintiffs' expert, "improperly assumes that all units containing Ryconox are defective." Johnson Mot. at 9. Dr. Johnson opines that "Sikorsky's remediation-based damages methodologies rest on a series of inappropriate assumptions regarding the nature of the alleged defect and the impact on consumers. . . . Sikorsky improperly assumes that all units containing Ryconox are defective and affected in a similar way." Johnson Report ¶ 6. Viewed in this light, plaintiffs' challenge goes to the weight that the finder of fact should attribute to Dr. Johnson's critique of Sikorsky's opinion, not Johnson's qualifications.

The Court concludes that Dr. Johnson is qualified to provide expert testimony.

b. Relevance

Dr. Johnson opines that "[f]rom an economic perspective, . . . Sikorsky's damages models do not provide an economic theory of class-wide harm that is consistent with [p]laintiffs' theory of liability—Carrier's alleged omissions of allegedly material information related to air conditioners."[6] Johnson Report ¶ 6. He further opines that

[6] Plaintiffs characterize Dr. Johnson's opinion as a "an impermissible legal conclusion that transparently seeks to usurp the role of the Court." Johnson Mot. at 4. According to plaintiffs, "under Comcast, it is the Court that must determine whether [p]laintiffs have set forth a damages model that is 'consistent' with their legal claims that can be applied on a class-wide basis." Johnson Mot. at 5. Plaintiffs' challenge is misplaced, however, because Dr. Johnson offer this opinion "[f]rom an economic perspective[.]" Johnson Report ¶ 6.

"[c]onsumers consider different sources of information and rely on a variety of factors when purchasing air conditioning units. As a result, the effect of a disclosure on the price a purchaser would have paid for an air conditioning system would be highly individualized, and . . . Sikorsky presents no analysis or mechanism for performing that analysis on a class-wide basis." Johnson Report ¶ 6. Dr. Johnson's opinions regarding the ability of Sikorsky's models to calculate damages on a class-wide basis are relevant to the Court's predominance analysis.

c. Reliability

Plaintiffs challenge the reliability of Dr. Johnson's opinions in several respects. See Johnson Mot. at 6–12. According to plaintiffs, "while the law is clear that damages for an omission claim are determined as of the time of purchase, Dr. Johnson opines that any calculation of damages should take into account future events, such as whether a consumer has 'experienced a failure' or 'received different remediation treatments." Id. at 7. Plaintiffs also assert that "Dr. Johnson's opinion also rests on improper mischaracterization of [p]laintiffs' claims" and that Dr. Johnson "presents an inaccurate (and therefore misleading) reported 3-4 year failure rate because the denominator in his calculation included units that do not contain Ryconox." Id. at 7, 10. While each of these contentions may provide plaintiffs a basis for cross-examination at trial, they do not require the exclusion of Dr. Johnson's opinions. See United States v. Prime, 431 F.3d 1147, 1153 (9th Cir. 2005) ("any potential error can be brought to the attention of the jury through cross-examination and the testimony of other experts."); In re Pool Prod. Distribution Mkt. Antitrust Litig., No. MDL 2328, 2016 WL 2756437, at *12 (E.D. La. May 12, 2016) (denying Daubert motion to exclude Dr. Johnson's opinion and related testimony because "all of plaintiffs' challenges to Dr. Johnson's opinion affect the weight to be assigned to his opinion, rather than its admissibility.").

Indeed, Dr. Johnson's critiques of Sikorsky's cost of repair damages models are based on economic principles. See, e.g., id. ¶ 24 ("a consumer's damages due to the alleged failure to disclose material information would be equal to the difference . . . between the price actually paid by the consumer for the air conditioning unit and the value actually received by the consumer. [Sikorsky's models] . . . do not address the relevant question of what price a consumer would have paid in the 'but-for' world in which the allegedly material disclosures were provided.").

In accordance with the foregoing, the Court **DENIES** plaintiffs' motion to limit consideration of Dr. Johnson's opinions and expert report.

B. Plaintiffs' Motion for Class Certification

Plaintiffs seek certification of the following classes and the appointment of the following Class Representatives:

Proposed Class	Proposed Representative	Proposed Claims Subject to Class Treatment
California Class: All original purchasing owners of the Affected Units[7] in California.	Oddo	UCL; FAL; fraudulent concealment; negligent misrepresentation
CLRA Sub-Class: All original purchasing owners of the Affected Units in California for personal, family, or household purposes.	Oddo	CLRA
Missouri Class: All original purchasing owners of the Affected Units in Missouri for personal, family, or household purposes.	Klinge	MMPA; fraudulent concealment; negligent misrepresentation
Massachusetts Class:	Cormier	MCPA

[7] Plaintiffs define "Affected Units" as "1.5- to 5-ton air conditioner condensing units and Small Packaged units reflected in Carrier's records that contain an Emerson scroll compressor with a serial number beginning 13L through 14H (but excluding the units identified in CARRIER_0043279) and that utilize 410 refrigerant." See Dkt. 219, Notice of Motion for Class Certification ("Class Cert. Notice").

All original purchasing owners of the Affected Units in Massachusetts.		

See generally Class Cert. Notice. In the alternative, plaintiffs seek certification of the following classes and the appointment of the following Class Representatives:

Proposed Class	**Proposed Representative**	**Proposed Claims Subject to Class Treatment**
California AOR Purchaser Class: All original purchasing owners of the Affected Units in California who purchased from a Carrier distributor, a Carrier Factory Authorized Dealer ("FAD"), or a Carrier Locator Dealer ("DLD").[8]	Oddo	UCL; FAL; fraudulent concealment; negligent misrepresentation; alternatively, unjust enrichment
CLRA Sub-Class: All original purchasing owners of the Affected Units in California who purchased from a Carrier distributor, FAD, or DLD for personal, family, or household purposes.	Oddo	CLRA
Missouri AOR Purchaser Class: All original purchasing owners of the Affected Units in Missouri who purchased from a Carrier distributor, FAD, or DLD.	Klinge	MMPA; fraudulent concealment; negligent misrepresentation

[8] Plaintiffs clarify that "FADs and DLDs are the dealers that Carrier listed as its dealers on its websites during the relevant time." Class Cert Notice at 2 n.1.

See generally Class Cert. Notice.

1. Rule 23(a) Requirements

a. Numerosity

Rule 23(a)(1) requires that "the class is so numerous that joinder of all members is impracticable[.]" Fed. R. Civ. P. 23(a)(1). The party seeking certification "do[es] not need to state the exact number of potential class members, nor is a specific number of class members required for numerosity." In re Rubber Chemicals Antitrust Litig., 232 F.R.D. 346, 350 (N.D. Cal. 2005). Instead, a "court may make common sense assumptions to support a finding that joinder would be impracticable." Id. "Courts generally find that numerosity is satisfied if the class includes forty or more members." Nightingale v. U.S. Citizenship & Immigration Servs., 333 F.R.D. 449, 457 (N.D. Cal. 2019).

Plaintiffs estimate that "[e]ach of the three classes here includes at least thousands of members." Mot. at 5. Although plaintiffs do not provide specific numerical estimates as to the number of members in each of plaintiffs' proposed classes, plaintiffs estimate there are [redacted] Affected Units in California, [redacted] Affected Units in Missouri, and [redacted] Affected Units in Massachusetts. Dkt. 117-1 ¶ 4; Cormier, Dkt. 66-1 ¶ 4. Moreover, Carrier does not dispute that the requisite numerosity exists in this case. The Court therefore concludes that plaintiffs have satisfied Rule 23(a)(1)'s numerosity requirement. See Sidibe v. Sutter Health, 333 F.R.D. 463, 485 (N.D. Cal. 2019) (finding numerosity satisfied where "Sutter does not dispute numerosity.").

b. Commonality

Rule 23(a)(2) requires that "there [be] questions of law or fact common to the class[.]" Fed. R. Civ. P. 23(a)(2). "Commonality is met through the existence of the 'same injury' resulting in a 'common contention' that is 'capable of classwide resolution in one stroke.'" Byorth v. USAA Cas. Ins. Co., 333 F.R.D. 519, 528 (D. Mont. 2019) (internal alteration and citation omitted). "What matters to class certification is not the raising of common 'questions'—even in droves—but rather, the capacity of a class-wide proceeding to generate common *answers* apt to drive the resolution of the litigation." Wal-Mart Stores, Inc. v. Dukes, 564 U.S. 338, 350 (2011) (emphasis in original) (internal alteration and citation omitted). "But even a single common question is sufficient to satisfy the requirement." Byorth, 333 F.R.D. at 528; accord Mazza v. Am. Honda Motor Co., 666

F.3d 581, 589 (9th Cir. 2012) ("commonality only requires a single significant question of law or fact.").

"Whether a question will drive the resolution of the litigation necessarily depends on the nature of the underlying legal claims that the class members have raised." Jimenez v. Allstate Ins. Co., 765 F.3d 1161, 1165 (9th Cir. 2014). Here, plaintiffs assert class claims pursuant to California's UCL, FAL, and CLRA, Missouri's MMPA, and Massachusetts' MCPA, as well as common law fraudulent concealment claims pursuant to California and Missouri law. To determine whether common questions exist so as to warrant class treatment, the Court therefore looks to the nature of each of these claims to determine if certification could facilitate the resolution of plaintiffs' claims in "one stroke." See Dukes, 564 U.S. at 350.

In certain circumstances, "an omission [may] be actionable under California fraudulent concealment[.]" Ahern v. Apple Inc., 411 F. Supp. 3d 541, 561 (N.D. Cal. 2019). A fraudulent omission may also form the basis for UCL, CLRA, and FAL claims. See Tait v. BSH Home Appliances Corp., No. 8:10-cv-00711-DOC, 2011 WL 3941387, at *2 (C.D. Cal. Aug. 31, 2011). Moreover, "courts often analyze these three statutes together." Elias v. Hewlett-Packard Co., 950 F. Supp. 2d 1123, 1132 (N.D. Cal. 2013).

Similarly, a fraudulent omission is actionable under Missouri law.[9] See Snelling v. HSBC Card Servs., Inc., No. 4:14-cv-431-CDP, 2015 WL 3621091, at *5 (E.D. Mo. June 9, 2015). And, a fraudulent omission may serve as the basis for an MMPA claim. See Pfitzer v. Smith & Wesson Corp., No. 4:13-cv-676-JAR, 2014 WL 636381, at *3 (E.D. Mo. Feb. 18, 2014) ("The MMPA is a broad statute, prohibiting . . . 'the . . . concealment, suppression, or omission of any material fact in connection with the sale or advertisement of any merchandise in trade or commerce.'") (internal citations omitted). Similarly, a fraudulent omission may give rise to an MCPA claim under Massachusetts law. See Tomasella v. Nestle USA, Inc., 364 F. Supp. 3d 26, 33 (D. Mass. 2019) ("Deception liability under [the MCPA] is not limited to false or misleading affirmative statements. A business may also violate [the MCPA] through an omission, as when it 'fails to disclose to a buyer or prospective buyer any fact, the disclosure of which may have influenced the

[9] Missouri law does not recognize fraudulent omission as a separate tort—instead, Missouri courts treat it as a species of fraudulent misrepresentation. See Hess v. Chase Manhattan Bank, USA, N.A., 220 S.W.3d 758, 765 (Mo. 2007) (en banc).

buyer or prospective buyer not to enter into the transaction.'") (internal citation and alterations omitted).

Here, the gravamen of plaintiffs' claims is that Emerson's use of Ryconox in its compressors damages Carrier's HVAC systems, that Carrier knew of this defect but did not disclose it to consumers, and that "a reasonable consumer would not have accepted one of these air conditioners if Carrier disclosed the presence of this unapproved chemical contaminant." Mot. at 1–3. Resolution of plaintiffs' fraudulent concealment claims and plaintiffs' related consumer protection claims therefore turn, in part, on factual questions such as, *inter alia*: (1) whether the presence of Ryconox in Carrier's HVAC systems caused a defect; (2) whether Carrier knew of the defect; (3) and whether Carrier concealed the defect. Such common questions satisfy Rule 23's commonality requirement. See, e.g., Alger v. FCA US LLC, No. 2:18-cv-00360-MCE-EFB, 2020 WL 799175, at *4 (E.D. Cal. Feb. 18, 2020) ("The core of Plaintiff's case is that the design of the AHR Systems in Class Vehicles is defective, Chrysler knew (or should have known) about the defect, and Chrysler failed to disclose material information. As such, there are similar common questions that can be identified, such as: (a) whether the AHR System is defective; (b) whether Chrysler was aware of the defect; [and] (c) whether Chrysler concealed or omitted information about the defect[.]"); accord Salas v. Toyota Motor Sales, U.S.A., Inc., No. 2:15-cv-08629-FMO-E, 2019 WL 1940619, at *5 (C.D. Cal. Mar. 27, 2019) ("Here, there are several questions of fact . . . that are common to the class, including: whether a defect exists in the Toyota Camry XV 50, whether Toyota knew about it, [and] whether Toyota concealed the defect[.]").

Resolution of these factual questions, then, may likewise inform the disposition of class-wide legal questions, such as Carrier's liability. See, e.g., Alger, 2020 WL 799175, at *5 (finding commonality satisfied in automobile defect case because "there are similar common questions that can be identified, such as . . . whether Chrysler's conduct was unlawful and amounted to violation of the CLRA and UCL."). That is because California, Missouri, and Massachusetts law each recognize that plaintiffs' consumer protection and fraudulent concealment claims may be based on a fraudulent omission.[10] Thus, if the finder

[10] Plaintiffs also assert negligent misrepresentation claims pursuant to California and Missouri law. See Class Cert. Notice. However, neither plaintiffs nor Carrier appear to

of fact were to determine that, as a factual matter, the presence of Ryconox does *not* constitute a defect, then that would necessarily resolve plaintiffs' legal claims. See McVicar v. Goodman Glob., Inc., No. 13-cv-1223-DOC-RNB, 2015 WL 4945730, at *7 (C.D. Cal. Aug. 20, 2015) ("there are common questions . . . specifically, Plaintiffs' evidence proposing that *all* the coils had a propensity to leak refrigerant due to formicary corrosion and prematurely fail—the 'truth or falsity' of which 'will resolve an issue that is central to the claims' validity.'") (emphasis in original) (internal alterations and citations omitted).

Carrier challenges commonality on a number of grounds. For example, Carrier contends that "[p]laintiffs have not shown and cannot show sufficiently uniform exposure to statements made by Carrier prior to class members' decision to purchase an HVAC system." Opp. at 9. Carrier likewise argues that plaintiffs "fail to establish common evidence of materiality and the related issues of reliance/causation" and that plaintiffs' proffered theories of injury "require different proofs, making class treatment completely inappropriate." Id. at 19, 24.

Carrier's arguments relate to the Court's predominance inquiry pursuant to Rule 23(b)(3), rather than the Court's commonality inquiry pursuant to Rule 23(a)(2). See Mazza, 666 F.3d at 589 ("Honda argues that the 'crucial question' of '*which* buyers saw or heard *which* advertisements' is not susceptible to common resolution. . . . Even assuming arguendo that we were to agree with Honda's 'crucial question' contention, the individualized issues raised go to [predominance] under Rule 23(b)(3), not to whether there are common issues under Rule 23(a)(2).") (emphases in original); see also Wolin v. Jaguar Land Rover N. Am., LLC, 617 F.3d 1168, 1172 (9th Cir. 2010) ("Rule 23(a)(2) asks whether there are issues common to the class, Rule 23(b)(3) asks whether these common questions predominate. Though there is substantial overlap between the two tests, the 23(b)(3) test is 'far more demanding[.]'"). And, even assuming *arguendo* that Carrier's challenges regarding exposure, materiality, reliance, and injury are meritorious, they do not undermine the Court's conclusion that common questions of fact exist regarding the alleged defect in this case, the impact on HVAC functionality caused by Carrier's use of Ryconox. That one common question of fact regarding the existence of a defect satisfies

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suggest that the Court's certification analysis materially differs as between plaintiffs' fraudulent concealment-based claims and plaintiffs' negligent misrepresentation claims.

the commonality requirement.[11] See Torres v. Mercer Canyons Inc., 835 F.3d 1125, 1133 (9th Cir. 2016) ("To satisfy Rule 23(a)(2) commonality, even a single common question will do.") (internal quotations marks, alterations, and citations omitted).

For the foregoing reasons, the Court concludes that plaintiffs have satisfied Rule 23's commonality requirement. See Marshall v. Northrop Grumman Corp., No. 2:16-cv-06794-AB-JC, 2017 WL 6888281, at *6 (C.D. Cal. Nov. 2, 2017) ("commonality . . . is a 'permissive standard.'"); accord Parkinson v. Hyundai Motor Am., 258 F.R.D. 580, 594 (C.D. Cal. 2008) (describing "Rule 23(a)'s commonality requirement" as a "low bar").

c. Typicality

"Rule 23(a)(3) provides that class members may sue as representative parties only if the claims or defenses of the representative parties are typical of the claims or defenses of the class." B.K. by next friend Tinsley v. Snyder, 922 F.3d 957, 969 (9th Cir. 2019) (internal citations omitted). "The named plaintiff's representative claims are 'typical' if they are 'reasonably coextensive with those of absent class member; they need not be substantially identical." Id. at 969–970. "The test for typicality is whether other members have the same or similar injury, whether the action is based on conduct which is not unique to the named plaintiffs, and whether other class members have been injured by the same course of conduct." Sandoval v. Cty. of Sonoma, 912 F.3d 509, 518 (9th Cir. 2018)

[11] The Court previously determined that the Oddo plaintiffs had failed to establish commonality because "homebuyers and purchasers of HVAC systems are too differently situated with respect to issues of exposure, materiality, and injury such that their claims are not capable of class-wide resolution." Oddo Cert. Order at 13. While the Court maintains these concerns, in light of the Court's conclusion that the existence of a defect presents a common question of fact, however, the Court concludes that issues relating to class-wide exposure, materiality, and injury relate to the Court's predominance analysis. See In re ConAgra Foods, Inc., 90 F. Supp. 3d at 973 n. 169 ("ConAgra asserts that plaintiffs have not met their burden of providing evidence that there is a 'common' question that can resolve in 'one stroke' all of the [p]laintiffs' claims . . . [and] identifies a myriad of individual reliance, causation, materiality, and damages issues that it contends affect each of plaintiffs' claims. . . . [H]owever, questions of individualized reliance, causation, materiality, and damages are best addressed in conducting a Rule 23(b) predominance inquiry.") (internal quotation marks, citations, and alterations omitted omitted).

(internal citation and quotation marks omitted). A "named plaintiff's motion for class certification should not be granted if there is a danger that absent class members will suffer if their representative is preoccupied with defenses unique to it." Nghiem v. Dick's Sporting Goods, Inc., 318 F.R.D. 375, 381 (C.D. Cal. 2016) (internal citation omitted). To determine whether plaintiffs have satisfied Rule 23(a)'s typicality requirement, the Court looks to plaintiffs' proposed classes and plaintiffs' proposed class representatives.

i. Oddo and Klinge

Here, plaintiffs offer named plaintiffs Oddo and Klinge as the respective representatives of plaintiffs' proposed California and Missouri classes. Class Cert. Notice at 1. Oddo is an AOR purchaser who purchased his Arcoaire unit "in-person . . . from United Refrigeration, Inc." Dkt. 215-10 ("Oddo Interrogatory Resp.") No. 1. Klinge is likewise an AOR purchaser who purchased his ICP unit from "United Refrigeration, Inc." Dkt. 215-8 ("Klinge Interrogatory Resp.") No. 1. Plaintiffs' proposed California and Missouri classes include both AOR purchasers—persons who directly purchased Carrier HVAC systems—*and* RNC purchasers who acquired a Carrier air conditioner in connection with the purchase of a new home. See Class Cert. Notice at 1.

As a preliminary matter, Carrier argues that plaintiffs cannot establish typicality because Oddo and Klinge are "subject to unique causation defenses." Mot. at 33. That is because, according to Carrier, Oddo and Klinge "self-installed their units" which "voids Carrier's warranties and is 'highly unusual.'" Id. Carrier relies on Schneyer's opinion that Oddo and Klinge's self-installation "(a) could have contributed and/or potentially caused a frozen coil; and (b) are presently causing their systems to operate inefficiently." Schneyer Report ¶ 73. In response, plaintiffs contend that their "claims do not arise out [of] design or installation of their systems; they arise out of Carrier's failure to disclose the presence of an unapproved contaminant." Reply at 33. Plaintiffs therefore aver that they "do not seek damages based on the amount of performance loss either, nor the cost to repair an installation either." Id. Accordingly, to the extent that Carrier would be permitted to question Oddo and Klinge regarding these issues at trial, the Court concludes that these issues do not, alone, defeat typicality as to Oddo and Klinge. See In re Yahoo Mail Litig., 308 F.R.D. 577, 594 (N.D. Cal. 2015) ("Even assuming Yahoo was correct and Plaintiffs might be subject to a unique defense, the Court is not persuaded that this alone defeats Plaintiffs' showing of typicality.").

In the Court's previous order denying the Oddo plaintiffs' motion for class certification, the Court noted that, "in addition to seeking to represent persons who directly purchased Carrier HVAC systems, [the Oddo] plaintiffs also seek to represent persons who bought new homes with Carrier HVAC systems already installed." Oddo Cert. Order at 13. The Court determined that "the claims of the Oddo plaintiffs—who purchased new HVAC units—are not typical of the claims of new homebuyers who may have never been exposed to any Carrier materials during the homebuying process, much less attached the same level of importance, if any, to a disclosure of the alleged defect as would a purchaser of an HVAC unit." Id. at 13–14.

Plaintiffs contend that "[t]he typicality requirement does not mandate that the methods of purchase of the named plaintiffs must be the same as those of absent class members." Reply at 35 (internal citation and alteration omitted). While the Court agrees that Rule 23(a)(3) does not require, as a precondition to certification, that either the channel of distribution of the product at issue or the character of class members be identical between all named plaintiffs and the class, such disparities are relevant to the Court's typicality analysis. See, e.g., In re Graphics Processing Units Antitrust Litig., 253 F.R.D. 478, 489 (N.D. Cal. 2008) (finding typicality not met where named plaintiffs were individual consumers that purchased product on defendant's website and proposed class would also include wholesale purchasers that individually-negotiated purchases with defendant because "[t]hese overwhelming disparities defeat typicality."); accord In re Optical Disk Drive Antitrust Litig., 303 F.R.D. 311, 318 (N.D. Cal. 2014) (determining that "the disparity between the named class members would preclude certification of the class as currently proposed" where named plaintiffs purchased products "through a defendant's distribution subsidiary or retail website" and "the putative class encompasses a myriad of other . . . purchasers whose . . . means of . . . purchases do not compare.").[12]

[12] Carrier further contends that Klinge is subject to unique "reliance and causation defenses" because, according to Carrier, "Klinge did not review Carrier brochures or marketing materials before his purchase[.]" Opp. at 33. However, during deposition, Klinge testified that he spent "maybe eight hours" researching potential HVAC units online although he could not remember definitively whether he visited Carrier's official website during his initial research. Dkt. 245-33, Klinge Deposition Transcript ("Klinge Dep. Tr.") at 56:5–59:21.

Other courts have noted the distinctions between AOR and RNC purchasers. See, e.g., McVicar, 2015 WL 4945730, at *12 (declining to certify putative class of RNC purchasers because, *inter alia*, "many members of the class never purchased the air conditioners, and instead, purchased real property already containing one[.]"). Because the proposed California and Missouri classes include both AOR and RNC purchasers, the Court concludes that, as AOR purchasers, neither Oddo's nor Klinge's claims are typical of those of the class. See Allied Orthopedic Appliances, Inc. v. Tyco Healthcare Grp. L.P., 247 F.R.D. 156, 178 (C.D. Cal. 2007) ("Plaintiffs fail to meet the typicality requirement . . . [because] the variability in circumstances and interests of the putative class members invalidates the inference of typicality required by Rule 23[.]").

That the Court has determined that Oddo's and Klinge's claims are not typical of those of plaintiffs' proposed California and Missouri classes does not, itself, require denial of plaintiffs' motion, however. That is because plaintiffs seek to certify, in the alternative, a California AOR Purchaser Class and a Missouri AOR Purchaser Class with Oddo and Klinge as the proposed representatives. See Class Cert. Notice at 2. The Court concludes that the claims of Oddo and Klinge are typical of the respective proposed California AOR Purchaser and Missouri AOR Purchaser Classes. See PB Prop. Mgmt., 2016 WL 7666179, at *25 (finding that named plaintiffs satisfied typicality requirement with respect to proposed class consisting only of real property owners in omissions case challenging HVAC manufacturer's sale of defective systems because "the alleged omission is the same" and plaintiffs "assert that Defendants failed to disclose the fact that Goodman copper evaporator coils are defectively prone to develop formicary corrosion.").

ii. Cormier

Plaintiffs seek certification of the proposed Massachusetts Class with Cormier as its representative. See Class Cert Notice at 1. Cormier is an RNC purchaser who acquired "a Bryant-branded HVAC System in connection with the purchase of [a] new-construction home for $364,375.00." Dkt. 215-11 ("Cormier Interrogatory Resp.") No. 1. Cormier contends that this purchase price included the price of his Bryant HVAC System. Id. According to Cormier, "prior to purchase, he conducted a detailed inspection of his new home, including a detailed inspection . . . of his HVAC System . . . which included, for example, a visual inspection of the indoor and outdoor unit and product labeling, data plates, and stickers thereon." Id. No. 2.

The Court has already concluded that, to the extent that plaintiffs' proposed California and Missouri classes include both AOR and RNC purchasers, plaintiffs fail to establish typicality because Oddo and Klinge are AOR purchasers. Thus, plaintiffs' proposed Massachusetts Class, which includes both AOR and RNC purchasers, suffers from a related typicality defect because Cormier is an RNC purchaser. See In re Sears, Roebuck & Co. Tools Mktg. & Sales Practices Litig., No. 05-cv-02623, 2007 WL 4287511, at *6 (N.D. Ill. Dec. 4, 2007) ("Courts . . . have held that typicality does not exist where a putative class is exposed to a varied mix of representations communicated through different channels and absorbed in different ways and to different degrees.").

Moreover, in its order denying the Cormier plaintiffs' motion for class certification, the Court determined that "Cormier, in particular, fails to satisfy the typicality requirement because he is unlikely to establish causation under the [MCPA]." Cormier Cert. Order at 7. The Court noted that Cormier testified during deposition that he "was not exposed to any of Carrier's materials until after he had already negotiated and agreed to the purchase price of his new home" and that "he would have not tried to renegotiate the price of his home based on anything he learned during the course of this inspection." Id. And, although a plaintiff asserting an MCPA claim "need not show 'actual reliance' on [a] defendant's allegedly deceptive practice," a plaintiff must "prove that the defendant's unfair or deceptive act caused an adverse consequence or loss." Estrada v. Progressive Direct Ins. Co., 53 F. Supp. 3d 484, 501 (D. Mass. 2014). Accordingly, based on this deposition testimony, the Court concluded that "Cormier is . . . subject to a unique defense of failure to demonstrate causation[.]" Cormier Cert. Order at 8.

Plaintiffs characterize Cormier's deposition testimony as "an out-of-context snippet . . . proffered by Carrier that omitted the most critical aspect of [Cormier's] testimony." Mot. at 19. According to plaintiffs, the reason [Cormier] testified that he 'wasn't going to try to renegotiate the price based on the home inspection' was *because the inspection did not reveal any defect*." Id. (emphasis in original) (internal citation and alteration omitted). Plaintiffs therefore contend that "[t]here is no typicality problem, nor will [Cormier] be subject to any unique causation defense. Carrier simply elided his relevant testimony and mischaracterized his testimony about the inspection by failing to note that there was nothing to renegotiate because the inspection turned up no issue." Id.

In response, Carrier contends that "it is enough that Cormier is 'uniquely vulnerable,' and that there is [a] 'serious dispute' over a defense that could 'become the

focus' of the [MCPA] litigation." Opp. at 33 (internal citations omitted). The Court agrees. Indeed, "the typicality inquiry does not demand proof that a defense will ultimately defeat the class representative's claims. Instead, it asks only whether plaintiff is likely to be preoccupied with litigating the defense to the detriment of the class as a whole." Cholakyan v. Mercedes-Benz, USA, LLC, 281 F.R.D. 534, 557 (C.D. Cal. 2012). "The fear is that the named plaintiff will become distracted by the presence of a possible defense applicable only to him so that the representation of the rest of the class will suffer." Santos v. TWC Admin. LLC, No. 2:13-cv-04799-MMM-CW, 2014 WL 12558009, at *21 (C.D. Cal. Aug. 4, 2014). Although the Court makes no determination, at this juncture, as to the merits of Carrier's causation defense to Cormier's MCPA claims, Carrier's assertion of this defense poses a risk of "derailing the claims of the class." Benedict v. Hewlett-Packard Co., 314 F.R.D. 457, 471 (N.D. Cal. 2016).

Accordingly, the Court concludes that Cormier's status as an RNC purchaser coupled with potential issues regarding lack of causation specific to Cormier preclude a finding of typicality with respect to plaintiffs' proposed Massachusetts Class. Moreover, plaintiffs do not alternatively seek to certify a Massachusetts AOR Purchaser Class.

d. Adequacy

Rule 23(a)(4) requires that "the representative parties . . . fairly and adequately protect the interests of the class." Fed. R. Civ. P. 23(a)(4). In determining adequacy, courts resolve two questions: "(1) do the named plaintiffs and their counsel have any conflicts of interest with other class members and (2) will the named plaintiffs and their counsel prosecute the action vigorously on behalf of the class?" In re Hyundai & Kia Fuel Econ. Litig., 926 F.3d at 566.

Here, Carrier does not contest adequacy aside from its contentions that unique defenses exist with respect to Oddo, Klinge, and Cormier. Carrier does not, for example, suggest that either Oddo, Klinge, Cormier, or their counsel have any conflicts of interest with other class members. Nor does Carrier appear to otherwise dispute that Oddo, Klinge, or Cormier would vigorously prosecute this action on behalf of the class.

Plaintiffs have therefore satisfied Rule 23(a)(4)'s adequacy requirement.

2. Rule 23(b)(3) Requirements

If the requirements of Rule 23(a) are met, a class action may be certified if the Court "finds that the questions of law or fact common to class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy." Fed. R. Civ. P. 23(b)(3). Having determined that plaintiffs have satisfied Rule 23(a)'s requirements with respect to the proposed California AOR Purchaser and Missouri AOR Purchaser Classes, the Court next determines whether these classes satisfy Rule 23(b)(3).

a. Predominance

"Rule 23(b)(3)'s predominance requirement requires courts to ask 'whether the common, aggregation-enabling issues in the case are more prevalent or important than the non-common, aggregation-defeating, individual issues.'" Senne v. Kansas City Royals Baseball Corp., 934 F.3d 918, 938 (9th Cir. 2019). "An individual question is one where 'members of a proposed class will need to present evidence that varies from member to member,' while a common question is one where 'the same evidence will suffice for each member to make a prima facie showing or the issue is susceptible to generalized, class-wide proof.'" Tyson Foods, Inc. v. Bouaphakeo, 136 S. Ct. 1036, 1045 (2016) (internal citation and alterations omitted). "Because no precise test can determine whether common issues predominate, the Court must pragmatically assess the entire action and the issues involved." Chavez v. Smurfit Kappa N. Am. LLC, No. 2:18-cv-05106-SVW-SK, 2019 WL 4570024, at *4 (C.D. Cal. July 5, 2019). "Considering whether 'questions of law or fact common to class members predominate' begins, of course, with the elements of the underlying cause of action." Erica P. John Fund, Inc. v. Halliburton Co., 563 U.S. 804, 809 (2011). With these principles in mind, the Court therefore looks to the claims of the California and Missouri AOR Purchaser Classes to determine whether plaintiffs have satisfied Rule 23(b)(3)'s predominance requirement.

i. Duty to Disclose

Plaintiffs' fraudulent concealment, UCL, FAL, CLRA, and MMPA claims are each premised on an omission theory[13] and therefore require that Carrier had a duty to disclose

[13] The Court previously dismissed plaintiffs' claims based on an affirmative misrepresentation theory. See Oddo MTD Order; Cormier MTD Order. During oral

the alleged defect in this case.[14] Here, plaintiffs "assert three independent bases for Carrier's duty to disclose the defect: (1) Carrier had exclusive knowledge of material facts not known or reasonably accessible to [plaintiffs]; (2) Carrier actively concealed material facts; and/or (3) Carrier made partial representations (i.e., the energy efficiency labels) that were misleading because other material facts had not been disclosed." Reply at 7 n.7. The Court therefore proceeds to determine whether individual questions regarding Carrier's alleged duty to disclose predominate over common questions.[15]

a) California AOR Purchaser Class

In Wilson v. Hewlett-Packard Co., the Ninth Circuit noted that "California courts have generally rejected a broad obligation to disclose[.]" 668 F.3d 1136, 1141 (9th Cir. 2012). The Ninth Circuit observed that "California federal courts have generally

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argument, plaintiffs' counsel confirmed that plaintiffs were only pursuing omissions-based claims. Dkt. 289 ("Hearing Tr.") at 6:20–22. To the extent that plaintiffs are pursuing omission-based negligent misrepresentation claims, neither plaintiffs nor Carrier argue that the Court's analysis should distinguish between plaintiffs' negligent misrepresentation claims and plaintiffs' fraudulent concealment and consumer protection claims.

[14] See Andren v. Alere, Inc., 207 F. Supp. 3d 1133, 1141 (S.D. Cal. 2016) ("In order to state a claim of fraudulent omissions under the UCL/FAL, CLRA, or as a claim of common law fraud, a plaintiff must allege facts either showing that the alleged omissions are contrary to a representation actually made by the defendant, or showing an omission of a fact the defendant was obliged to disclose."); In re Bisphenol-A (BPA) Polycarbonate Plastic Prod. Liab. Litig., 687 F. Supp. 2d 897, 907 (W.D. Mo. 2009) ("Under Missouri law, silence becomes misrepresentation only when there is a duty to speak, such as when one of the parties has superior knowledge or information not within the fair and reasonable reach of the other party.") (internal citation and alterations omitted).

[15] Plaintiffs contend that in Carrier's opposition to plaintiffs' previous certification motion, "Carrier did not dispute . . . that the duty to disclose is a common issue subject to class-wide evidence." Mot. at 6 n.5. The Court, however, "has a duty to evaluate independently the proposed class to ensure its compliance with the procedural rules." Charles Alan Wright & Arthur R. Miller, Federal Practice and Procedure § 1785 (3d ed. 2020).

interpreted" California law "as holding that a manufacturer's duty to consumers is limited to its warranty obligations absent either an affirmative misrepresentation or a safety issue." Id. (internal citations, alterations, and quotation marks omitted).

The Ninth Circuit subsequently considered the contours of a manufacturer's duty to disclose, pursuant to California law, in Hodsdon v. Mars, Inc., 891 F.3d 857 (9th Cir. 2018). In that case, a putative class of consumers challenged a food manufacturer's failure to disclose that products in the manufacturer's food chain may be the product of child or slave labor as violations of the CLRA, UCL, and FAL. Id. at 859. The Ninth Circuit characterized Wilson as imposing a "safety-hazard requirement" and recognized that litigants had interpreted Wilson as requiring that in order to trigger a duty to disclose in a pure omissions case, plaintiffs "must always allege that the undisclosed information 'caused an unreasonable safety hazard.'" Mars, 891 F.3d at 861. The Ninth Circuit acknowledged that while "the recent California cases do cast doubt on whether Wilson's safety-hazard requirement applies in all circumstances, we have no occasion in this case to consider whether the later state-court cases have effectively overruled Wilson." Mars, 891 F.3d at 861–62. That is because the plaintiff in Mars "has not sufficiently alleged that the defect in question—the existence of child labor in the supply chain—affects the central functionality of the chocolate products." Id. at 862.

Relying on two post-Wilson opinions from the California Court of Appeal—Rutledge v. Hewlett-Packard Co., 238 Cal. App. 4th 1164 (2015) and Collins v. eMachines, Inc., 202 Cal. App. 4th 249 (2011)—the Ninth Circuit determined that "[w]hile Collins and Rutledge are somewhat vague about the test for determining whether a defendant has a duty to disclose, they sanction a UCL omission claim when: the plaintiff alleges that the omission was material; second, the plaintiff must plead that the defect was central to the product's function; and third, the plaintiff must allege one of the four LiMandri factors."[16]

[16] In LiMandri v. Judkins, the California Court of Appeal concluded that "[t]here are four circumstances in which nondisclosure or concealment may constitute actionable fraud: (1) when the defendant is in a fiduciary relationship with the plaintiff; (2) when the defendant had exclusive knowledge of material facts not known to the plaintiff; (3) when the defendant actively conceals a material fact from the plaintiff; and (4) when the defendant makes partial representations but also suppresses some material facts." 52 Cal. App. 4th 326, 336 (1997).

Mars, 891 F.3d at 863. Assuming *arguendo* that California law imposes a duty to disclose on a manufacturer where the omitted information does not concern a safety defect, such as where the information "affects the product's central function," the Ninth Circuit concluded that allegations regarding "the existence of slave or child labor" in the supply chain of a food product do not satisfy such a requirement. Id. at 864. The Ninth Circuit reasoned that "the central functionality of the product is not based on subjective preferences about a product. A computer chip that corrupts the hard drive, or a laptop screen that goes dark, renders those products incapable of use by any consumer; some consumers of chocolate are not concerned about the labor practices used to manufacture the product." Id. Accordingly, the Ninth Circuit concluded "that in this pure omissions case concerning no physical product defect relating to the central function of the chocolate and no safety defect, [p]laintiff has not sufficiently pleaded that Mars had a duty to disclose," and "[a]bsent a duty to disclose, [p]laintiff's CLRA, UCL, and FAL claims are foreclosed." Mars, 891 F.3d at 865.

Several district courts have interpreted Mars as recognizing, in a pure omissions case, a duty to disclose under California law where an alleged defect does not present a safety hazard but nonetheless relates to a product's central function. See, e.g., Sosenko v. LG Elecs. U.S.A., Inc., No. 8:19-cv-00610-JLS-ADS, 2019 WL 6118355, at *3 n.2 (C.D. Cal. Aug. 29, 2019) ("In Hodsdon v. Mars, Inc., . . . the Ninth Circuit recognized developments in California law and relaxed Wilson's safety hazard requirement in holding that manufacturers may also have a duty to disclose defects manifesting beyond the express warranty period that affect a product's 'central functionality.'"); accord Norcia v. Samsung Telecommunications Am., LLC, No. 14-cv-00582-JD, 2018 WL 4772302, at *1 (N.D. Cal. Oct. 1, 2018) (citing Mars and determining that "Wilson's safety hazard pleading requirement is not necessary in *all* omission cases.") (emphasis in original); In re Apple Inc. Device Performance Litig., 386 F. Supp. 3d 1155, 1176 (N.D. Cal. 2019). Other courts have not interpreted Mars so broadly. See Browning v. Unilever United States, Inc., No. 16-cv-02210-AG-KES, 2018 WL 6615064, at *3 (C.D. Cal. Dec. 17, 2018) (concluding that Mars "does not go as far as Plaintiffs say in removing the safety hazard requirement for omission-based claims.").

Importantly, the Ninth Circuit in Mars did not overrule its prior holding in Wilson. See Mars, 891 F.3d at 862 ("Therefore, without . . . overruling Wilson, we hold that [p]laintiff has not established that Mars had a duty to disclose the labor practices [.]"). And, the alleged defect in this case—the presence of Ryconox, which may or may not cause

failure in some or all of Carrier's HVAC systems—indisputably does not present a safety hazard that would trigger a duty to disclose pursuant to the Ninth Circuit's interpretation of California law in Wilson. Even assuming *arguendo* that California law recognizes a duty to disclose where an alleged defect does not present a safety hazard but instead relates to a product's central function, plaintiffs fail to establish the existence of such a duty to disclose in this case is capable of class-wide proof.

The Court finds instructive Ahern v. Apple Inc., 411 F. Supp. 3d 541 (N.D. Cal. 2019). In that case, a putative class of consumers brought suit against Apple and asserted claims for, *inter alia*, fraudulent concealment and violations of the UCL, CLRA, and FAL based on Apple's failure to disclose a "filter defect." Ahern, 411 F. Supp. 3d at 550. There, the consumers averred that Apple's failure to install "fans and vents" in its computers allowed the fans to "suck in dirt and debris" which resulted in the dirt and debris "getting stuck behind the screen, causing permanent dark smudging to appear in the corners of the screens." Ahern, 411 F. Supp. 3d at 550 (internal citations and alterations omitted). Citing Mars, the court determined that "under California law, a defendant only has a duty to disclose material defects that impair the product's central function or that implicates the consumer's safety." Id. at 567. The court reasoned that "such a defect is one that renders those products incapable of use by any consumer." Id. (internal citation and quotation marks omitted) Accordingly, the court determined that the filter defect at issue, which resulted in "dark smudging," did not affect the computers' central function because the filter defect did not "obliterate the function of a computer as a computer." Id. at 568. Thus, "[w]hile such smudges may appear unreasonable to [consumers,] the 'central functionality of a product' depends 'not on subjective preferences about a product,' and 'some consumers of Apple computers are not concerned about dark smudges in the corners of displays.'" Id. (internal alterations omitted). The court concluded that "Apple did not have a duty to disclose the alleged Filter Defect under the facts alleged here," dismissing the consumers' California omission-based claims. Id.

Another district court, applying California law, recently reached a similar conclusion in a multidistrict proceeding where consumers brought a putative class action against Intel, a computer component hardware manufacturer. See In re Intel Corp. CPU Mktg., Sales Practices & Prod. Liab. Litig., No. 3:18-MDL-2828-SI, 2020 WL 1495304 (D. Or. Mar. 27, 2020). In that case, consumers challenged Intel's failure to disclose that its microprocessors allegedly suffered from certain security vulnerabilities. Id. at *1. In particular, plaintiffs averred that Intel's processors suffered from two primary design

defects: "First, the design of the processors heightens the risk of unauthorized access to protected memory secrets. Second, the design does not completely delete, or undo, the memory's recent retrieval of those secrets, also increasing the risk of unauthorized access." Id. According to the consumers, "Intel knew about the first design flaw since at least 2006, when Intel moved to multi-core processors," and "Intel knew about the second design flaw since at least 1995." Id.

The consumers asserted claims for, *inter alia*, fraudulent concealment and violations of the CLRA, UCL, and FAL. Intel Corp., 2020 WL 1495304, at *1. The court noted that the consumers' fraudulent concealment and omission-based CLRA, UCL, and FAL required that Intel had a duty to disclose, and, citing Mars, explained that "Intel had a duty to disclose if the omissions were material, related to a central defect, and at least one of the LiMandri factors was present." Intel Corp., 2020 WL 1495304, at *17. The court reasoned that the consumers "allege that one of the alleged flaws has existed in Intel's CPUs since 1995 and the other since 2006. Consumers have thus been using devices with Intel's microprocess that included one of the alleged defects for more twenty years and the other alleged defect (or both) for more than 10 years." Id. The court therefore concluded that Intel's failure to disclose the alleged defects did not give rise to a duty to disclose because "the allegations do not go to the central functionality of a microprocessor and do not show that the chips were incapable of use. To the contrary, Plaintiffs' allegations show that they and others have been extensively using Intel's chips despite the alleged defect." Id.

Plaintiffs rely on Sikorsky's testimony to establish the existence of class-wide methods of proof to show that all class members' HVAC systems containing Ryconox are defective. However, Sikorsky's testimony is based on his opinion that a fraction of those units have suffered, or will suffer, an acute failure at some undetermined point in time after installation and that virtually all of the HVAC systems will suffer performance losses due to Ryconox deposits. Sikorsky does not, however, opine that all, or virtually all, of the HVAC units containing Ryconox have, or will suffer acute failure, or that they will be rendered incapable of use.

Further, Sikorsky opines, based on Carrier's own internal testing and documents, that "*at least* about [redacted] of all 1.5-2.5 ton units containing Ryconox have failed" and that "the evidence shows that consumers have experienced performance loss and do not know it." Sikorsky Report ¶ 18(B). Indeed, while Sikorsky opines that up to [redacted] of the HVAC systems at issue in this case may, sometime in the future, suffer acute failure due to the

allegedly defective TXVs, Sikorsky also urges that "[i]n many, if not most instances, consumers do not know that their HVAC systems are impacted by Ryconox deposits on the TXV." Id. ¶ 70. That many members of the proposed classes have continued using the allegedly defective HVAC systems without "know[ing] that their HVAC systems are impacted by Ryconox deposits on the TXV" further indicates that the defect in this case does not render many of the proposed class members' HVAC systems "incapable of use" so as to affect the HVAC systems' central functionality and therefore does *not* impose on Carrier a duty to disclose pursuant to California law. Cf. Ahern, 411 F. Supp. 3d at 568 (noting that California law imposes a duty to disclose an alleged defect only where the defect "renders those products incapable of use by any consumer."); Intel, 2020 WL 1495304, at *17 (finding that no duty to disclose existed where "the allegations do not go to the central functionality of a microprocessor and do not show that the chips were incapable of use. To the contrary, Plaintiffs' allegations show that they and others have been extensively using Intel's chips despite the alleged defect.").

Assuming *arguendo* that a failure rate of [redacted] in HVAC systems ranging in size from 1.5 to 2.5 tons is sufficient to impose a duty to disclose as to those units, plaintiffs seek to certify classes consisting of purchasers of "1.5- to 5-ton air conditioner condensing units and Small Packaged units," Class Cert. Notice at 1, presenting additional issues regarding any alleged duty to disclose under California law. Sikorsky opines that "[w]hile larger systems may take longer to manifest severe failures, this does not mean they are not defective." Sikorsky Report ¶ 18. Sikorsky points to a series of internal Carrier documents which allegedly demonstrate "that the Ryconox issue is not limited to 1.5 to 2.5 ton systems." Id. ¶ 82. However, Sikorsky acknowledges that [redacted] Id. ¶ 83. And while Sikorsky opines that "3 to 5 ton systems containing Ryconox are just as defective as 2 and 2.5 ton systems," he concedes that "they may manifest symptoms later or differently." Id. ¶ 86.

This evidence demonstrates that the failure rate of the HVAC systems at issue in this case may differ among the range of units that make up plaintiffs' proposed classes, meaning that a duty to disclose, pursuant to California law, may exist as to some, but not all, of the proposed class members' HVAC systems. Further, Sikorsky has offered no method to determine which class members' HVAC systems will suffer acute failure. Thus,

individualized inquiries would be necessary to determine whether a duty to disclose exists as to a particular class member's HVAC system. See In re Seagate Tech. LLC, 326 F.R.D. 223, 243 (N.D. Cal. 2018) (finding that individualized questions predominated in putative class action where consumers challenged hard drive manufacturer's "failure to disclose that drives were unreliable and had high failure rates" because [p]laintiffs have not presented classwide proof from which a finder of fact could conclude that the drivers' AFR was higher than Seagate represented, or otherwise sufficiently high to support [p]laintiffs' claims, across the full span of the class period and various products at issue.").

b) Missouri AOR Purchaser Class

Plaintiffs also seek to certify negligent misrepresentation, fraudulent concealment, and MMPA claims in connection with plaintiffs' proposed Missouri AOR Purchaser Class. See Class Cert. Notice at 3. Pursuant to Missouri law, a "duty to disclose arises from a classical fiduciary relationship, from a partial disclosure of information, or from particular circumstances such as where one party to a contract has superior knowledge and is relied upon to disclose this knowledge." Constance v. B.B.C. Dev. Co., 25 S.W.3d 571, 580 (Mo. Ct. App. 2000). "A duty exists also where one party expressly or by clear implication places a special confidence in the other." Id. Pursuant to Missouri law, a "claim for fraudulent omission which alleges one party withheld information based on superior knowledge requires the plaintiff to show that he exercised due diligence to discover the information." In re Gen. Motors Corp. Anti-Lock Brake Prod. Liab. Litig., 966 F. Supp. 1525, 1535 (E.D. Mo. 1997). Unlike California law, then, Missouri law does not appear to necessarily limit a manufacturer's duty to disclose to circumstances where a defect presents a safety hazard or where the defect fatally compromises a product's central functionality.

Here, plaintiffs adduce evidence that "[b]y late-spring or early-Summer of 2014 Carrier was aware of an increase in the number and rate of warranty claims for failed TXVs in residential air conditioners and heat pumps." Sikorsky Report ¶ 19. Moreover, "Carrier never disclosed the defect to consumers" and "Carrier labeled its service bulletins 'Confidential and Proprietary Information- Not for Further Distribution'" meaning that consumers presumably did not have access to Carrier's knowledge of the alleged defect in this case. Id. ¶ 75 n.7. The Court therefore assumes, without deciding, that whether a duty to disclose exists is a question susceptible to common proof with respect to plaintiffs' proposed Missouri AOR Purchaser Class.

ii. Reliance and Materiality

Carrier challenges predominance on the basis that plaintiffs "fail to establish common evidence of materiality and the related issues of reliance/causation." Opp. at 19. "[T]o establish predominance under Rule 23(b)(3), courts typically require that plaintiffs demonstrate that reliance and causation are subject to common proof." In re 5-Hour Energy Mktg. & Sales Practices Litig., No. 13-MDL-2438-PSG-PLA, 2017 WL 2559615, at *6 (C.D. Cal. June 7, 2017). The Court therefore looks to California and Missouri law to determine whether reliance and materiality, critical elements of the classes' claims, are subject to common proof sufficient to satisfy Rule 23(b)(3).

With respect to California law, "[a]n essential element for a fraudulent omission claim is actual reliance." Daniel v. Ford Motor Co., 806 F.3d 1217, 1225 (9th Cir. 2015) ("Daniel I"). "To prove reliance on an omission, a plaintiff must show that the defendant's nondisclosure was an immediate cause of the plaintiff's injury-producing conduct." Id. "A plaintiff need not prove that the omission was the only cause or even the predominant cause, only that it was a substantial factor in his decision." Id. "A plaintiff may do so by simply proving 'that, had the omitted information been disclosed, one would have been aware of it and behaved differently.'" Id. (internal citation omitted). "That one would have behaved differently can be presumed, or at least inferred, when the omission is material." Id. (internal citation omitted). "An omission is material if a reasonable consumer 'would attach importance to its existence or nonexistence in determining his choice of action in the transaction in question.'" Id. Similarly, the materiality of FAL, UCL, and CLRA claims is likewise governed by the "reasonable consumer" test. In re Coca-Cola Prod. Mktg. & Sales Practices Litig., No. 14-MDL-02555-JSW, 2020 WL 759388, at *10 (N.D. Cal. Feb. 14, 2020). Indeed, "[f]or purposes of class certification, the UCL, FAL, and CLRA are materially indistinguishable." Forcellati v. Hyland's, Inc., No. 2:12-cv-1983-GHK-MRW, 2014 WL 1410264, at *9 (C.D. Cal. Apr. 9, 2014).

Missouri law follows a similar approach with respect to MMPA claims. "The MMPA prohibits 'deception, fraud, false pretense, false promise, misrepresentation, unfair practice or the concealment, suppression, or omission of any material fact in connection with the sale of any merchandise." Huffman v. Credit Union of Texas, 758 F.3d 963, 967 (8th Cir. 2014) (internal citation and alteration omitted). "[MMPA] regulations define 'material fact,' in pertinent part, as 'any fact which a reasonable consumer would likely consider to be important in making a purchasing decision.'" Id. (internal citation omitted).

"Whether the conduct alleged is deceptive under the MMPA is to be analyzed under the 'reasonable consumer' standard." Webb v. Dr Pepper Snapple Grp., Inc., No. 4:17-cv-00624-RK, 2018 WL 1955422, at *3 (W.D. Mo. Apr. 25, 2018). "Under the MMPA, the reasonable consumer standard does not require plaintiffs to show individualized reliance upon the alleged fraud or misrepresentations[.]" Id. (internal alterations omitted). All that is required is that defendant make an omission of a material fact which "would be likely to induce a reasonable consumer to act, respond or change his/her behavior in any substantial manner." In re Simply Orange Juice Mktg. & Sales Practices Litig., No. 4:12-MDL-02361-FJG, 2018 WL 522785, at *2 (W.D. Mo. Jan. 23, 2018). "If a fact is not material under the MMPA, it also is not material under the common law because the definition of 'material fact' in the applicable MMPA regulations is broader than the materiality requirement of common law fraud." Anderson v. Ford Motor Co., No. 17-03244-cv-S-BP, 2020 WL 1853321, at *2 (W.D. Mo. Feb. 14, 2020).

In the class action context, "reliance and causation are susceptible to common proof only if the state law at issue follows a 'reasonable person' standard for assessing the materiality of the misstatement." In re 5-Hour Energy, 2017 WL 2559615, at *6. "If a statute uses a reasonable person standard, it is more likely to be subject to common proof because the inquiry into materiality is objective." Id. Because the UCL, FAL, CLRA, MMPA and California common law fraud claims follow the reasonable consumer standard, courts have determined that, in the context of these claims, reliance and causation may be susceptible to common proof. See, e.g., Id. at *7 (determining that because UCL, FAL, and CLRA "follow a reasonable consumer standard . . . a classwide-inference of reliance and causation is available . . . without individualized proof of deception, reliance, and injury.") (internal citations and quotation marks omitted); Cole v. Asurion Corp., 267 F.R.D. 322, 329 (C.D. Cal. 2010) (determining that plaintiff's California fraudulent omission claims were subject to presumption of classwide reliance sufficient to satisfy predominance requirement). Similarly, Missouri common law fraud and MMPA claims may likewise be susceptible to common proof. See Glen v. Fairway Indep. Mortg. Corp., 265 F.R.D. 474, 481 (E.D. Mo. 2010) (determining that MMPA claim based on omission was subject to common proof "because the primary issue in this case involves the legality of defendant's . . . allegedly failing to disclose . . . and can be proven with common evidence[.])"); accord Boswell v. Panera Bread Co., 311 F.R.D. 515, 531 (E.D. Mo. 2015) (concluding that "there is no indication that individual issues of reliance regarding Plaintiffs' classwide fraud claims will predominate . . . [because] for fraud claims based on

uniform misrepresentations, . . . reliance may be shown by common circumstantial evidence[.]").

The Court concludes that, as a legal matter, UCL, FAL, CLRA, MMPA, and common law fraud claims pursuant to California and Missouri law are susceptible to common proof in that these claims allow for class-wide inferences of reliance and causation. The Court therefore proceeds to determine whether, with respect to reliance and materiality, plaintiffs' claims in this case are susceptible to common proof.

The Court previously noted that plaintiffs provided no evidence of their own that class members would consider the alleged defect in this case to be material.[17] Oddo Cert. Order at 15. Instead, "plaintiffs' only evidence to this effect are Carrier's surveys showing that, generally, 'reliability' and 'quality' are the two most important factors considered by purchasers." Id. The Court likewise rejected plaintiffs' argument "that materiality can be proven on a classwide basis because . . . Carrier itself believed that the alleged defect was material." Id.

In support of their renewed motion for class certification, plaintiffs now point to Dr. Maronick's survey as evidence of materiality. Dr. Maronick conducted "an online

[17] In their renewed motion for class certification, plaintiffs argue that "[w]here, as here, materiality is based on an objective standard, it is usually not necessary to present *any* evidence of materiality at the class certification stage because there is never a risk that it will present individualized issues." Mot. at 13 (emphasis in original) (citing Amgen, 568 U.S. at 467–68). As a preliminary matter, Amgen concerned materiality with respect to federal securities fraud claims, not the California and Missouri common law and consumer protection claims at issue here. Moreover, Amgen stands for the proposition that "under the plain language of Rule 23(b)(3), plaintiffs are not required to prove materiality at the class-certification stage. In other words, they need not, at that threshold, prove that the predominating question will be answered in their favor." 568 U.S. at 468. Contrary to plaintiffs' argument, however, "[i]t does not follow from Amgen that a common question suffices for purposes of Rule 23 by virtue of Plaintiffs' *ipse dixit*. Instead, it remains the task of district courts, through application of the rule's requirements to the facts and claims before it, to determine what constitutes a question of law or fact common to class members." Gonzalez v. Corning, 885 F.3d 186, 201 (3d Cir. 2018) (internal citations, quotation marks, and alterations omitted).

consumer study to determine . . . how [consumers] would have viewed a disclosure about the presence of the chemical rust inhibitor at issue in this case, and their likely behavior if it had been disclosed in connection with their acquisition." Dr. Maronick Report at 3. Dr. Maronick's survey asked 144 existing home-owner respondents to make a series of assumptions and subsequently answer a set of questions. Maronick Report at 10. For example, respondents were presented with the following statement:

> For the next question please assume the following:
>
> Prior to purchase, you learn that the new central air conditioner you are about to buy contains a chemical that will cause a sticky deposit on a valve that controls the cooling process. The chemical will cause the air condition to fail in some cases within either a few weeks or a few years, and, even if the unit doesn't fail, the chemical can cause loss of performance and efficiency of the system. The cost to remove the chemical at the time of the installation is $1000.00.

Maronick Report at 14. Dr. Maronick's survey then asked respondents: "*Which of the following, if any, best describes how you would have viewed the information about the chemical in your new central air conditioner?*" Id. at 15. Dr. Maronick's survey yielded the following results:

Table 10
Impact of Information Prior to Purchase

It would have been a decisive factor in my decision to purchase or not purchase that central air conditioner*	104 (72.2%)	86.1%
It would have been important information to know but not a decisive factor in my decision to purchase or not purchase that central air conditioner	20 (13.9%)	
It would not have been an important factor in my decision to purchase that air conditioner	12 (8.3%)	
Don't know/Not sure how important a factor it would have been in my decision to purchase that air conditioner	8 (5.6%)	
TOTAL	144	

*Response options randomized

Id.

In response to a question regarding what, if any, respondents likely would have done had they learned about the defect prior to completing a purchase, "41.0% of the respondents would have 'demanded a replacement that didn't have the chemical in it," and 22.2% would have 'demanded the chemical be removed before accepting the unit.' Another 12.5% would have demanded a price reduction of $1,000, which is described as 'the cost of removing the chemical.'" Maronick Report at 15. According to plaintiffs, "[t]his evidence . . . is more than enough to establish that materiality, which is based on an objective standard, is a common question." Mot. at 15.

In response, Carrier contends that Dr. Maronick's survey "was not a survey that would actually test materiality or causation—that is, whether consumers would have behaved differently had they encountered a disclosure about Ryconox in the marketplace prior to purchase." Opp. at 19. As such, Carrier raises a number of challenges to Dr. Maronick's survey including that: (1) Dr. Maronick's "prompt was highly inaccurate and vague"; (2) "the questions about how consumers would react to the inaccurate information were fundamentally flawed"; and (3) "the survey flouts critical principles and methods for surveys designed to test materiality or causation." Id. at 21–24. Carrier chiefly relies on the rebuttal report of Dr. Dhar, who opines that "the Maronick Survey cannot isolate the degree to which survey responses to the key questions of materiality of the disclosure was due to leading survey methodology, including the demand effects, focusing illusion, and the highly leading closed-ended response options or the specific content of the disclosure of the alleged defect." Dkt. 236-16 ("Dhar Rebuttal Report") ¶ 97.

Some courts have determined that survey evidence can be sufficient to establish that common questions of materiality predominate. For example, in In re NJOY, a putative class of consumers brought suit against an electronic cigarettes manufacturer, alleging that the manufacturer had engaged in false advertisements and misleading omissions regarding the safety of smoking e-cigarettes as compared to traditional cigarettes. See generally 120 F. Supp. 3d 1050. Plaintiffs in that case proffered survey evidence from Dr. Maronick indicating that, "with respect to the omissions-based claims, 91% of respondents indicated that it would have been either 'Very Important' or 'Important' to know that e-cigarettes contained other ingredients than nicotine." Id. at 1112. The court determined that "[t]hat is sufficient to demonstrate that reasonable persons could find NJOY's omissions . . . were material." Id. There, the court specifically rejected the manufacturer's argument that Dr.

Maronick's survey was unreliable simply because it asked close-ended questions because "close-ended questions are not inherently suspect, and courts frequently rely on the data obtained from such questions." In re NJOY, 120 F. Supp. 3d 1113. Similarly, the court acknowledged that although the manufacturer's own survey contradicted Dr. Maronick's survey, predominance simply requires that courts "determine whether plaintiffs have shown that there are plausible classwide methods of proof available to prove their claims[.]" Id. at 1114–16.

On the other hand, other courts have declined to certify consumer classes pursuing fraudulent omission and consumer protection claims on the basis that individual questions regarding materiality predominate. For example, in a putative class action where consumers challenged an energy drink manufacturer's promotion of its products as "hydrating," another court determined that Dr. Maronick's survey failed to establish that common questions predominated with respect to materiality. See Townsend v. Monster Beverage Corp., 303 F. Supp. 3d 1010, 1045 (C.D. Cal. 2018). The court explained that "[w]hile a challenged statement need not be the sole or even dominant factor in consumers' purchasing decisions, a survey needs to assess whether the challenged statements were in fact material to consumers' purchases, as opposed to, or in addition to, price, promotions, retail positioning, taste, texture or brand recognition." Id. The court noted that Dr. Maronick's report "does not contain any kind of survey or discussion of sports drinks" and that "Dr. Maronick's survey is not tethered to consumers' purchasing behavior." Id. at 1032, 1045.

Here, Dr. Maronick's survey asked respondents about the types of information they received from a seller prior to purchasing an HVAC system.[18] It did not, however, question respondents about which, if any, of these attributes respondents found important when making a purchasing decision. For that reason, Dr. Maronick's survey is insufficient to establish, on a class-wide basis, "*how* the challenged statements, together or alone, were a factor in any consumer's purchasing decisions." Jones v. ConAgra Foods, Inc., No. 12-cv-

[18] Dr. Maronick's survey asked respondents: "*which of the following information, if any, did you learn about the air conditioner you purchased?*" Maronick Report at 12. The survey then presented respondents with a list of types of information including: (1) brand reputation; (2) efficiency rating; (3) size; (4) type of compressor; (5) model name/number; (6) relative quality; (7) single or two-stage; (8) brand name; and (9) other. Id.

01633-CRB, 2014 WL 2702726, at *15–16 (N.D. Cal. June 13, 2014) (emphasis in original) (determining that individual questions predominated with respect to materiality in case challenging food manufacturer's practice of labeling canned tomato product as "100% Natural" because "there are numerous reasons a customer might buy Hunt's tomatoes, and there is a lack of evidence demonstrating the impact of the challenged label statements."); accord Pierce-Nunes v. Toshiba Am. Info. Sys., Inc., No. 2:14-cv-07242-DMG-KS, 2016 WL 5920345, at *8 (C.D. Cal. June 23, 2016) (finding that individualized questions predominated with respect to materiality in case challenging television manufacturer's marketing of its television as "LED TVs" as breaches of the UCL, FAL, and CLRA because "there are numerous reasons a consumer may purchase LED-lit LCD TVs, in addition to or aside from image quality, including style (thinner form), energy efficiency[,] . . . color rendition[,] and . . . environmental benefits[.]").

Because Dr. Maronick's survey does not indicate how consumers "valued" Carrier's alleged omissions "compared to other attributes of the product and the relevant market generally," "the Court is not convinced that the question of materiality"—whether reasonable consumers would view Carrier's failure to disclose the alleged defect in this case as material to the consumers' purchasing decision—"is susceptible of classwide proof." See Townsend, 303 F. Supp. 3d at 1045; Pierce-Nunes, 2016 WL 5920345, at *8.

* * * * *

"The question of certification requires a 'rigorous analysis'" which means that the Court "may have to 'probe behind the pleadings before coming to rest on the certification question.'" Pulaski & Middleman, LLC v. Google, Inc., 802 F.3d 979, 985 (9th Cir. 2015) (internal citation omitted). Indeed, "[t]he decision to grant or deny class certification is within the trial court's discretion." Bateman, 623 F.3d at 712. "This is so because the district court is in the best position to consider the most fair and efficient procedure for conducting any given litigation." Doninger v. Pac. Nw. Bell, Inc., 564 F.2d 1304, 1309 (9th Cir. 1977).

Here, individual questions, including whether Carrier had a legal duty to disclose the alleged defect in this case to all or most members of plaintiffs' proposed classes and whether Carrier's alleged failure to do so was material, predominate over the common questions of whether the presence of Ryconox in Carrier's HVAC systems causes a defect, whether Carrier knew of the defect, and whether Carrier concealed the defect. In light of these individual questions, the Court does not reach the issues of exposure, damages,

superiority, or appointment of class counsel. And, in exercise of its discretion, the Court declines to certify plaintiffs' proposed California, Missouri, and Massachusetts Classes, as well as plaintiffs' proposed, alternative California and Missouri AOR Purchaser Classes.[19]

IV. CONCLUSION

In accordance with the foregoing, the Court orders as follows:

1. The Court **DENIES** Carrier's motion to exclude the opinions of Thomas J. Maronick;

2. The Court **DENIES** Carrier's motion to exclude the opinions of Paul J. Sikorsky;

3. The Court **DENIES** plaintiffs' motion to limit consideration of the expert report and testimony of Professor Ravi Dhar;

4. The Court **DENIES** plaintiffs' motion to limit consideration of the expert report and testimony of Dr. John H. Johnson, IV;

5. The Court **DENIES** plaintiffs' motion to limit consideration of the expert report and testimony of Wayne Schneyer;

6. The Court **DENIES** plaintiffs' renewed motion for class certification.

IT IS SO ORDERED.

Initials of Preparer	00 : 00
	CMJ

[19] Plaintiffs request that the Court certify an "issues" class pursuant to Rule 23(c)(4). See Class Cert. Notice. However, plaintiffs do not elsewhere explain what particular issue warrants certification or why certifying a Rule 23(c)(4) class would materially advance this litigation. See Werdebaugh v. Blue Diamond Growers, No. 12-cv-02724-LHK, 2014 WL 7148923, at *14 n. 9 (N.D. Cal. Dec. 15, 2014) (denying "cursory request" for Rule 23(c)(4) certification); accord Davidson v. Apple, Inc., No. 16-cv-04942-LHK, 2018 WL 2325426, at *26 (N.D. Cal. May 8, 2018) (denying "perfunctory" Rule 23(c)(4) request).