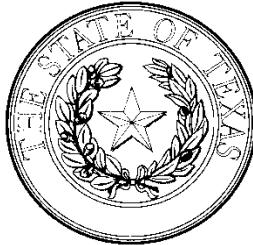


Opinion issued October 10, 2013



In The  
**Court of Appeals**  
For The  
**First District of Texas**

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**NO. 01-12-00073-CV**

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**BUILDING PRODUCTS PLUS, CO., L.C., Appellant**  
v.  
**TAMKO BUILDING PRODUCTS, INC., Appellee**

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**On Appeal from the 234th District Court  
Harris County, Texas  
Trial Court Case No. 2009-66450**

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**MEMORANDUM OPINION**

Appellant Building Products Plus, Co., L.C. (BPP) appeals from the trial court's take-nothing judgment in this breach of warranty suit against appellee TAMKO Building Products, Inc. In three issues BPP contends that the trial court

erred in granting TAMKO's motion for judgment n.o.v. BPP also raises three issues addressing TAMKO's alternative reasons for affirming the trial court's judgment. Because we conclude that the evidence was insufficient to support the jury's verdict, we affirm the judgment of the trial court.

### **Background**

BPP is a distributor and supplier of building materials. Verandah Construction, Inc. was the general contractor for the Beacon Island Boardwalk Project, an upscale housing community located southeast of Houston and developed by South Shore Partnership. Verandah Construction subcontracted with Shirley & Sons Construction, a marine contractor, to build a boardwalk around the perimeter of the island that was to be the Beacon Island development. This job included the construction of the bulkhead that would support the boardwalk.

David Smith, the president of Verandah Construction, testified that he, his wife, and a third business partner selected TAMKO's EverGrain decking, a composite wood product, to be used in construction of the boardwalk. EverGrain was chosen based on its appearance, low maintenance requirements, and the manufacturer's warranty. The brochure for the EverGrain decking stated, "We offer a 10-year limited warranty against rotting, splintering, splitting, and termite damage when applied according to the manufacturer's instructions. You'll love the look, and you'll love how long it lasts." It also stated, "Choose EverGrain

composite decking for low maintenance dock performance. Our proprietary compression molding process provides outstanding durability and eliminates splinters—all while creating deep lasting grain beauty ideal for marine applications. EverGrain composite decking offers the peace of mind of a 25-year limited warranty from TAMKO®.” The brochure further boasted that EverGrain was “[i]deal for decks, porches, swimming pool decks, walkways, docks and more,” “withstands exposure to sunlight, snow, ice, sleet and rain,” “absorbs little moisture, does not splinter and exceeds ADA slip-resistant guidelines.”

The express limited warranty provided:

TAMKO warrants to the owner that if, during the twenty-five (25) year period beginning with the date of the original purchase (the “Term”), the Products rot, decay, split, check, splinter or suffer termite damage as a direct result of a manufacturing defect, TAMKO will provide the Owner with either (1) a replacement for the Products determined to be defective, or (2) a refund of the original purchase price of the Products determined to be defective.

The limited warranty expressly disclaimed all other express and implied warranties, “including any implied warranty of merchantability or fitness for a particular use.” It also stated that failure to install the decking in accordance with TAMKO’s installation instructions, including providing “adequate ventilation,” would void the warranty:

TAMKO shall have no liability whatsoever for Products not installed in accordance with TAMKO’s Installation Instructions. Products not installed in accordance with TAMKO’s Installation Instructions,

including adequate ventilation, are sold “As Is” and without warranty of any kind.

Shirley & Sons obtained the EverGrain decking from BPP. The decking was shipped directly from TAMKO’s manufacturing facility to BPP in three shipments based on three separate purchase orders, which shipped between March 13 and April 30, 2007. Each shipment consisted of approximately 900 20-foot boards, which BPP cut into 10-foot pieces. The decking was delivered to Shirley & Sons four to six days after receipt by BPP.

Ron Shirley, of Shirley & Sons, installed the decking. Shirley had worked in marine contracting since he was a child. He had never seen and did not review TAMKO’s installation guidelines, and he was unaware that EverGrain decking required adequate ventilation. Shirley had twice before used EverGrain decking in similar applications.

The EverGrain decking did not perform as expected. Within one year of installation—in late July or early August 2008—the boards began deteriorating upon contact. Shirley said, “When you rubbed your foot over it, [it] would . . . turn to powder.” Smith described it as “flaking.” Dorian Benn, a representative of BPP, said, “[I]t was very evident. You could drag your foot across the decking and . . . [i]t would powder.”

The problem was reported to BPP and TAMKO. Jim Klein, TAMKO’s Texas territory sales manager for decking and railing products, was informed of the

problem. Klein's responsibilities included responding to and investigating customer complaints, and he contacted Benn, who arranged for a site inspection on September 3, 2008, which was later rescheduled.

Meanwhile, on September 13, 2008, and before Klein visited the site, Hurricane Ike made landfall on the Texas coast, impacting the Beacon Island boardwalk. No photographs or samples of the decking were taken before the hurricane. After the hurricane, Benn, Klein, and Robert Shaner, another TAMKO account manager, visited the boardwalk and observed signs of damage from the hurricane and deterioration of the boards. Verandah Construction sought compensation under the limited warranty, and TAMKO denied the warranty claim because the project had been underwater for several days as a result of Hurricane Ike.

After TAMKO denied the warranty claim, BPP offered to replace the decking with treated wood at its expense, and in return it obtained assignments of warranty rights from Verandah Construction, Shirley & Sons, and the bank which by then had foreclosed on the real property where the EverGrain decking was installed. BPP sued TAMKO. In its live pleading at trial, BPP alleged two causes of action: (1) breach of contract by delivery of defective materials to BPP, and (2) breach of express warranty, relying on the express, written, limited warranty.

TAMKO's third amended answer, which was its live pleading at trial, generally denied BPP's allegations. It pleaded that BPP lacked standing due to an improper assignment of the warranty, a verified denial of BPP's capacity to sue, and several other affirmative defenses not at issue in this appeal. TAMKO argued that the damage to the EverGrain decking was caused by the hurricane or improper ventilation, not by a manufacturing defect. Testimony at trial centered on (1) whether installation had conformed to TAMKO's instructions, (2) the effect of the hurricane, and (3) general information relating to the EverGrain manufacturing process.

As to installation, much of the testimony concerned construction of the deck, spacing of the boards, and whether there was adequate ventilation. For example, Shirley testified that he installed the decking using a one-foot joist span spacing and 1/8-inch spacing between the individual boards based on his experience and advice from BPP, which comported with TAMKO's installation guidelines. Shirley explained that he filled the substructure and capped it with one or two feet of sand filled to within two inches of the boards to promote drainage. He was not aware that EverGrain decking required adequate ventilation, and when asked if he did anything while installing the Beacon Island boardwalk "to make sure that . . . evaporation was promoted," he said: "No. I installed this deck exactly like we've installed decks all our lives." When asked a second time, "Was there anything that

you did to . . . promote the evaporation of . . . water and moisture?" he replied: "We installed the sand. And the sand runs out from underneath the boardwalk to the bulkhead. It goes down to disperse along the wall, and goes through the filter cloth and out in the water."

Smith testified that he had no problem with the adequacy of the ventilation on the boardwalk because he trusted Shirley and "had very qualified people on the ground every day monitoring the project." Smith acknowledged that he did not design the boardwalk and conducted no testing of the adequacy of the ventilation, but he said, "I've got to believe, yes, that there was a proper ventilation space underneath the material." He recalled walking the boardwalk, looking through the gaps and seeing space. Similarly, Benn observed the boardwalk after the hurricane, and he testified that there was "plenty of space" under the boards. Both Smith and Benn noticed deterioration on the top of the boards and surmised that if there had been a ventilation problem, the boards would have disintegrated only from the bottom. Neither Smith nor Benn offered any basis for this conclusion. There was no evidence that they looked at the bottom of the boards at that time.

But TAMKO's Robert Shaner, who visited the boardwalk after the hurricane, disputed the adequacy of the ventilation. He said, "[T]here's no way for air to circulate and . . . dry out that deck and dry out that area beneath the deck in a reasonable amount of time." Likewise, Klein was concerned that the ventilation

was inadequate. He testified that the construction of the boardwalk against the seawall created a “boxed in situation.” He also noted that the spaces between the boards were clogged with dirt and mud in many places and weeds were growing from the mud, which led him to question how long the mud had been present. He also testified that some of the boardwalk installation comported with TAMKO’s installation instructions, but other aspects of it did not. For example, he observed one joist improperly spaced at approximately 22.5 inches instead of 12 inches and cantilevering of some of the boards. However, he did not assert that these deficiencies caused the disintegration of the boards.

With respect to the impact of the hurricane on the decking, Smith testified that the same problems existed both before and after the storm, and he suggested that it was “a bad batch” of boards. He added, “I don’t know of anything the hurricane did to the material that could have caused it to start decaying so rapidly like that.” Benn conducted an experiment to determine if soaking the boards in water would cause them to deteriorate. He placed a board in the water and left it there for a month. The test board was admitted into evidence. It showed no signs of deterioration or flaking.

Klein had been informed that the boardwalk had been submerged for several days as a result of the hurricane, but he testified that he was unable to determine the effect of the submersion on the decking or if the decking suffered abrasion or

other effects from the storm. Klein sent samples of boards that had been blown ashore by the hurricane to TAMKO, and he reported his observations to his supervisor. Klein also contacted Smith and told him that without samples or photographs predating Hurricane Ike, they could not determine the cause of the damage to the decking.

BPP introduced deposition testimony from Daniel Clark Blackburn, the general manager of TAMKO Building Products at its composite products location in Lamar, Missouri. Blackburn testified that he did not know how the hurricane impacted the boards or whether any sand, salt, or debris abraded the decking. He explained:

There is a difference between simply submerging a board in static saltwater versus saltwater being pounded and abraded against this. And what the other contents are in the saltwater, whether it's sand, suspended debris, the pressure, the waves. If it was—it could be like a real high speed pressure washer with abrasives in it. Saltwater can be abrasive. But a simple submersion with no abrasion is a whole different situation.

And he could not explain what caused the damage to the boards used in the project.

We do not know what the condition was pre-Hurricane Ike. We did not know what the care and maintenance was. We don't have photos of the previous condition. What we do have is photos after Hurricane Ike. And it was apparent that there was some damage done due to Hurricane Ike. How much, we do not know.

Aside from Benn's experiment of submerging a board in the water, BPP did not conduct any other testing on the boards. Benn testified that BPP decided not to

conduct any other testing on the boards because testing was expensive and it believed testing was not necessary to determine the cause of the deterioration. Benn also said that he expected TAMKO to conduct testing, though he agreed that as the party asserting a warranty claim it was BPP's burden to prove the existence of a manufacturing defect.

At trial, BPP introduced some general evidence regarding the EverGrain manufacturing and quality control processes. Blackburn testified about TAMKO's quality control program, which includes code certification with a third party that periodically checks its quality control systems, verifies that it is following its procedures, and checks its measurements by taking comparative samples. TAMKO conducts daily internal testing of EverGrain product and tests representative board samples for modulus of rupture, modulus of elasticity, and water absorption. At trial, Blackburn did not remember the frequency of water-absorption testing.

Blackburn testified that TAMKO conducts a strength test of every EverGrain production run, and the date codes on the EverGrain decking could be used to connect test results to the boards that were actually used. He said that with the date codes, he could determine which facility and line produced the board, the day it was run, and the time it was run on which shift. But the date codes were

never provided to Blackburn, who said that he believed the TAMKO employees who visited the location were unable to find them.

Blackburn testified that EverGrain decking was suitable for use as a boardwalk in this application. He agreed that the board from the project had damage, but he did not know what caused it. He did not know what could cause premature failure, and he said that the damage did not look like ordinary wear and tear.

Klein testified that he had investigated other claims of product deterioration in the past, but the Beacon Island boardwalk had a different appearance. Prior investigations revealed problems in individual boards, that “almost look[ed] like a piano keyboard where . . . one board . . . looks okay . . . [a]nd then the next board next to it . . . is . . . having some issues . . . .” But the Beacon Island boardwalk was different. Its problems spanned the entire deck, however only the portion of the boards supported by the substructure showed discoloration. The portion of the boards that protruded over the water was not discolored. This was also apparent in photographs admitted at trial.

Klein also testified that it was “highly unlikely, if not next to impossible that [all the boards] came from the same run.” He explained:

Because the span of 45 days [when the three orders were placed], the plant isn’t a warehouse, it’s a plant. And, so, storing product for 45 days for one particular job is not how the plant is set up. The way the machines are set up to run, and they’re going to run a full truckload of

the same product going out to the same place. They're going—they're going to ship to order.

However, he also testified that he could not say if the EverGrain decking used in the Beacon Hill boardwalk came from existing stock.

Finally, BPP presented the testimony of Jeff Patrizi, who testified over TAMKO's objections as an expert as to causation. Patrizi had been employed by CAM Construction for ten years in the field of residential and commercial construction. Before that, he was an estimator for another general contractor. He had worked on approximately ten composite wood decking jobs. He also worked as a consultant for insurance companies, compiling repair estimates for customer claims. Sometimes he recommended whether an insurance company should accept a claim. He also has experience mediating disputes.

Patrizi was present at trial and listened to all the testimony in this case. He reviewed the installation instructions, warranty, and TAMKO's marketing materials. He also saw photographs and examined the boards that were admitted into evidence. He did not send any board for laboratory testing.

Patrizi testified that he was aware of the various causes TAMKO had suggested to explain the damaged boards. Patrizi eliminated Hurricane Ike as a potential cause of damage “[b]ecause the damage was before the hurricane.” He eliminated the spacing between the boards as a cause because Shirley testified that the boards were properly spaced. He also ruled out spacing as an issue related to

TAMKO's concerns about dirt blocking the spaces between the boards, though he supplied no reason why. He testified that the substructure was built in accordance with industry standards, and he based that conclusion on his belief in the credibility of testimony from BPP's witnesses: "Based on their information, it was done properly." He said that he listened to Shirley's testimony and found it to be "impressive." Accordingly, he ruled out the design and construction of the substructure as a potential cause of the damage. As to TAMKO's concerns that the presence of weeds indicated that the mud and dirt may have been on the boardwalk for a long period of time, Patrizi opined, based on prior testimony, that "water or mud runoff onto the deck . . . was taken care of . . . relatively quickly." Accordingly he eliminated "vegetation" as a potential cause of the damage. He ruled out improper maintenance as a potential cause based on testimony that the dirt or debris was swept off the deck with a broom or rinsed off the deck with low-pressure pumped bay water.

He eliminated ventilation as an issue because he would expect damage to the bottom of the board if ventilation had been an issue, but it was only the tops of the boards that showed damage. However, he also conceded that the material flaked off both the top and bottom of the damaged board that was admitted into evidence, saying, "It's getting worse." He thought about possible fertilizer drainage onto the deck as a potential cause of the damage, but he ruled it out without any testing or

research by “eliminat[ing] that from [his] thought process.” He considered the time of failure after installation and the 25-year warranty in forming his opinion. And he came to a conclusion of what caused the damage to the boards, testifying, “[I]t’s a manufacturing defect.”

On cross-examination, Patrizi conceded that he had no technical training or training that would enable him to determine if a particular material failure resulted from a manufacturing defect; no experience in manufacturing, specifically composite wood products, or in testing materials for abrasion, hardness, modulus of rupture, elasticity, or any other deviation from specifications; and no education in construction materials or determining the causes of material failure. He conceded that he did nothing other than looking at the board to substantiate his opinion about adequate ventilation. For example, he never went to the site, looked at the boards that were in the yard, looked for date codes on the boards, determined how much ventilation existed at the boardwalk or the impact of lack of adequate ventilation, or conducted any materials testing. Patrizi did not think any testing was necessary to determine that the damage was caused by a manufacturing defect. He testified that “[t]he manufacturing defect is that [the board is] breaking down.” He said, “Based on looking at the board, it is obvious that the board is breaking down.” Patrizi did nothing other than look at the same evidence the jury saw in the case. He conceded that he gave a purely subjective opinion, based on his

consideration of trial testimony and observation of the deteriorating board, and not at all based on science. Finally, he testified that he did not know why the board was deteriorating and did not know if there was a manufacturing defect in the board.

There was no other testimony about what caused the deterioration of the decking. Shaner, Blackburn, and Patrizi all testified that they did not know what caused the deterioration, and Patrizi, who was offered as an expert witness, ultimately testified that he did not know if there was a manufacturing defect.

The jury charge instructed the jury on the difference between direct and circumstantial evidence as follows:

A fact may be established by direct evidence or by circumstantial evidence or both. A fact is established by direct evidence when proved by documentary evidence or by witnesses who saw the act done or heard the words spoken. A fact is established by circumstantial evidence when it may be fairly and reasonably inferred from other facts proved.

The charge inquired:

Question No. 1

Did the EverGrain decking rot, decay, split, check or splinter as a direct result of a manufacturing defect?

The term “manufacturing defect” means a finished product deviates, in terms of its construction or quality, from the specifications or planned output in a manner that renders it defective.

Answer “Yes” or “No.”

## Question No. 2

Was the EverGrain decking installed in accordance with TAMKO's installation instructions?

For this question only, a "no" answer must be based on a preponderance of the evidence. If you do not find that a preponderance of the evidence supports a "no" answer, then answer "yes."

At the charge conference, BPP objected to the court's failure to include specific questions as to warranty and failure to comply with the warranty, however, the record does not reflect that BPP tendered to the court such questions in writing in substantially correct form. There were no other objections to the jury charge. The jury answered "yes" to both questions and awarded damages and attorneys' fees.

TAMKO moved for judgment n.o.v., asserting that BPP lacked standing and that there was no evidence to support the jury's verdict based on the existence of a manufacturing defect, because Patrizi was not qualified to testify as an expert and because his opinions did not rest on a reliable foundation. The trial court granted TAMKO's motion for judgment n.o.v. stating:

Tamko's Motion is GRANTED IN PART. Specifically, the Court grants the aspect of Tamko's Motion regarding Question 1. Because this issue is dispositive of the entire matter, the Court does not reach any other issues.

Building Products had a burden of proof in this case—to prove by a preponderance of the evidence that a manufacturing defect was

the cause of the damage to the decking that is the subject matter of the lawsuit. In order to meet its burden, Building Products retained Jeffrey Patrizi to testify as an expert on its behalf. Putting aside the procedural infirmities regarding Patrizi of which Tamko complains (upon which this Court does not rule)[,] Tamko also complained of the substance of Patrizi's testimony. The Court initially allowed Patrizi to testify and denied Tamko's challenge to his expert testimony. Nevertheless and for the reasons set forth in Tamko's briefing challenging Patrizi as well as the reasons set out in their Motion for Judgment Notwithstanding the Verdict, the Court now concludes that Patrizi was not qualified to testify as an expert in this case, and that his opinions and conclusions should be stricken. Therefore, there is no qualified or adequate expert testimony in the record upon which a jury could reach a verdict in Building Products' favor.

Furthermore, even if his testimony were to be considered, it is legally insufficient. While Patrizi does opine on various alternate theories of what might have caused the damage to the subject decking (and negates such theories), he never affirmatively testified about what actually caused such damage, or if such damage was in fact caused by a manufacturing defect. . . . In this case, Building Products offers Patrizi's alternate theories not as a supplement to his ultimate opinion and conclusion, but rather as a substitute for some ultimate opinion. In fact, Patrizi testified that he could not give that ultimate opinion regarding when a manufacturing defect may have existed or if it caused the decking to fail in this instance.

Patrizi's opinions are boiled down to this essence: "there was a product failure in this case, the failure was not caused by anything I can think of, therefore it must have been a manufacturing defect." Merely ruling out alternate theories is not the same as affirmatively opining to a certain causation position. And, a verdict and judgment cannot stand on this type of *res ipsa* logic. . . .

The trial court rendered judgment that BPP take nothing, and BPP appealed.

## Analysis

In three issues, BPP argues that the trial court erred by granting TAMKO's motion for judgment n.o.v. Specifically, BPP contends that the trial court erred by disregarding properly admitted evidence, by basing its decision on Patrizi's qualifications and the admissibility of Patrizi's testimony, and by disregarding the other evidence that was legally sufficient to prove causation even in the absence of Patrizi's testimony.

A trial court may disregard a jury verdict and enter a judgment n.o.v. if there is no evidence to support one or more of the jury findings on issues necessary to establish liability. *Tiller v. McLure*, 121 S.W.3d 709, 713 (Tex. 2003); *Gulf Liquids New River Project, LLC v. Gulsby Eng'g, Inc.*, 356 S.W.3d 54, 72 (Tex. App.—Houston [1st Dist.] 2011, no pet.); *see* TEX. R. CIV. P. 301. We review a trial court's ruling on a judgment n.o.v. under a no-evidence standard of review. *Tanner v. Nationwide Mut. Fire Ins. Co.*, 289 S.W.3d 828, 830 (Tex. 2009). “The standard for reviewing a judgment notwithstanding the verdict, like all other motions rendering judgment as a matter of law, requires a reviewing court to credit evidence favoring the jury verdict if reasonable jurors could, and disregard contrary evidence unless reasonable jurors could not.” *Cent. Ready Mix Concrete Co. v. Islas*, 228 S.W.3d 649, 651 (Tex. 2007) (citing *City of Keller v. Wilson*, 168 S.W.3d 802, 823, 827 (Tex. 2005)). Evidence that shows that an expert's opinion

is incompetent or unreliable is included in our no-evidence review. *Whirlpool Corp. v. Camacho*, 298 S.W.3d 631, 638 (Tex. 2009). We will reverse the trial court's judgment n.o.v. if the jury's finding is supported by more than a scintilla of competent evidence. *See Tanner*, 289 S.W.3d at 830.

In the absence of an objection, we evaluate the sufficiency of the evidence in light of the court's charge as given to the jury. *Osterberg v. Peca*, 12 S.W.3d 31, 55 (Tex. 2000). In this case, there was no objection to question 1 of the court's charge, which inquired, "Did the EverGrain decking rot, decay, split, check or splinter as a direct result of a manufacturing defect?" and defined "manufacturing defect" to mean a deviation in a finished product "in terms of its construction or quality, from the specifications or planned output in a manner that renders it defective." Neither "specifications" nor "planned output" was defined.

In granting the motion for judgment n.o.v., the trial court held that Patrizi was not qualified as an expert, his opinions did not rest on a reliable foundation, and his testimony was no evidence as to the existence of a manufacturing defect or whether the deterioration in the EverGrain decking was caused by a manufacturing defect.\* On appeal, BPP contends that Patrizi was qualified as an expert based on

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\* Although the parties dispute whether Patrizi's testimony was properly admitted, and notwithstanding the trial court's statement that Patrizi's opinions and conclusions should be struck, the issue on appeal is the propriety of the court's ruling on the motion for judgment n.o.v., not the admission of Patrizi's testimony. By the time the trial court ruled on the

his experience in construction and evaluation of decking projects, his testimony was sufficient because there was not too great an analytical gap between his opinion and the underlying data, and, even disregarding Patrizi's testimony, the evidence was sufficient to support the verdict.

Expert testimony must be both relevant and reliable, and the expert must be qualified. *Whirlpool*, 298 S.W.3d at 637; *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713, 727 (Tex. 1998). Expert testimony is relevant when it assists the fact finder in determining an issue or in understanding other evidence. *See* TEX. R. EVID. 702; *TXI Transp. Co. v. Hughes*, 306 S.W.3d 230, 234 (Tex. 2010). “Conclusory or speculative opinion testimony is not relevant evidence because it does not tend to make the existence of material facts more probable or less probable.” *Whirlpool*, 298 S.W.3d at 637 (citing TEX. R. EVID. 401 and *Coastal Transp. Co. v. Crown Cent. Petroleum Corp.*, 136 S.W.3d 227, 232 (Tex. 2004)).

When a party asserts on appeal that an expert's testimony is insufficient evidence because it is unreliable, a court will ordinarily consider both the *Robinson* reliability factors and the expert's experience. *Whirlpool*, 298 S.W.3d at 638; *see*

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motion for judgment n.o.v., it had already exercised its discretion as to the admission of evidence, the jury had rendered a verdict, and the question before the trial court was whether the jury's findings were supported by the evidence. *See* TEX. R. CIV. P. 301; *cf. Whirlpool Corp. v. Camacho*, 298 S.W.3d 631, 638 (Tex. 2009).

*E.I. du Pont de Nemours & Co. v. Robinson*, 923 S.W.2d 549, 557 (Tex. 1995) (identifying factors for courts to consider in evaluating reliability of expert testimony). *Robinson* set out the following list of nonexclusive factors: (1) the extent to which the theory has been or can be tested, (2) the extent to which the technique relies upon the subjective interpretation of the expert, (3) whether the theory has been subjected to peer review and/or publication, (4) the technique's potential rate of error, (5) whether the theory or technique has been generally accepted as valid by the relevant scientific community, and (6) the non-judicial uses which have been made of the theory or technique. *Robinson*, 923 S.W.2d at 557. Not every *Robinson* factor will apply in every case, particularly when the proffered expert testimony is not scientific in nature. *See Mack Trucks, Inc. v. Tamez*, 206 S.W.3d 572, 579 (Tex. 2006). But while the court's "criteria for assessing reliability must vary depending on the nature of the evidence," the court should consider the *Robinson* factors "when doing so will be helpful in determining reliability of the expert's testimony, regardless of whether the testimony is scientific in nature or experience-based." *Id.* "[I]n very few cases will the evidence be such that the trial court's reliability determination can properly be based only on the experience of a qualified expert to the exclusion of factors such as those set out in *Robinson*, or, on the other hand, properly be based

only on factors such as those set out in *Robinson* to the exclusion of considerations based on a qualified expert's experience." *Whirlpool*, 298 S.W.3d at 638.

As to reliability, the court must examine the expert's methodology, foundational data, and whether the data and methodology are separated from the expert's opinions by too great an analytical gap. *See id.* at 637; *Gammill*, 972 S.W.2d at 727–28. "An expert's opinion might be unreliable, for example, if it is based on assumed facts that vary from the actual facts . . . or it might be conclusory because it is based on tests or data that do not support the conclusions reached." *Whirlpool*, 298 S.W.3d at 637 (citing *Burroughs Wellcome Co. v. Crye*, 907 S.W.2d 497, 499 (Tex. 1995) and *City of San Antonio v. Pollock*, 284 S.W.3d 809, 818–19 (Tex. 2009)). "[I]t is the basis of the witness's opinion, and not the witness's qualifications or his bare opinions alone, that can settle an issue as a matter of law; a claim will not stand or fall on the mere *ipse dixit* of a credentialed witness." *Burrow v. Arce*, 997 S.W.2d 229, 235 (Tex. 1999).

## **I. Reliability of opinion**

Patrizi based his opinions on the testimony and evidence presented at trial. He listened to the testimony, read the installation instructions, warranty, and marketing materials, and looked at photographs and decking boards that were admitted into evidence. Patrizi never visited the boardwalk, looked at the boards in the yard, looked for date codes on the boards, determined how much ventilation

existed at the boardwalk or the effect of lack of adequate ventilation, or conducted any materials testing. There was no evidence in the record that Patrizi had seen or worked with other composite wood decking that failed in the same manner as the EverGrain in this case. Although he testified that he believed the deterioration in the decking boards was caused by a manufacturing defect, he conceded that his opinion was purely subjective, that he did not know if there was a manufacturing defect in the board, and that he did not know why the board was deteriorating.

Instead of performing an analysis to demonstrate the existence of a manufacturing defect, Patrizi used the process of elimination ostensibly to discredit other explanations and thereby to reach his opinions and conclusion that the decking was deteriorating due to a manufacturing defect. However, this method of reasoning cannot substitute for scientific analysis. *Cf. Cooper Tire & Rubber Co. v. Mendez*, 204 S.W.3d 797, 807–08 (Tex. 2006) (“The universe of possible causes for the tire failure is simply too large and too uncertain to allow an expert to prove a manufacturing defect merely by the process of elimination.”). Patrizi testified that he considered the various causes that TAMKO suggested might explain the deterioration of the decking boards, and he eliminated all of those causes except for the existence of a manufacturing defect. However, Patrizi never testified that he had any experience designing or constructing the substructure of a boardwalk for use with manufactured composite wood decking. And while he eliminated

many other causes, he did not demonstrate—through observation, testing, analysis, or underlying facts—that the boards were not manufactured to their proper specification.

Patrizi admitted that his opinions were purely subjective. Under the second *Robinson* factor, the extent to which the technique relies upon the subjective interpretation of the expert, this would weigh against a finding of reliability. *See Robinson*, 923 S.W.2d at 557. Because Patrizi did not apply any scientific methodology or technique and merely gave his subjective opinion, his opinions were not based on a reliable foundation. *See Burrow*, 997 S.W.2d at 235.

Having concluded that Patrizi's opinions did not rest on a reliable foundation, we agree with the trial court that his testimony constituted no evidence to support a finding that the EverGrain decking rotted, decayed, split, checked, or splintered as a direct result of a manufacturing defect in this case. *See Leitch v. Hornsby*, 935 S.W.2d 114, 119 (Tex. 1996) (“Incompetent opinion testimony is not evidence, and a finding supported only by such testimony cannot survive a no evidence challenge.”); *see also City of Keller*, 168 S.W.3d at 813 (“[A] no-evidence review cannot disregard contrary evidence showing the witness was unqualified to give an opinion. And if an expert’s opinion is based on certain assumptions about the facts, we cannot disregard evidence showing those assumptions were unfounded.”).

## **II. Sufficiency of evidence and the need for expert testimony**

BPP argues that even without Patrizi's testimony, there is still legally sufficient evidence of a manufacturing defect. It relies on testimony that the board deterioration began even before Hurricane Ike and that the boardwalk was properly installed. BPP thus argues that evidence of the deterioration itself is sufficient circumstantial evidence from which the jury could determine that the product's failure was more likely than not caused by a manufacturing defect. In this regard, BPP relies on two product liability cases, *Walker v. Thomasson Lumber Co.*, 203 S.W.3d 470 (Tex. App.—Houston [14th Dist.] 2006, no pet.), and *Goodyear Tire & Rubber Co. v. Rios*, 143 S.W.3d 107 (Tex. App.—San Antonio 2004, pet. denied), for the proposition that evidence of a product's malfunction is legally sufficient circumstantial evidence of a manufacturing defect.

TAMKO responds that expert testimony was required to prove that the EverGrain decking failed “as a direct result of a manufacturing defect”—as the warranty requires—because EverGrain is a “complex synthetic building product scientifically engineered, designed, manufactured and tested.” TAMKO contends that the existence of a manufacturing defect causing deterioration of the decking boards is beyond the “general experience and common understanding” of the jurors, thus requiring expert testimony. In support of its position, TAMKO relies primarily on three products liability cases: *Praytor v. Ford Motor Co.*, 97 S.W.3d

237 (Tex. App.—Houston [14th Dist.] 2002, no pet.); *Driskill v. Ford Motor Co.*, 269 S.W.3d 199 (Tex. App.—Texarkana 2008, no pet.); and *Lyon v. Atico Int'l USA, Inc.*, 10-08-00046-CV, 2009 WL 1800820 (Tex. App.—Waco June 24, 2009, no pet.) (mem. op.).

Whether expert testimony is required is a question of law, which we review de novo. *FFE Transp. Servs., Inc. v. Fulgham*, 154 S.W.3d 84, 89 (Tex. 2004). “Expert testimony is required when an issue involves matters beyond jurors’ common understanding.” *Mack Trucks*, 206 S.W.3d at 583; *see FFE Transp. Servs.*, 154 S.W.3d at 90. “Proof other than expert testimony will constitute some evidence of causation only when a layperson’s general experience and common understanding would enable the layperson to determine from the evidence, with reasonable probability, the causal relationship between the event and the condition.” *Mack Trucks*, 206 S.W.3d at 583. In determining whether expert testimony is required, we consider whether the conduct at issue involves the use of techniques unfamiliar to the ordinary person. *See id.* at 583; *FFE Transp. Servs.*, 154 S.W.3d at 90.

In breach-of-warranty cases, expert testimony generally may not be required if the action constituting the alleged breach is “plainly within the common knowledge of laymen.” *Melody Home Mfg. Co. v. Barnes*, 741 S.W.2d 349, 355 (Tex. 1987) (implied warranty to perform repairs in a good and workmanlike

manner). For example, no expert testimony was required when the Barneses filed suit after their home flooded due to Melody Home’s failure to connect a water pipe, because “[t]he jurors had sufficient knowledge to find that [this failure] would not be considered good and workmanlike by those capable of judging repair work.” *Id.* And a plaintiff in an implied warranty of merchantability case may rely on circumstantial evidence to meet his burden of proof, i.e., that the goods were defective when they left the manufacturer’s possession and unfit for their ordinary use because of a defect. *Plas-Tex, Inc. v. U.S. Steel Corp.*, 772 S.W.2d 442, 444 (Tex. 1989). To make a *prima facie* case of a defect in such a case, “[e]vidence of proper use of the goods together with a malfunction may be sufficient.” *Id.* at 444–45.

But the warranty in this case required more proof than the existence of the defect—it required proof of its cause. BPP sued on an express warranty that provided for refund of the purchase price or replacement of the products “*if, during the twenty-five (25) year period beginning with the date of the original purchase (the “Term”), the Products rot, decay, split, check, splinter or suffer termite damage as a direct result of a manufacturing defect.*” TAMKO expressly disclaimed all other express and implied warranties, “including any implied warranty of merchantability or fitness for a particular use.” The jury charge asked:

Did the EverGrain decking rot, decay, split, check or splinter as a direct result of a manufacturing defect?

The term “manufacturing defect” means a finished product deviates, in terms of its construction or quality, from the specifications or planned output in a manner that renders it defective.

BPP did not object to the jury charge, and we measure the sufficiency of the evidence against this language. *See Osterberg*, 12 S.W.3d at 55.

BPP has shown through circumstantial evidence that the decking boards were properly installed and that they malfunctioned by deteriorating approximately a year after installation. TAMKO’s advertising materials boasted that the decking would withstand rain, not absorb moisture, and be long lasting. While no expert testimony nevertheless was required to establish that the decking was deteriorating, expert testimony was required for BPP to meet its burden of proof in this case. Both the warranty and the jury charge required BPP to prove that the decking boards deteriorated “as a direct result of a manufacturing defect.” This required a showing of causation, which is absent from the record: BPP adduced no evidence that the deterioration was a direct result of a manufacturing defect. Like its expert testimony, its lay testimony merely ruled out improper installation or drainage as causes. While not every warranty case will require expert testimony, in this case, because the jury charge includes an element of causation, and because the existence of a manufacturing defect that caused the specific problems complained of is a matter not within the common knowledge of the jurors, we hold that expert

testimony was required to prove an affirmative answer to the first jury question. BPP's other evidence does not "transcend mere suspicion." *Ford Motor Co. v. Ridgway*, 135 S.W.3d 598, 601 (Tex. 2004). No evidence in the record shows what caused the decking to deteriorate. Neither Patrizi nor TAMKO representatives Shaner and Blackburn knew what was causing the decking boards to deteriorate. Similarly, Smith did not know what caused the deterioration, but he said, "perhaps it was a bad batch" of boards.

In sum, there is no evidence in the record identifying any specific deviation from design that caused the product's failure. Rather the evidence is essentially that the product failed; BPP believed the failure was not related to ventilation or installation; and BPP concluded "perhaps" there must be a manufacturing defect in the product. This is merely suspicion, not evidence, of a manufacturing defect. *Marathon Corp. v. Pitzner*, 106 S.W.3d 724, 728 (Tex. 2003).

Having reviewed all of the evidence in the light most favorable to the jury's verdict, we conclude that there is no evidence that the deterioration of the EverGrain decking was caused by a manufacturing defect, and we hold that the trial court did not err in granting TAMKO's motion for judgment n.o.v. We overrule BPP's first three issues. Because we uphold the trial court's judgment on this basis, we need not address BPP's three remaining issues, which pertain to alternative reasons for affirmance of the trial court's judgment.

## **Conclusion**

We affirm the judgment of the trial court.

Michael Massengale  
Justice

Panel consists of Justices Jennings, Bland, and Massengale.