

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
FORT MYERS DIVISION

ACUFLOOR, LLC,

Plaintiff,

v.

Case No.: 2:21-cv-802-SPC-KCD

EVENTILE, INC. and FORPAC,
LLC,

Defendants.

CLAIM CONSTRUCTION ORDER¹

This is a patent case. Plaintiff Acufloor, LLC manufactures, markets, and sells ceramic tiles and tools to aid in tile installation. That includes a leveling system that helps tile installers produce flat floors and walls. The Acufloor System includes leveling spacers and wedges like these:



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Acufloor accuses Defendants Eventile, Inc. and Forpac, LLC of infringing patents it owns relating to the Acufloor System.

The parties disagree on the meanings of some parts of the patent claims. The disputed claims fall into three categories: terms describing the leveling spacer, terms describing the wedge, and design patent drawings. The Court has carefully considered the parties' briefs, exhibits, and oral arguments.

Legal Standard

“The purpose of claim construction is to determine the meaning and scope of the patent claims asserted to be infringed.” *Kaufman v. Microsoft Corp.*, 34 F.4th 1360, 1369 (Fed. Cir. 2022) (cleaned up). “A proper claim construction provides a legal standard for the jury to apply[.]” *Id.* at 1370. But “a sound claim construction need not always purge every shred of ambiguity.” *Bayer Healthcare LLC v. Baxalta Inc.*, 989 F.3d 964, 977 (Fed. Cir. 2021) (citation omitted).

When construing claims, courts should give terms their “ordinary and customary meaning[.]” that is, “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention[.]” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). Courts primarily look to intrinsic evidence to determine what a person with skill in the art would have understood a term to mean. *Id.* at 1314. That includes the language of the claims, the remainder of the specification, and the prosecution history. *Id.*

Extrinsic evidence like expert testimony and dictionary definitions is less reliable than intrinsic evidence, so courts should consider extrinsic evidence in the context of the intrinsic evidence. *Id.* at 1319. “If the meaning of a claim term is clear from the intrinsic evidence, there is no reason to resort to extrinsic evidence.” *Seabed Geosolutions (US) Inc. v. Magseis FF LLC*, 8 F.4th 1285, 1287 (Fed. Cir. 2021).

Courts should not narrow a claim term beyond its plain and ordinary meaning unless the intrinsic evidence supports the limitation. *Wasica Fin. GmbH v. Continental Auto. Sys., Inc.*, 853 F.3d 1272, 1281 (Fed. Cir. 2017). “If the intrinsic record supports several different definitions of a term, the term may be construed to encompass all such consistent meanings.” *Id.*

I. Terms describing the leveling spacer

The parties dispute the proper interpretation of five words or phrases used to describe the leveling spacer in U.S. Patent No. 10,513,857 (the ‘857 Patent) and U.S. Patent 10,704,274 (the ‘274 Patent). The patents claim Acufloor’s tile leveling devices and methods of using them. Claim 1 the ‘857 Patent exemplifies how four of the disputed terms—edge, corner, notch, and I-shaped base—are used in the patents, and how they relate to each other:

A tile leveling device and tile combination comprising:
 a leveling device comprising:
 a body defining an open window,
 an **I-shaped base** orthogonally coupled to the body, the **I-shaped base** having spaced first, second, third, and fourth

bars extending transversely from the body, the spaced first and second bars extending to the front and outward of the body and the spaced third and fourth bars extending to the rear and outward of the body,

...

a first **notch** formed between the first and second bars, and

a second **notch** formed between the third and fourth bars;

a first tile over the first bar, the first tile having a first surface opposite a second surface, the first tile having a first **corner** over the first **notch**, the first **corner** having contact with mortar at the first **notch** with **edge**-to-subfloor contact of first **corner**-to-mortar-to-subfloor at the first **notch**, wherein the first surface faces the first bar and the second surface is farther from the first bar than the first surface;

...

(Doc. 1-2 at 14) (emphasis added).

a. Edge, corner, and notch

A single issue underlies the disputes about the meanings of edge, corner, and notch. Defendants argue the device claimed in Acufloor's patents must allow tile-to-mortar contact up to the extreme edge of the tile, and they propose constructions designed to make that limitation clear. So under Defendants' proposed constructions, the "corner" of a tile is a point, the "edge" of a tile is a line, and a "notch" must permit edge-to-mortar-to-subfloor contact. Acufloor argues "corner" and "edge" are regions of a tile. It urges the Court not to construe the terms but to allow the jury to apply the terms' plain and ordinary meanings. Acufloor proposes a construction of "notch" that does not include edge-to-mortar-to-subfloor contact.

Before deciding the proper constructions of the disputed terms, the Court will address the larger underlying issue. During prosecution of the ‘857 and ‘274 Patents, the applicants repeatedly distinguished their invention from tile spacers in the prior art by showing that only their invention allowed for mortar contact all the way to the very edge of the tile. (*See, e.g.*, [Doc. 93-6](#) and [Doc. 93-4 at 9](#)). The prior art allowed mortar to reach an area near the edge of the tile, but according to the inventors that was not “edge-to-mortar-to-subfloor contact.” ([Doc. 93-6 at 14-15](#)). In addition to making this distinction during prosecution, the inventors amended Claims 1 and 10 of the ‘857 Patent by adding the phrase “with edge-to-subfloor contact at the first notch” and “with edge-to-subfloor contact at the second notch.” ([Doc. 93-4](#)). The inventors made similar additions to Claim 5 of the ‘274 Patent. ([Doc. 93-16](#)).

The prosecution history vindicates Defendants on this point. The inventors relied on mortar-to-tile contact up to the very edge of the tile, rather than an area near the very edge, to distinguish their invention from the prior art. The inventors made this limitation explicit by adding the phrase “edge-to-subfloor contact” to its patent claims. For example, Claim 1 of the ‘857 Patent states, “the first corner having contact with mortar at the first notch with edge-to-subfloor contact of first corner-to-mortar-to-subfloor at the first notch[.]” ([Doc. 1-2 at 14](#)). Here, “edge-to-subfloor contact” clarifies that mortar reaches the extreme edge of the tile at the corner and over the notch. Similarly, Claim

5 of the ‘274 Patent clarifies that the notches provide “edge-to-mortar-to-subfloor contact[.]” ([Doc. 1-4 at 14](#)). Thus, the limitation is not inherent in the definitions of “corner” or “notch.”

Having found that the patents use the term “edge” to state the limitation at issue, the Court must choose a construction that most clearly communicates the limitation to the jury. Eventile proposes, “the line that is the intersection of two plane faces of a tile,” while Forpac proposes, “the line at which a surface of a tile terminates.” Both proposals accurately describe the Court’s understanding of the term as used in the patents. The Court finds Forpac’s proposal simpler and easier to understand. The Court thus construes the term “edge,” when used in the phrases “edge-to-subfloor contact” and “edge-to-mortar-to-subfloor contact,” to mean “the line at which a surface of a tile terminates.” The Court will not construe “corner,” and it adopts Acufloor’s proposed construction of “notch”: “opening intersecting an edge of the base through which mortar can penetrate.”

b. I-shaped base

The ‘857 Patent describes the bottom portion of the levelling spacer as an “I-shaped base having spaced first, second, third, and fourth bars extending transversely from the body[.]” Defendants propose similar, but not identical, constructions—both include a “thin, elongated central member” with shorter bars extending from the ends. They argue the Court should construe “I-shaped

base” because it is imprecise. The Court disagrees. The term, in the context of the claims, is precise enough to communicate that aspect of the invention to a jury.

Defendants also argue that because the notches formed by the trunk and crossbars of the base must allow for adequate mortar-to-tile contact, the I-shape must have certain general dimensional qualities to fulfill its function. But the patent separately requires contact between mortar and tile at the notches “with edge-to-subfloor contact[.]” ([Doc. 1-2 at 14](#)). The Court finds that claim language, as construed above, adequate to describe the required functionality of the notches. It would be redundant and confusing to include a mortar-to-tile-contact limitation in the construction of “I-shaped base.”

The term “I-shaped” is susceptible to variations. But “absent a clear disavowal or alternative lexicography” by the patentees, they were “free to choose a broad term and expect to obtain the full scope of its plain and ordinary meaning.” [Wasica, 853 F.3d at 1282](#) (quotation marks and citation omitted). The Court declines to adopt a narrowing construction of “I-shaped base.”

c. The “majority of an area” phrase

The parties offer competing constructions of this phrase from Claims 1, 5 and 8 of the ‘274 Patent: “the combination of the first notch and the second notch providing a majority of an area of tile-to-mortar-to-subfloor contact for the tile leveling device within the bounds of the base” (the “majority of an area”

phrase). (Doc. 1-4 at 14-15). Acufloor argues the phrase describes the size of the notches in comparison to other openings, while Defendants assert it describes the size of the notches in relation to the solid portions of the base.

Acufloor points to the prosecution history to support its proposed construction. But the document it cites favors Defendants. In an August 13, 2018 response and request for continued examination, the applicants added the “majority of an area” phrase to their claims and used the phrase to distinguish their invention from the prior art. The prior art device at issue had openings in its base that allowed mortar to spread over the transverse member of the base and adhere the tile to the transverse member. The notches in the claimed device, on the other hand, allowed for a larger area of uninterrupted subfloor-to-mortar-to-tile contact. In the words of the applicants, the claimed design allowed “more adhesive to penetrate the opening and extend over a greater surface area of the tiles” than the prior art. (Doc. 86-10 at 25). The applicants gave no indication they contemplated other openings when adding the “majority of an area” phrase.

The prosecution history thus confirms Defendants’ interpretation of the “majority of an area” phrase. The limitation distinguishes Acufloor’s device from the prior art because the Accufloor design allows a relatively large area of direct contact between subfloor, mortar, and tile. Defendants submitted different proposed constructions in their briefs, but at the hearing Eventile

accepted Forpac’s construction. The Court thus construes the “majority of an area phrase” to mean “the notches in the base collectively span an area that is larger than the solid portions of the base.”

II. Terms describing the wedge

The parties have four disputes over the claim language describing Acufloor’s wedge device.

a. “backstop member”

All four of Acufloor’s utility patents use the phrase “backstop member.” The ‘857 and ‘274 Patents claim “a wedge device comprising: a backstop member, and a wedge member extending from the backstop member...” ([Doc. 1-2 at 14](#); [Doc. 1-4 at 14](#)). U.S. Patents 10,501,947 (the ‘947 Patent) and 10,704,271 (the 271 Patent) are a bit more descriptive. They claim as part of a wedge device “a backstop member; a body having an attachment end, a penetrating end, a top, and a bottom, the attachment end being coupled to the backstop member...” ([Doc. 1-1 at 13](#); [Doc. 1-3 at 13](#)).

Acufloor argues the plain and ordinary meaning of “backstop member” applies, so the Court need not construe it. Eventile proposes this construction: “a structure distinct from the wedge member that extends laterally outward from the rear of the wedge member to provide additional surface area for pushing the wedge device.” ([Doc. 94 at 26](#)). Forpac’s proposal is almost identical to Eventile’s.

Defendants claim their proposed construction will clarify three properties of the backstop member. First, it states the backstop member is a distinct structure, not merely the rear face of the wedge. That element of the proposed construction is unnecessary. The term “backstop member” itself communicates that it is more than just a rear surface. That the claims identify the backstop member as an independent component of the wedge device makes it even more clear.

Second, Defendants’ proposed construction expressly includes the limitation that the backstop member “extends laterally outward.” Most of the embodiments disclosed in the patents include a backstop that increases the surface area of the rear of the wedge device, but not all of them do. Figures 11 and 15 of the ‘947 Patent show backstop members that appear flush with the back of the wedge. ([Doc. 1-1 at 8-9](#)). Claim 8 of the ‘947 Patent also favors Acufloor: “The wedge device as recited in claim 1, wherein the backstop member has a larger surface area than the attachment end.” ([Id. at 12](#)). If the inventors considered a backstop member inherently oversized, Claim 8 would have been unnecessary. Defendants have not provided sufficient evidence to support this limitation.

Third, Defendants propose the Court include the function of the backstop member—“to provide additional surface area for pushing”—in the construction. But as established above, the backstop member does not

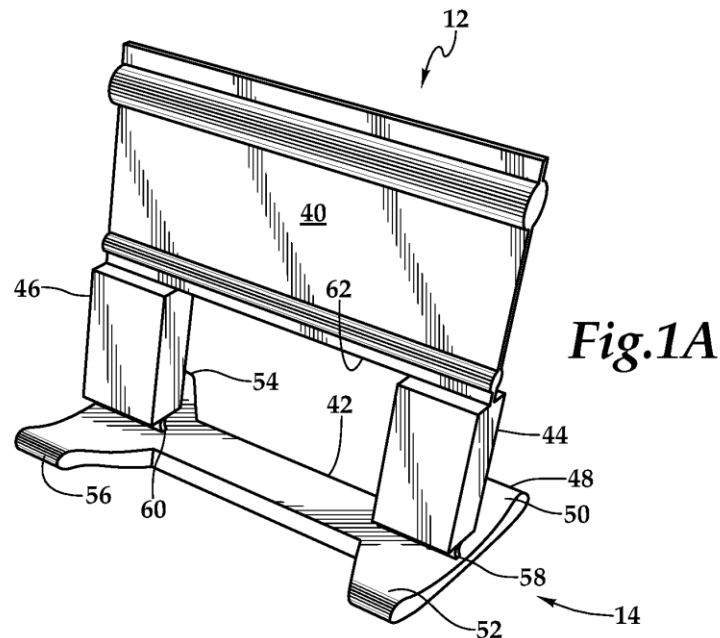
necessarily increase the rear surface area of the wedge device. What is more, this explanation is unnecessary. Any juror with a basic understanding of the Accufloor system will understand that the user applies force to the backstop member.

The Court will not construe “backstop member.”

b. The wedge device preamble

Claims 9 and 10 of the ‘947 Patent and Claim 1 of the ‘271 Patent begin with this preamble: “A wedge device for a tile leveling device including a clip member, the wedge device comprising...” ([Doc. 1-1 at 12-13](#); [Doc. 1-3 at 12](#)). Eventile asks the Court to construe the preamble as a limitation that “requires a wedge device including a clip member.” ([Doc. 94 at 28](#)). According to Accufloor, the preamble merely states an intended use for the wedge device and is not limiting.

To understand this issue, it is important to understand the terms “clip member” and “tile leveling device” as used in the patents. Both patents at issue here include the following diagram of an example of a clip member:



([Doc. 1-1 at 4](#); [Doc. 1-3 at 4](#)). And the patents refer to the clip member and the wedge device together as a “tile leveling device.” (See, e.g., [Doc. 1-3 at 11](#)).

Preambles are generally not limiting. [Summit 6, LLC v. Samsung Elecs. Co., Ltd.](#), 802 F.3d 1283, 1292 (Fed. Cir. 2015). That includes “preamble language that merely states the purpose or intended use on an invention.” *Id.* (cleaned up). But there are exceptions. A preamble generally is limiting “if it recites essential structure or steps, or if it is necessary to give life, meaning, and vitality to the claim.” [Proveris Scientific Corp. v. Innovasystems, Inc.](#), 739 F.3d 1367, 1372 (Fed. Cir. 2014) (quotation marks and citation omitted). And “when limitations in the body of the claim rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component

of the claimed invention.” *Pacing Techs, LLC v. Garmin Int’l, Inc.*, 778 F.3d 1021, 1024 (Fed. Cir. 2015) (quotation marks and citation omitted).

The patents at issue bear hallmarks of a limiting preamble. The bodies of each claim include “the penetrating edge being configured to penetrate the clip member.” (See, e.g., [Doc. 1-3 at 12](#)). The “clip member” mentioned in the body of each claim derives an antecedent basis from the preamble. And the specifications emphasize the necessity of a clip member even when broadening the scope of the patents: “It should be appreciated that although a particular clip member is described and illustrated, the wedge device **10** presented herein may work with a variety of clip members and the clip member selected will depend on a number of manufacturing and design considerations.” ([Doc. 1-1 at 11](#); [Doc. 1-3 at 11](#)).

That said, the preamble is not limiting in the way Eventile argues. Under Eventile’s proposed construction, the preamble “requires a wedge device including a clip member.” But the clip member is not part of the wedge device. Rather, the wedge device and clip member are separate components of a tile leveling device. The ‘947 and ‘271 Patents claim a wedge device, not a tile leveling device. The limiting effect of the clip member lies in the design of the wedge—the wedge is designed to penetrate a clip member. The clip member is not a part of the wedge device, as Eventile’s proposed construction implies. Because the body of each claim includes the limitation “the penetrating edge

being configured to penetrate the clip member,” the preamble phrase does not provide any additional limitation.²

Because the limitation stated in the preamble of each claim is duplicative of a limitation in the body, the Court will not construe the preamble. *See Summit 6*, 802 F.3d at 1292.

c. The “line-of-sight opening” phrase

Claim 10 of the ‘947 Patent includes the following description of an opening in the claimed wedge device: “a line-of-sight opening extending along the longitudinal axis and intersecting the longitudinal length from one-third (1/3) of the longitudinal length measured from the attachment end to one-third (1/3) of the longitudinal length measured from the penetrating edge[.]” (*Doc. 1-1 at 13*). Eventile purportedly proposes a construction that merely simplifies the limitation for the jury: “a line of sight opening that extends one-third (1/3) the distance of the longitudinal length of the wedge device measured starting from a point that is 1/3 the distance from the attachment end to a point that is one-third (1/3) of the distance from the penetrating edge.” (*Doc. 94 at 29*).

Eventile’s proposed construction is not significantly easier to understand than the claim language. But it is much more limiting. Both the claim

² This conclusion is consistent with the prosecution history cited by Eventile, wherein the examiner found: “The combination of all the elements of the claimed wedge device, in particular the wedge device including a clip member, *wherein a penetrating edge of the wedge being configured to penetrate the clip member* is not adequately taught or suggested in the cited prior art of record.” (*Doc. 94-13 at 7*) (emphasis added).

limitation and the proposed construction describe a line-of-sight opening in relation to points $1/3$ the length of the wedge measure from either end. Eventile’s proposed construction requires the opening to *terminate* at the $1/3$ points, while the claim teaches an opening that *intersects* those points. Eventile offers no justification for this additional limitation.

The Court will not construe the “line-of-sight opening” phrase.

d. “inclined plane”

The ‘947 and ‘271 Patents use the term “inclined plane” to describe the top surface of the wedge device. Acufloor and Eventile offer slightly different constructions. Acufloor proposes “sloped surface,” and Eventile proposes “sloped flat surface.” Acufloor worries that “flat” undercuts the patents’ explicit claim of embodiments that include teeth along the top surface of the wedge. Eventile argues “sloped *flat* surface” will ensure the jury understands the claims.

The Court finds that inclusion of the term “flat” would more likely confuse than clarify. While “flat” does not necessarily mean “smooth,” a juror could perhaps interpret it that way. That risk seems small, but the benefit of including “flat” is even smaller. Given the figures in the patents and the demonstrative evidence likely to be used at trial, a jury will understand that the top surface of the claimed wedge device is flat rather than concave or convex. The Court construes “inclined plane” as a “sloped surface.”

III. Design patents

Acufloor accuses Eventile of infringing two design patents, U.S. Design Patent No. D832,680 (the ‘680 Design Patent) and U.S. Design Patent No. D870,527 (the ‘527 Design Patent). Eventile asks the Court to construe the design claims by adopting its proposed written descriptions of the figures. Acufloor rejects the need to construe the design claims, and while it contests the accuracy of Eventile’s descriptions, it provides no alternative language.

The Federal Circuit has “proposed that the preferable course ordinarily will be for a district court not to attempt to construe a design patent claim” but “also emphasized that there are a number of claim scope issues on which a court’s guidance would be useful to the fact finder.” *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1293 (Fed. Cir. 2010). Among them “is the distinction between the functional and ornamental aspects of a design.” *Id.* That is so because a design patent protects the ornamental design of an article and not the functional elements. *Id.* at 1293-94.

Acufloor’s design patents claim two designs for wedge devices used in its tile leveling system. The wedges are highly functional items, and the patents explicitly disclaim certain elements, which are illustrated in the patent with broken lines. It would be improper to allow Acufloor to extend the protection of its design patents to the functional and disclaimed elements of the wedge designs. See *id.* at 1294. However, the Court declines to adopt Eventile’s list

of design elements, might encourage the jury to engage in an improper element by element comparison rather than consider the overall design. The Court will attempt to avoid that trap by referring the jury to the figures in the patents.

The Court construes the claim in Design Patent ‘680 as follows: The ornamental design for a wedge-shaped device (Fig. 1) with a rectangular bottom surface (Fig. 4), right angles where the bottom surface meets the front and back surfaces (Fig. 2), a top surface sloped downward from back to front at the angle shown in Fig. 2, and smooth areas on the front and back ends of the top surface having the sizes and shapes shown in Figs. 1, 2, and 3. The wedge has a vertical opening as shown in Fig. 4. The existence of the opening is not part of the protected design, but the shape of the opening is. The rectangular backstop at the rear of the wedge and the teeth along the top surface—both of which are depicted in the figures with broken lines—are not part of the protected design.

Likewise, the Court construes the claim in Design Patent ‘527 as follows: The ornamental design for a wedge-shaped device (Fig. 1) with a rectangular bottom surface (Fig. 4), right angles where the bottom surface meets the front and back surfaces (Fig. 2), a top surface with a smooth and level area at the back having the size and shape shown in Figs. 1-3 adjoining a larger area sloped downward from back to front at the angle shown in Fig. 2, and a smooth front end of the sloped top surface having the size and shape shown in Figs. 1-

3. The wedge has a vertical opening as shown in Figs. 3-4. The existence of the opening is not part of the protected design, but the shape of the opening is. The shelf protruding from the bottom rear part of the wedge and the teeth along the top surface—both of which are depicted in the figures with broken lines—are not part of the protected design.

DONE and **ORDERED** in Fort Myers, Florida on November 21, 2022.


SHERI POLSTER CHAPPELL
UNITED STATES DISTRICT JUDGE

Copies: All Parties of Record