

Separation Panes: Emerging Litigation Over Window Sealant

Law360, New York (August 9, 2016, 4:20 PM ET) –

Relatively few people in the commercial construction industry are kept up at night by polyisobutylene (PIB) — the synthetic rubber sealant commonly used to provide a long term and durable moisture barrier for insulated glass window units (IGUs). That may be changing, however. Litigation alleging significant defects in PIB suggests that this fairly commonplace sealant has become a source of anxiety for building owners, contractors, subcontractors and PIB manufacturers.

What is PIB?

An IGU is a window unit made up of two or more glass panes separated by a spacer bar and sealed with PIB. IGUs are frequently used in glass curtain walls on commercial office buildings.[1] The curtain wall is the “exterior closure or skin of the building.” The PIB prevents moisture from passing into the air space between the glass panes that make up each IGU. A functioning PIB seal is essential to the IGU; any break in the seal acts as an opening to allow moisture into the space between the glass panes. This can lead to condensation, fogging and other degradation of the IGUs.

What Issues Have Emerged Regarding PIB?

Recent litigation has centered on several allegations involving PIB. These problems can include the following:

1. **Running PIB.** Running PIB occurs when the PIB runs or drips down across the glass from its location between the tops of the panes of the IGU.[2]
2. **Migrating PIB.** Migrating PIB occurs when PIB leaks or spreads out across the glass from across the top of the IGU in an uneven, wave formation.[3]
3. **Failed PIB.** Failed PIB occurs when the IGU seal has weakened to such an extent that it allows moisture to enter the area between the IGU panes, causing the glass to fog, or worse.[4]
4. **Color changes.** One pending case alleges that problems with the PIB caused the structural silicone sealant adjacent to the PIB to change from gray to a brownish color that contrasted with the color of the building.[5]

Pending Litigation Regarding PIB in Windows

There are at least three pending, publicly recorded cases involving PIB:

The first involves a 32-story luxury hotel in San Francisco. In that case, the owner (CDC San Francisco) filed suit last year in California Superior Court against Webcor Builders and its subcontractors and suppliers. According to the complaint, the owner noticed after construction that a “grey film was forming or mottling on some of the IG units.”[6] The suit alleges that the film and mottling are the result of a malfunction or failure of the PIB used in the IGUs. It alleges claims based on breach of warranty, negligence, strict products liability and breach of contract based on a third party beneficiary theory. Besides Webcor, the defendants in the lawsuit include Architectural Glass & Aluminum (the subcontractor who installed the curtain wall), Midwest Curtainwalls (the subcontractor who assisted in fabrication of the curtain wall), Viracon (the IGU supplier), and Quanex (the PIB manufacturer). All of the defendants have filed motions for summary judgment.



Brent J. Gurney



Rachel Murphy



Meredith Loretta

Hearings are scheduled in September and October 2016. Trial is set for November 2016.

In the second case, a window designer and manufacturer (H. Hirschmann Ltd.) filed a lawsuit in the federal district court for the district of Vermont against Green Mountain Glass (the IGU manufacturer) and ADCO Products (the PIB manufacturer). Hirschmann alleges that the PIB in a large number of IGUs failed, “loosened, and was drooping into the window’s visible area which resulted in a significant deterioration in aesthetics.”[7] The court recently denied a motion to dismiss an implied warranty claim based on lack of contractual privity between ADCO and Hirschmann. In denying the motion, the court applied New Hampshire state law, which does not require privity.[8] In addition to the implied warranty claims, Hirschmann alleges claims based on breach of contract and breach of express warranty.

Lastly, Starline Windows (a window manufacturer), its affiliate, and Vitrum Industries (an IGU manufacturer) filed a lawsuit last year in the federal district court for the Southern District of California in connection with its purchase of aluminum window units used in several residential developments located in San Diego, Oakland and Los Angeles. The lawsuit alleges that the PIB in the window units failed and migrated across the glass, damaging the IGUs.[9] The defendants are Quanex Building Products and TruSeal Technologies, the manufacturers and suppliers of the PIB. The court recently denied the defendants’ motion to dismiss the negligence and strict products liability claims based on the economic loss rule (described below).[10] In addition to these claims, claims are pending for breach of contract, breach of implied warranties, implied indemnity, breach of the California Business and Professions Code, contribution, unjust enrichment, equitable relief and declaratory relief.

Causation

According to research published by the engineering consulting firm of Wiss Janney Estner (WJE) Associates,[11] the problems associated with PIB can result “solely or primarily from normal exposure to sunlight,” UV radiation, and/or heat.[12] WJE ruled out incompatible building materials as the proximate cause.

WJE also observed that the problems with PIB have occurred in only gray-colored PIB.[13] The pending cases reinforce WJE’s finding. Both Starline Windows and Webcor specify that the PIB at issue is gray.[14] (H. Hirschmann does not specify the color of the defective PIB).

Additionally, WJE noted that “there is currently no known remediation method to address PIB ... [failure] for affected IGUs other than IGU replacement.”[15] PIB running that results from changes in the physical properties of the PIB will likely continue, so long as the PIB is exposed, and will likely worsen in appearance over time. The continued flow of PIB sealant “will likely shorten the IGU edge seal service life,” resulting in premature condensation or fogging of the affected IGU.[16]

The Economic Loss Rule

One potentially noteworthy development to emerge from the pending cases involves the economic loss rule, which can be

a significant bar to recovery in tort claims. According to this rule, there can be no recovery of tort damages that result from an economic loss caused by a breach of contract, unless the product defect causes damage to property other than the product itself. However, last month the court in *Starline Windows* denied a motion by the PIB manufacturers (Quanex and TruSeal) to dismiss the strict liability and negligence claims against them based on the economic loss rule.[17] Quanex and TruSeal had argued that once the PIB was incorporated into an IGU, the PIB became part of the IGU, and there could be no separate property damage caused by the defective PIB outside of the product itself. The court denied the motion to dismiss, stating that resolving whether “the PIB lost its identity as an independent product upon its incorporation into the larger window assembly,” is a “fact intensive inquiry inappropriate for resolution on a motion to dismiss.”[18]

Conclusion

The litigation involving PIB discussed above suggests that the commercial construction world may find itself facing complex disputes regarding this seemingly mundane sealant. The migrating, running or degrading PIB can mar the face of the curtain wall and expose all parties, from the building owner down to the PIB manufacturer, to significant claims for damages. If any of these problems associated with PIB is discovered in a building’s IGUs or curtain wall, it is important to assess both the damage and legal responsibility as soon as possible.

—By Brent J. Gurney, Rachel Murphy and Meredith Loretta, [WilmerHale](#)

Brent Gurney is a partner in WilmerHale's Washington, D.C., office, and is a member of the firm's business trial group and investigations practice. Rachel Murphy is a senior associate in WilmerHale's Washington office in the firm's litigation/controversy department. Meredith Loretta was a firm summer associate in 2016.

The opinions expressed are those of the author and do not necessarily reflect the views of the firm, its clients, or Portfolio Media Inc., or any of its or their respective affiliates. This article is for general information purposes and is not intended to be and should not be taken as legal advice.

[1] Curtain wall, DictionaryofConstruction.com, WebFinance Inc. (last visited July 28, 2016).

[2] Allegations of PIB migration were cited in *H. Hirschmann v. Green Mountain Glass, et al.*, First Amended Complaint at 4, No. 5:15-cv-34 (D. Vt. March 7, 2016), ECF No. 37 [hereinafter *Hirschmann*] and *CDC San Francisco v. Webcor Builders et al.*, Complaint at 4, No. CGC-15-546222 (Cal. Super. Ct. June 9, 2015) [hereinafter *Webcor*].

[3] Allegations of PIB running were cited in *Starline Windows et al. v. Quanex Building Products et al.*, First Amended Complaint at 7, No. 3:15-cv-1282 (S.D. Cal. Sept. 17, 2015), ECF No. 4 [hereinafter *Starline Windows*].

[4] See *id.* (“The PIB has failed, deteriorated, and migrated.”).

[5] *Webcor*, Complaint at 5, No. CGC-15-546222 (Cal. Super. Ct. June 9, 2015).

[6] *Id.* at 4, No. CGC-15-546222 (Cal. Super. Ct. June 9, 2015).

[7] Hirschmann, First Amended Complaint at 4, No. 5:15-cv-34 (D. Vt. March 7, 2016), ECF No. 37.

[8] Hirschmann, Order denying Motion to Dismiss, No. 5:15-cv-34 (D. Vt. July 6, 2016), ECF No. 50.

[9] Starline Windows, First Amended Complaint at 7, No. 3:15-cv-1282 (S.D. Cal. Sept. 17, 2015), ECF No. 4.

[10] Starline Windows, Order denying Motion to Dismiss, No. 3:15-cv-1282 (S.D. Cal. June 6, 2016), ECF No. 53.

[11] Wiss, Janney, Estner Associates is a firm that consults on complex construction challenges, and is comprised of engineers, architects, and material scientists.

[12] Richard Cechner, *Insulating Glass Units and Polyisobutylene Run-down*, Primer (Wiss, Janney, Elstner Associates, Inc.) (2016).

[13] *Id.*

[14] See Webcor, Complaint at 5, No. CGC-15-546222 (Cal. Super. Ct. June 9, 2015); Starline Windows, First Amended Complaint at 4, No. 3:15-cv-1282 (S.D. Cal. Sept. 17, 2015) ECF No. 4.

[15] Richard Cechner, *Insulating Glass Units and Polyisobutylene Run-down*, Primer (Wiss, Janney, Elstner Associates, Inc.) (2016).

[16] *Id.*

[17] Starline Windows, Order denying Motion to Dismiss, No. 3:15-cv-1282 (S.D. Cal. June 6, 2016) ECF No. 53.

[18] *Id.*