

Design Accountability:

Statutes of Repose, the Missing Inspector, and a Knowledge Gate for the People Who Design Things

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Abstract

Statutes of repose extinguish claims against the designers and builders of things a fixed number of years after completion, regardless of discovery, culpability, or concealment. This Article argues that the doctrine does something worse than deny stale claims: it subsidizes a design strategy. A hazard engineered to fail slowly, hidden where no user can inspect it, will predictably outlast the repose window, and the designer who conceals best is the designer the statute protects most completely. The Article proceeds from a specimen, a Pennsylvania home whose garage slab was built over a concealed void on a single unprotected steel column that corroded for thirty years behind a sealed wall, and generalizes. First, it shows that the finality rationales for repose, lost evidence, faded memory, and fair notice, each collapse when the defendant manufactured the evidentiary silence, and that limitations doctrine already recognizes this through a fraudulent concealment exception that repose alone lacks. Second, it demonstrates that the resulting incentive is not hypothetical by assembling the documented record of design decision concealment across industries: automotive cost benefit suppression, tobacco and asbestos knowledge management, pharmaceutical ghost management, aviation certification concealment, and the built environment itself. Third, it shows that American law already operates downstream harm surveillance in food, motor vehicles, drugs and devices, consumer products, and workplaces, under the closely regulated industry doctrine and mandatory death and injury reporting, and that housing is the conspicuous omission. Drawing on the builder provisions of the Code of Hammurabi as the ancient baseline of unlimited accountability, the Article proposes a knowledge gate as a domain agnostic principle of design accountability: time based liability shields should shelter what could not have been known at the moment of the design decision despite reasonable diligence, and should shelter nothing that was known and concealed. Two transplant reforms follow: a fraudulent concealment carve out in statutes of repose, and early warning reporting for the built environment on the model of 49 U.S.C. § 30166 and Florida's post collapse milestone inspection statute.

Keywords: product liability; design defect; design accountability; statute of repose; fraudulent concealment; engineering ethics; ethical design; closely regulated industry; consumer protection; safety regulation; construction defect.

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I. Introduction

Every legal rule is a designed structure, and designed structures can be load tested. This Article load tests one rule, the statute of repose, against one failure mode, the deliberately concealed design hazard, and finds that the rule does not merely fail to deter the hazard. It pays for it. The finding is not confined to construction law. Wherever a person designs a thing that other people will rely on, a product, a building, an aircraft control system, a drug disclosure regime, a statute, the same two variables recur: what the designer knew at the moment of the decision, and whether the people bearing the consequences could ever find out. The Article's claim is that liability doctrine should turn on the first variable, that time based shields presently turn on neither, and that the combination of a time based shield with an unwatched product category creates a payoff structure that rewards the most patient concealer.¹

The test case is concrete in both senses. In the summer of 2026, a family in North Huntingdon, Pennsylvania hired a contractor to repair cracks in their garage floor. His sledgehammer went through the slab into a room no occupant knew existed: a void beneath the garage, inaccessible from the finished basement, weatherproofed on a single wall, in which one unprotected steel column and its rebar had corroded for roughly thirty years while carrying the floor above.² A structural engineer retained by the family attributed the condition to poor workmanship and faulty construction.³ The builder's representative offered a different frame: the laws were different thirty years ago.⁴ The family's homeowner's insurer denied coverage on the ground that faulty construction is excluded.⁵ A second home by the same builder, from the same era, in a nearby township, had already failed the same way; its owner's car broke through

1. The claim about payoff structures is developed doctrinally in Part III and empirically in Part IV. For the foundational economic treatment of when liability and when regulation are the appropriate instruments for controlling risk, see Steven Shavell, *Liability for Harm Versus Regulation of Safety*, 13 J. Legal Stud. 357 (1984).

2. Meghan Schiller, *KDKA Investigates*, CBS Pittsburgh broadcast (July 2026) (recording and transcript on file with author). All facts of the specimen case in this Article derive from this segment and are presented as reported.

3. *Id.*

4. *Id.*

5. *Id.*

the garage floor, revealing a void nine feet deep whose existence, she discovered, was drawn on the blueprints filed with her township.⁶

No lawsuit will reach this builder, and this Article does not argue otherwise. Pennsylvania's statute of repose extinguishes construction claims twelve years after completion,⁷ and the Pennsylvania Supreme Court has held that expiration does not merely bar the remedy but abolishes the cause of action.⁸ The interesting question is what the statute's blindness to this fact pattern reveals about its design, and what the fact pattern's recurrence across industries reveals about the general problem. Part II examines the specimen and establishes why its defining feature is choice rather than accident. Part III examines the repose doctrine, its rationales, and the doctrinal seam that separates it from limitations law. Part IV assembles the cross industry record demonstrating that manufactured silence around known design hazards is a documented corporate strategy rather than a hypothetical. Part V surveys the five American regimes of downstream harm surveillance and identifies housing as the omission, including the one state that has begun to close it. Part VI reaches back to the oldest builder liability rule on record to isolate what modern law improved and what it abandoned, and states the resulting principle as a knowledge gate. Part VII translates the gate into two reforms. Part VIII concludes.

II. The Specimen: A Void Beneath the Garage

A. What the Unbiased Expert Said

Three parties evaluated the North Huntingdon garage, and two of them had money at stake. The insurer, whose exclusion for faulty construction protects its reserves, invoked the exclusion. The builder, whose exposure runs with its name across thousands of similar homes, invoked the calendar. The third evaluator, the structural engineer, had neither a premium to guard nor a warranty to escape, and his conclusion was a finding about method: poor workmanship and faulty

6. *Id.*

7. 42 Pa. Cons. Stat. § 5536(a).

8. *Noll v. Harrisburg Area YMCA*, 643 A.2d 81 (Pa. 1994).

construction.⁹ The vocabulary matters. Workmanship and construction are descriptions of how a thing was built. They are never descriptions of when it was built. The engineer had available to him an entire lexicon of temporal excuse, standards of the era, ordinary deterioration, service life exceeded, and used none of it. The one participant with no incentive located the failure in the act of building.

B. The Calendar Defense and Its Kernel

The builder's frame contains a genuine kernel. Pennsylvania had no statewide building code until the Uniform Construction Code, established by the Pennsylvania Construction Code Act of 1999 and effective in April 2004.¹⁰ A home completed in the mid 1990s answered only to whatever ordinance its municipality had adopted, and municipal coverage in that era was thin and uneven.

The kernel does no exculpatory work, because prescriptive codes were never the only source of builder obligation. Pennsylvania recognized an implied warranty that a new home is constructed in a reasonably workmanlike manner decades before any statewide code existed,¹¹ and negligence law asked then, as it asks now, whether the builder built as a reasonably competent builder would. The duty ran to the people foreseeably relying on the structure, a principle American law settled for manufactured things generally more than a century ago,¹² and the class of foreseeable reliers on a suburban family home includes, obviously and always, children. Neither doctrine requires a code citation. Both were available to a plaintiff at year two. The calendar defense succeeds only as rhetoric, by relocating the dispute from the domain

9. Schiller, *supra* note 2.

10. Act of Nov. 10, 1999, P.L. 491, No. 45; 34 Pa. Code ch. 403 (regulations effective Apr. 9, 2004).

11. *Elderkin v. Gaster*, 447 Pa. 118, 288 A.2d 771 (1972) (builder-vendor impliedly warrants that the home is constructed in a reasonably workmanlike manner and fit for habitation); *accord Tyus v. Resta*, 476 A.2d 427 (Pa. 1984). The warranty has its own limit worth candor: Pennsylvania declined to extend it past the first purchaser, *Conway v. Cutler Group, Inc.*, 99 A.3d 67 (Pa. 2014), which narrows the year two counterfactual to original owners and leaves later buyers to negligence alone; the narrowing strengthens rather than weakens Part V's case for a surveillance regime that does not depend on privity.

12. *MacPherson v. Buick Motor Co.*, 217 N.Y. 382, 111 N.E. 1050 (1916) (duty of care runs to foreseeable users of a product, privity notwithstanding).

where the builder loses, method, to the domain where the builder wins, time. The relocation is instructive precisely because it concedes the method question.

C. Choice, Not Chance

The reflexive vocabulary for the rusted column is “defect,” and the vocabulary forfeits the point. Products liability law divides the term. A manufacturing defect is a unit that departs from its intended design, the one flawed beam that slipped through; a design defect is a product built exactly to plan, where the plan itself is what endangers.¹³ What the blueprints establish here is the second category. The void was drawn. The single column was specified. The sealed inaccessibility was constructed as designed. Nothing departed from intent; the intent is the problem. And the design category is the systemically worse one, because a manufacturing defect is confined to the unlucky unit while a design defect replicates across every unit built from the plan. The second home’s identical failure, same era, same builder, same buried void, same broken slab, is what replication looks like.

Each design choice, moreover, carried a consequence that was available knowledge at the moment the choice was made. Unprotected steel in a damp, enclosed, below grade cavity presents the most elementary corrosion scenario in the building trades; it is knowledge a builder cannot avoid possessing. A single column is, by construction, a single point of failure. And sealing the cavity from the finished basement guaranteed that the one party with a continuing interest in the column’s condition, the occupant, could never observe it, maintain it, or discover its decay. The concealment is therefore not incidental to the story. It is the load bearing element of the legal outcome: the concealment is what converted a claim that existed at year two into a claim that had been abolished by year thirty.

13. Restatement (Third) of Torts: Products Liability § 2 (Am. L. Inst. 1998) (distinguishing manufacturing defects, design defects, and warning defects). The doctrinal architecture descends from *Greenman v. Yuba Power Products, Inc.*, 59 Cal. 2d 57, 377 P.2d 897 (1963), and *Barker v. Lull Engineering Co.*, 20 Cal. 3d 413, 573 P.2d 443 (1978); its policy rationale was stated a generation earlier in *Escola v. Coca Cola Bottling Co.*, 24 Cal. 2d 453, 150 P.2d 436, 440–44 (1944) (Traynor, J., concurring).

III. The Clock: What Repose Actually Protects

A. *The Doctrine and Its Distinction from Limitations*

Pennsylvania’s statute of repose provides that a civil action arising from the deficient design, planning, supervision, or construction of an improvement to real property must be commenced within twelve years after completion of construction, with a limited extension to fourteen years where the injury occurs in years ten through twelve.¹⁴ The provision is one instance of a national pattern; in the products liability reform era, most states enacted repose or useful life statutes for improvements to realty, products, or both.¹⁵ The Supreme Court has explained the conceptual distinction the label carries: a statute of limitations runs from accrual of the claim and is subject to equitable tolling, while a statute of repose runs from the defendant’s last act, is measured without reference to injury or discovery, and reflects a legislative judgment that the defendant should be free of liability after a fixed period.¹⁶ In Pennsylvania’s formulation, expiration of the repose period does not merely bar the remedy as limitations does; it completely abolishes and eliminates the cause of action.¹⁷

The protection is robust against circumvention. A builder’s return to perform repairs does not restart the period.¹⁸ And the statute’s limitation of its shelter to persons “lawfully” performing construction has been construed to require authorization and licensure rather than compliance with applicable codes, so that a certificate of occupancy starts a clock that code violations cannot stop.¹⁹

14. 42 Pa. Cons. Stat. § 5536(a)–(b).

15. See Robert A. van Kirk, Note, *The Evolution of Useful Life Statutes in the Products Liability Reform Effort*, 1989 Duke L.J. 1689 (surveying the statutes and the insurance crisis politics that produced them).

16. *CTS Corp. v. Waldburger*, 573 U.S. 1 (2014); *Cal. Pub. Employees’ Ret. Sys. v. ANZ Sec., Inc.*, 582 U.S. 497 (2017) (statutes of repose are not subject to equitable tolling); *Lampf, Pleva, Lipkind, Prupis & Petigrow v. Gilbertson*, 501 U.S. 350 (1991).

17. *Noll*, 643 A.2d 81. The statute survived constitutional challenge in *Freezer Storage, Inc. v. Armstrong Cork Co.*, 382 A.2d 715 (Pa. 1978).

18. *Venema v. Moser Builders, Inc.*, 2022 PA Super 171, 284 A.3d 1224 (Pa. Super. Ct. 2022).

19. *Johnson v. Toll Bros.*, 2023 Pa. Super. LEXIS 410 (Pa. Super. Ct. Sept. 19, 2023).

B. The Finality Rationales

The literature states three standard justifications for repose: fairness to defendants entitled to a sense of security after a reasonable time, the staleness of evidence, and the facilitation of business certainty and planning, including insurability of a bounded rather than perpetual liability tail.²⁰ The vocabulary is old; the Supreme Court was calling limitations statutes “statutes of repose” as early as 1831, in the sense of statutes that quiet titles and settle expectations.²¹ These are genuine considerations, and this Article does not propose abolishing repose. It proposes noticing the assumption every finality rationale shares: that the evidentiary silence of the intervening years is a natural product of time. Lost records, faded memories, and unfair surprise are equities that belong to a defendant who did not cause the silence.

The assumption has been attacked before on grounds adjacent to this Article’s. Scholarship on latent injury has shown that time bars perform worst precisely where the gap between wrongful act and discoverable harm is longest, toxic exposure being the canonical example, so that the statutes achieve the opposite of their purpose in the very cases where the stakes are highest.²² The present argument is narrower and, for that reason, harder to resist: it does not ask what to do about all latency, only what to do about latency the defendant built.

C. The Seam: Concealment Estops Limitations and Perfects Repose

Limitations doctrine confronted the manufactured silence problem long ago and answered it. Under the fraudulent concealment doctrine, a defendant whose affirmative concealment prevented the plaintiff from discovering the claim is estopped from pleading the time bar his concealment

20. Christopher R. Leslie, Comment, *Den of Inequity: The Case for Equitable Doctrines in Rule 10b-5 Cases*, 81 Cal. L. Rev. 1587 (1993) (stating the three justifications); see also Note, *Statutes of Limitations and Opting Out of Class Actions*, 81 Mich. L. Rev. 399 (1982) (the basic policy of time bars is fairness to the defendant); see generally Developments in the Law, *Statutes of Limitations*, 63 Harv. L. Rev. 1177 (1950).

21. *Lewis v. Marshall*, 30 U.S. (5 Pet.) 470, 476–77 (1831) (statutes of limitations “have been emphatically and justly denominated statutes of repose”), quoted in Note, *supra* note 18.

22. Michael D. Green, *The Paradox of Statutes of Limitations in Toxic Substances Litigation*, 76 Cal. L. Rev. 965 (1988); see also van Kirk, *supra* note 14 (collecting cases in which repose extinguished products claims before injury, an effect one commentator termed “death before conception,” citing Kratky, *Statutes of Repose in Products Liability: Death Before Conception?*, 37 Sw. L.J. 665).

produced; the Supreme Court traced the rule to equity in the nineteenth century and declared it “read into every federal statute of limitation.”²³ The companion discovery principles serve the same function: a claim ordinarily accrues when the plaintiff knows or should know of the injury and its cause, because a plaintiff cannot reasonably be charged with sleeping on rights she has no way to know exist.²⁴ The whole family of doctrines rests on the oldest maxim in the neighborhood, that no one may take advantage of his own wrong.²⁵

Repose doctrine, as a general rule, contains no such exception, and because repose is framed as abolishing the right rather than delaying the remedy, the Supreme Court has expressly held that equitable tolling cannot touch it.²⁶ The result is a doctrinal seam: the identical concealment that estops a limitations defense perfects a repose defense. A defendant who hides his wrong from a plaintiff for four years converts a losing limitations plea into a winning one only if the hiding fails; a defendant who hides his wrong for thirteen years wins automatically, and wins more securely the better the hiding worked.

D. The Split, the Strongest Objection, and Its Answer

The general rule is not unanimous, and the dissenting jurisdictions are this Article’s best evidence that the reform is administrable rather than utopian. Kansas has held squarely that fraudulent concealment reaches the repose period on the ground that no logic supports tolling a limitations statute but not a repose statute when the defendant’s own fraud produced the delay.²⁷ Georgia

23. *Holmberg v. Armbrrecht*, 327 U.S. 392 (1946); *Bailey v. Glover*, 88 U.S. (21 Wall.) 342 (1874) (where the fraud is concealed, the bar does not begin to run until discovery).

24. *United States v. Kubrick*, 444 U.S. 111 (1979); *TRW Inc. v. Andrews*, 534 U.S. 19 (2001) (discussing the discovery rule’s scope); cf. *Gabelli v. SEC*, 568 U.S. 442 (2013) (declining to extend the fraud discovery rule to government penalty actions).

25. *Glus v. Brooklyn E. Dist. Terminal*, 359 U.S. 231 (1959).

26. *ANZ Sec.*, 582 U.S. 497; *CTS Corp.*, 573 U.S. 1. Commentators observed at the time of *Lampf* that the practical consequence of a repose period is precisely the elimination of equitable tolling and estoppel, including for concealed fraud. Leslie, *supra* note 18.

27. *Robinson v. Shah*, 936 P.2d 784 (Kan. Ct. App. 1997) (“There is no reason grounded in logic to presume that the fraudulent concealment of a defendant will toll a statute of limitations but not a statute of repose.”). *Robinson* arose in a physician patient relationship with its ongoing duty to disclose, and the court held in the alternative that the defendant was equitably estopped from raising either time defense; a partial dissent would have read the statute’s “but in no event” language as absolute. The relational context matters for transplanting the holding, and the builder

and Mississippi reach the same destination through equitable estoppel rather than tolling: the repose period itself never moves, but a defendant whose fraud concealed the injury's cause is estopped from raising the defense his own wrong created.²⁸ Minnesota did it the way this Article recommends, by statute: its construction repose provision carries a legislative fraud exception, applied to allow suit against a manufacturer alleged to have concealed the presence and hazards of asbestos in a building long past the repose date.²⁹ On the other side sit the jurisdictions holding that concealment can never extend repose because the right itself has been extinguished,³⁰ the position Pennsylvania's abolition language commits it to.³¹ A parallel body of state constitutional law shows how uneasily the absolute version of repose has always sat: several state supreme courts have struck construction or products repose statutes under open courts and remedies clauses precisely because they extinguish injuries before they can be discovered.³²

buyer relationship, with its implied warranty of habitability and its radical information asymmetry, is the context in the residential setting most nearly analogous.

28. *Esener v. Kinsey*, 240 Ga. App. 21 (Ga. Ct. App. 1999); *Windham v. LATCO of Miss., Inc.*, No. 2005-CT-02086-SCT (Miss. 2005) ("Equity mandates that wrongdoers should be estopped from enjoying the fruits of their fraud."; adopting equitable estoppel against the repose defense and relying on *Esener*).

29. Minn. Stat. § 541.051, subd. 1(a) ("Except where fraud is involved, no action . . . to recover damages for any injury to property . . . or for bodily injury or wrongful death, arising out of the defective and unsafe condition of an improvement to real property, shall be brought . . . more than two years after the cause of action accrues . . . nor in any event shall such a cause of action accrue more than ten years after substantial completion of the construction."); *Appletree Square 1 Ltd. P'ship v. W.R. Grace & Co.*, 815 F. Supp. 1266 (D. Minn. 1993) (applying the fraud provision to an asbestos concealment claim). The opening four words are the entire reform.

30. *Cortez v. Cook Inc.*, No. 20-3434 (7th Cir. Mar. 2, 2022) (applying Indiana law, under which "fraudulent concealment may not extend the time in which to file a claim" against a statute of repose, because repose statutes, "absent express language to the contrary," vest a substantive grant of immunity that supersedes equitable tolling; the qualifier is the reform's opening, since express language to the contrary is exactly what a legislature can supply); *Ambers-Phillips v. SSM DePaul Health Ctr.*, 459 S.W.3d 901 (Mo. 2015) ("While statutes of limitations are subject to equitable tolling in certain circumstances, statutes of repose by their nature are not."; quoting *CTS Corp.*, 573 U.S. 1, for the rule that repose "generally may not be tolled, even in cases of extraordinary circumstances beyond a plaintiff's control").

31. *Noll*, 643 A.2d 81.

32. *Berry ex rel. Berry v. Beech Aircraft Corp.*, 717 P.2d 670 (Utah 1985) (cited for its historical holding; aspects of Utah's open courts analysis have been qualified in later cases); *Horton v. Goldminer's Daughter*, 785 P.2d 1087 (Utah 1989) (repose periods tolerable "only . . . when the possibility of injury and damage has become highly remote and unexpected"); *Kennedy v. Cumberland Eng'g Co.*, 471 A.2d 195 (R.I. 1984); *Phipps v. Irby Constr. Co.*, 636 So. 2d 353 (Miss. 1993); *Hayes v. Mercy Hosp. & Med. Ctr.*, 136 Ill. 2d 450 (1990) (collecting authorities). Pennsylvania upheld its statute against constitutional challenge, *Freezer Storage*, 382 A.2d 715, which is why the fix there must be legislative.

The strongest objection to a concealment exception comes from within this case law, and it deserves to be stated at full strength rather than discovered by a hostile reader. Mississippi's intermediate court, refusing to apply the state's concealment tolling statute to construction repose, gave the refusal two grounds. The categorical ground: the repose statute "operates independently of causes of action and by its nature bars hidden claims," so accrual, and therefore concealment of accrual, is simply irrelevant to its operation. The practical ground: construction work is inherently covered, every wall covers a stud, every slab covers its fill, "a necessary covering over of the work" occurs in all building, so a doctrine triggered by mere covering would swallow the repose statute whole.³³ The objection is correct against a badly drafted exception and harmless against the one this Article proposes, for three reasons the trade's own practice supplies. First, the norm of ordinary covering is built on reversibility and access: drywall is cut and patched, basements are entered, crawl spaces receive access hatches, and the residential codes themselves require access openings to under floor spaces, which means the trade's own rulebook already distinguishes covering a structure from entombing one.³⁴ A stilt house gets skirting, never a concrete encasement of its foundation, because the trade covers what remains checkable and refuses to bury what must someday be checked. Ordinary construction leaves the path back to the structure; the specimen was built to have no path back, ever, and that is a different act. Second, the culpability of a concealment is not free standing; it compounds with what it conceals, and the specimen conceals a stack. A hole that should have been filled was instead spanned. The span was carried on the one material every member of the trade knows fails in exactly that environment. The entombment then buried both prior choices permanently. Each step was known wrong at the moment it was taken, and each subsequent step functioned to

33. *Estes v. Bradley*, 954 So. 2d 455 (Miss. Ct. App. 2006). *Estes* carries a negative treatment signal, and it must be read against the Mississippi Supreme Court's own holding that fraud gives rise to equitable estoppel against the repose defense, *Windham*, No. 2005-CT-02086-SCT, so within Mississippi the high court sits with the estoppel jurisdictions while *Estes* states the strongest form of the internal objection. The categorical ground, note, is an argument about what the legislature wrote, not about what it should write; it concedes the premise of Part VII, which is that the fix is legislative.

34. See Int'l Code Council, International Residential Code § R408.4 (2018) (requiring an unobstructed access opening to all under floor spaces, through the floor or the perimeter foundation wall).

place the prior one beyond discovery; the exception's knowledge and affirmative acts elements are satisfied at every layer of the stack, while ordinary covering satisfies them at none. Third, the sealed wall did not merely hide; it asserted. A person standing in that finished basement reasonably understood cold earth behind that wall, and the design communicated solid ground while delivering a cavity on a corroding column, a design performing less safely than an ordinary user would expect from ordinary use, which is the consumer expectations prong of design defect doctrine stated in its home vocabulary.³⁵ Drywall over a stud is the trade practicing normally. A room built to be unfindable, holding a known bad choice atop a known bad choice, behind a wall that says solid ground, is not. Minnesota's statute has administered this distinction for decades without the exception swallowing anything, which is the empirical answer to the floodgates form of the objection.

E. The Incentive Reading

Read as an incentive structure rather than a fairness rule, the seam issues an instruction. A hazard that fails fast is actionable; warranty and negligence reach it comfortably inside the window. A hazard that fails slowly but visibly is actionable; discovery triggers suit within the period. The only hazard the statute fully shelters is the one engineered on both margins, slow to fail and impossible to observe, and those two properties are exactly the properties the North Huntingdon design achieved: a corrosion mechanism with a multi decade fuse, sealed where no occupant could watch it burn. This Article does not claim that any individual at the specimen site performed this calculation. It claims something that requires no evidence about any individual's state of mind: the statute, on its face, makes the calculation correct. A twelve year repose window converts durable concealment from a moral failing into a rational engineering specification. The economic literature has long recognized that liability deters only harms that can be attributed and litigated, and that where attribution fails, whether from insolvency,

35. *Barker*, 20 Cal. 3d 413 (design defect where the product fails to perform as safely as an ordinary consumer would expect when used in an intended or reasonably foreseeable manner).

latency, or dispersion, regulation must substitute;³⁶ what the seam adds is that a defendant can manufacture the attribution failure himself and be rewarded for it with abolition of the claim.

Whether real designers behave as the incentive invites is an empirical question, and it has an empirical answer.

IV. The Pattern: Manufactured Silence as a Documented Strategy

The intuition that no firm would deliberately manage what it knows about its own product's dangers does not survive the document archives. Across industries, the pattern the specimen exhibits in miniature, a design decision whose risks were known internally, followed by arrangements that kept the knowledge from the people bearing the risk, is among the best documented behaviors in the corporate liability record, and the documentation nearly always surfaced the same way: through litigation discovery, years or decades after the design decisions, which is to say, on the far side of every time bar that applied.³⁷

A. Automotive

The automotive record supplies the canonical case of a design decision taken against known risk. In *Grimshaw v. Ford Motor Co.*, the court sustained a punitive award on evidence that the manufacturer's own crash testing had identified the fuel tank vulnerability before sale and that the design proceeded on cost grounds; the punitive theory was precisely that management consciously disregarded a known danger to consumers.³⁸ Two generations later the pattern

36. Shavell, *supra* note 1, at 357–74 (liability underdeters where suits are unlikely, as with harms difficult to trace to their source).

37. Marc-André Gagnon & Mengying Dong, *What Did the Scientific Literature Learn from Internal Company Documents in the Pharmaceutical Industry? A Scoping Review*, 1 Cochrane Evidence Synthesis & Methods (2023) (finding that nearly all of the 37 studies analyzing internal pharmaceutical documents obtained them through legal proceedings, and concluding that the scandals unveiled are symptoms of systematic strategies rather than exceptions).

38. *Grimshaw v. Ford Motor Co.*, 119 Cal. App. 3d 757, 174 Cal. Rptr. 348 (Ct. App. 1981). For the revisionist account contesting the popular version of the episode while accepting the core of the internal knowledge record, see Gary T. Schwartz, *The Myth of the Ford Pinto Case*, 43 Rutgers L. Rev. 1013 (1991). A related objection, that juries wrongly punish the very conduct of risk analysis, W. Kip Viscusi, *Corporate Risk Analysis: A Reckless Act?*, 52 Stan. L. Rev. 547 (2000), does not reach this Article's proposal, which attaches no consequence to analyzing risk and every consequence to concealing a lethal condition the analysis found; the gate punishes the burial, never the audit.

recurred with an ignition switch: an internal investigation commissioned by General Motors found that engineers knew of the defect for roughly a decade, that the part was quietly redesigned without a part number change, a step that specifically impeded later traceability, and that the recall came only after deaths accumulated.³⁹ The Takata airbag inflator episode, the largest recall in automotive history, likewise featured internal test data at variance with data reported to customers and regulators, resolved by consent order and criminal plea.⁴⁰ These are the episodes that produced the reporting regime discussed in Part V; the automotive early warning statute is Congress's finding, written into law, that the industry could not be trusted to surface its own death data voluntarily.

B. Tobacco and Asbestos

The tobacco record is the most exhaustively documented instance of institutionalized knowledge management in commercial history. A federal court, after a nine month bench trial on the internal documents, found that the major manufacturers had for decades publicly denied what they internally knew about addiction and disease, and had organized research through counsel to shield it from discovery.⁴¹ The asbestos record runs parallel and older: the Fifth Circuit's foundational failure to warn decision rested on evidence that the hazard was documented in the industrial hygiene literature decades before warnings appeared,⁴² and the internal document scholarship has since traced the affirmative suppression apparatus in detail.⁴³ The strategy has

39. Anton R. Valukas, *Report to Board of Directors of General Motors Company Regarding Ignition Switch Recalls* (May 29, 2014); see also Deferred Prosecution Agreement, *United States v. General Motors Co.* (S.D.N.Y. Sept. 2015) (\$900 million wire fraud resolution premised on concealment of the defect from the regulator).

40. Consent Order, *In re TK Holdings Inc.* (NHTSA 2015).

41. *United States v. Philip Morris USA, Inc.*, 449 F. Supp. 2d 1 (D.D.C. 2006); see also Stanton A. Glantz et al., THE CIGARETTE PAPERS (1996); Peter Hanauer et al., *Lawyer Control of Internal Scientific Research to Protect Against Products Liability Lawsuits: The Brown and Williamson Documents*, 274 JAMA 234 (1995); Jeffrey Drope & Simon Chapman, *Tobacco Industry Efforts at Discrediting Scientific Knowledge of Environmental Tobacco Smoke: A Review of Internal Industry Documents*, 55 J. Epidemiology & Community Health 588 (2001).

42. *Borel v. Fibreboard Paper Products Corp.*, 493 F.2d 1076 (5th Cir. 1973).

43. David Egilman & Susanna Rankin Bohme, *Over a Barrel: Corporate Corruption of Science and Its Effects on Workers and the Environment*, 11 Int'l J. Occup. Envtl. Health 331 (2005); Susanna Rankin Bohme, John Zorabedian & David Egilman, *Maximizing Profit and Endangering Health: Corporate Strategies to Avoid Litigation and Regulation*, 11 Int'l J. Occup. Envtl. Health 338 (2005).

since matured into a service industry: the manufacture of scientific uncertainty as litigation support, offered commercially across product categories.⁴⁴

C. Aviation and the Built Environment

The recent record extends the pattern to certification itself. The congressional investigation of the 737 MAX found that the manufacturer concealed the character of a new flight control system from regulators and airlines and secured the removal of references to it from pilot materials, decisions later resolved by deferred prosecution; the two crashes that exposed the design killed 346 people.⁴⁵ And the built environment supplies its own recent entries at both ends of the culpability spectrum this Article distinguishes. The public inquiry into the Grenfell Tower fire found that manufacturers of the cladding products engaged in what the inquiry called systematic dishonesty about fire performance, manipulating testing and marketing while the products spread across the housing stock.⁴⁶ The Champlain Towers South collapse in Surfside, Florida, which killed 98 people in a forty year old building, sits closer to the specimen's structural facts, long term deterioration in concealed and under inspected structural elements, and is the subject of a federal construction safety investigation.⁴⁷ Surfside matters twice over for this Article: once as the death toll a hidden structural failure can produce, and once because it moved a legislature, a point Part V returns to.

44. David Michaels, *Manufactured Uncertainty*, 1076 *Annals N.Y. Acad. Sci.* 149 (2006); David Michaels, DOUBT IS THEIR PRODUCT: HOW INDUSTRY'S ASSAULT ON SCIENCE THREATENS YOUR HEALTH (2008).

45. H. Comm. on Transp. & Infrastructure, 116th Cong., *Final Committee Report: The Design, Development & Certification of the Boeing 737 MAX* (Sept. 2020); Deferred Prosecution Agreement, *United States v. Boeing Co.*, No. 4:21-cr-005 (N.D. Tex. Jan. 7, 2021).

46. *Grenfell Tower Inquiry: Phase 2 Report* (Sept. 4, 2024) (finding "systematic dishonesty" by cladding and insulation manufacturers, including deliberate manipulation of test data and marketing of products known to be unsuitable for high rise external walls; 72 deaths).

47. Nat'l Inst. of Standards & Tech., National Construction Safety Team Investigation of the Champlain Towers South Collapse, <https://www.nist.gov/disaster-failure-studies/champlain-towers-south-collapse-ncst-investigation> (ongoing investigation under the National Construction Safety Team Act).

D. What the Pattern Establishes

The archive supports three propositions with direct doctrinal significance. First, design decisions taken against internally known risk are not aberrational; they recur across unrelated industries, decades, and regulatory environments, which is what one expects when the payoff structure, rather than any industry's culture, is the cause.⁴⁸ Second, the knowledge nearly always surfaces through compelled disclosure years later, which means every year of successful concealment is a year run off whatever clock applies; the concealment and the time bar are complements, not coincidences. Third, the law already possesses the culpability vocabulary the pattern requires. Actual knowledge and its legal equivalent, willful blindness, the deliberate avoidance of confirming a fact one believes to be true, satisfy knowledge elements across bodies of law,⁴⁹ and conscious disregard of a known danger is the classic predicate for punitive damages.⁵⁰ What the law lacks is not the concept. It is the application of the concept to the one shield, repose, that presently ignores it.

V. The Missing Inspector: Five Regimes and One Omission

A. Harm Surveillance Where It Exists

The reform intuition this pattern provokes, that someone ought to be able to look when a product's harms begin to cluster, is settled machinery in five American regimes.

Food service operates under warrantless administrative inspection sustained by the closely regulated industry doctrine, the line of authority running from liquor and firearms through vehicle dismantling, under which pervasively regulated businesses hold a reduced expectation of privacy and a regulatory scheme that provides notice and neutral limits can substitute for a warrant.⁵¹

48. Gagnon & Dong, *supra* note 27 (corporate scandals unveiled by internal documents "should not be considered as exceptions but symptoms of normal and systematic strategies").

49. *Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754 (2011).

50. *Grimshaw*, 119 Cal. App. 3d 757.

51. *New York v. Burger*, 482 U.S. 691 (1987); *United States v. Biswell*, 406 U.S. 311 (1972); *Colonnade Catering Corp. v. United States*, 397 U.S. 72 (1970). The administrative inspection doctrine itself begins with housing:

The doctrine has boundaries the Court has policed: it does not extend to industry generally,⁵² and an inspection scheme must afford the regulated party an opportunity for precompliance review before a neutral decisionmaker.⁵³ Within those boundaries, the restaurant traced to a cluster of illness is inspected, its records examined, its practices corrected or its doors closed, under food safety statutes that have only thickened over time.⁵⁴

Motor vehicles operate under a regime that is nearly a schematic of the intuition. Following the Firestone tire failures, Congress enacted the TREAD Act,⁵⁵ whose early warning provisions now require every manufacturer to report to the National Highway Traffic Safety Administration all incidents of which it receives actual notice involving fatalities or serious injuries alleged or proven to have been caused by a possible defect, a duty that operates notwithstanding any protective order or settlement confidentiality.⁵⁶ The same section, whose title is itself the argument, “Inspections, investigations, and records,” grants the Secretary authority to inspect, to copy manufacturer records, to require reports, and to compel testimony and production by subpoena.⁵⁷ Deaths flow to a regulator as data; patterns in the data open investigations; investigations produce recalls, at year two or year fifteen, because the surveillance never lapses for the life of the product.

Drugs and medical devices report adverse events to the Food and Drug Administration under an analogous architecture,⁵⁸ consumer products carry a statutory duty to report substantial

Camara v. Municipal Court, 387 U.S. 523 (1967) (area housing code inspections, warrant on administrative standards), and its commercial companion *See v. City of Seattle*, 387 U.S. 541 (1967).

52. *Marshall v. Barlow’s, Inc.*, 436 U.S. 307 (1978).

53. *City of Los Angeles v. Patel*, 576 U.S. 409 (2015).

54. FDA Food Safety Modernization Act, Pub. L. No. 111-353, 124 Stat. 3885 (2011); 21 U.S.C. § 374 (inspection authority).

55. Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Pub. L. No. 106-414, 114 Stat. 1800 (2000).

56. 49 U.S.C. § 30166(m)(3)(C)–(D); 49 C.F.R. pt. 579 (implementing regulations).

57. 49 U.S.C. § 30166(b), (c), (e), (g).

58. 21 U.S.C. § 360i (device reports); 21 C.F.R. pt. 803 (medical device reporting).

product hazards to the Consumer Product Safety Commission on pain of penalty,⁵⁹ and workplaces answer to inspection on complaint and injury under the occupational safety laws.⁶⁰ Five regimes, one shape: the product leaves the maker's hands, and a watcher remains downstream, collecting the harm signal and holding authority to act on it.

B. The Omission

Residential construction has the front half of this architecture and none of the back half. The regulatory attention paid to a house is intense and momentary: plan review, permit, staged inspections, certificate of occupancy. At the certificate, it ends, permanently. No agency collects reports of deaths or serious injuries associated with residential structural failure by builder or by floor plan. No early warning database would have connected the North Huntingdon void to its nine foot sibling one township over; the two families connected themselves, through a television station.⁶¹ A vehicle with a lethal design flaw is recallable in year fifteen because the reporting duty never expired. A house with a corroding hidden support has no watcher in year fifteen, and the one product Americans sleep inside, park over, and raise children in is the one with no downstream surveillance at all.

The omission is not immutable, and the proof is recent. After Surfside, Florida enacted a mandatory milestone inspection regime for aging condominium buildings, structural inspections by licensed professionals at thirty years and periodically thereafter, with reporting to local officials and owners.⁶² The statute is confined to one building class in one state, and it took 98 deaths to produce, but it establishes the essential point: post occupancy structural surveillance

59. 15 U.S.C. § 2064(b) (every manufacturer, distributor, and retailer who obtains information reasonably supporting the conclusion that a product contains a defect that could create a substantial product hazard, or creates an unreasonable risk of serious injury or death, “shall immediately inform the Commission”).

60. 29 U.S.C. § 657(a).

61. Schiller, *supra* note 2.

62. Fla. Stat. § 553.899 (enacted by S.B. 4-D, signed May 26, 2022, in the wake of the Champlain Towers South collapse) (mandatory milestone structural inspection of condominium and cooperative buildings three stories or more, by a licensed engineer or architect, at thirty years of age, twenty-five for buildings near the coastline, and every ten years thereafter, with reports to the association and the local building official). The legislative findings state the watcher's premise in statutory prose: maintaining structural integrity “throughout the life of the building” is of paramount importance. *Id.* § 553.899(1).

of the built environment is legislatively and constitutionally available; the general omission is a choice. Comparative practice says the same. England has coupled strict builder liability for dwellings unfit for habitation with an insurance backed ten year warranty scheme under which the warranty body itself assumes a building inspector's role,⁶³ and the economics literature on building codes reaches the conclusion the specimen dramatizes, that a code prescribing methods at the moment of construction cannot by itself deliver the efficient safety level, because the code neither observes what the builder actually did nor follows the building through time.⁶⁴

The omission compounds the repose seam, and the two failures should be understood as a single mechanism with two switches. The repose statute switches off the remedy at year twelve. The absent surveillance regime switches off the discovery that could have produced a timely claim before year twelve. A concealed hazard defeats liability only when both switches are off, because either one alone breaks the strategy: a downstream watcher surfaces the pattern inside the window, and a concealment carve out keeps the window open when the pattern was hidden. The built environment is the domain where both switches are off at once, which is why it is the domain where the patient concealer wins.

C. The Trigger Standard and the Designer's Dilemma

When does the watcher act? The history of American safety regulation supplies the trigger in practice: a product's death toll climbs past what the public and its regulators will tolerate, and a mandated design change follows. The pattern is old, successful, and measurable. Child poisoning deaths from aspirin and other household drugs produced the Poison Prevention Packaging Act of 1970, the first statute of its kind, and the resulting child resistant packaging cut the child mortality rate from oral prescription drug ingestion by roughly 45 percent against projected

63. Defective Premises Act 1972 (UK); see Carl F. Stychin, *Dangerous Liaisons: New Developments in the Law of Defective Premises*, 16 Legal Studies 387 (1996) (describing the Act's strict fitness standard and the National House Building Council scheme's inspection and ten year warranty functions, and their common restriction to dwellings).

64. Peter F. Colwell & Abdullah Yavaş, *The Value of Building Codes*, 20 Real Est. Econ. 501 (1992) (double moral hazard model; codes achieve the first best only under conditions codes in practice do not meet).

levels, on the order of 460 children's lives through 1992 by the standard econometric estimate.⁶⁵ Child drownings produced fencing mandates and, after drain entrapment deaths, a federal statute; four sided isolation fencing remains the one intervention with demonstrated effectiveness against toddler pool drowning, and current estimates put the deaths still preventable by full deployment of fencing and life jackets at roughly 348 Americans a year.⁶⁶ Even the staircase, the homeliest hazard in the housing stock, is among the most design regulated objects in American life, its riser heights, tread depths, handrails, and guards specified by code in response to fall injury data.⁶⁷ Each episode is the same event: a death signal crossed a tolerance line, scrutiny followed, and the scrutiny mandated a design change that the death data then vindicated. The watcher works.

The tolerance line can be stated as a principled standard rather than an ad hoc political reflex, and federal practice has already done so once. The benchmark is the organic baseline: the risk of death a person carries from the world itself, lightning, storm, and accident of nature, without the product in her life. A design whose incremental death toll among its exposed population climbs above a small fraction of that baseline has earned mandatory scrutiny, not condemnation, scrutiny: investigation of whether the deaths were designable away, and a mandate where they were. The Nuclear Regulatory Commission's quantitative safety goals are this standard in codified form, capping the risk a plant may add to its neighbors at a small fraction of the background accident risk those neighbors already bear.⁶⁸ The classic acceptable risk

65. Poison Prevention Packaging Act of 1970, Pub. L. No. 91-601, 84 Stat. 1670 (codified at 15 U.S.C. §§ 1471–1476); Gregory B. Rodgers, *The Safety Effects of Child-Resistant Packaging for Oral Prescription Drugs*, 275 JAMA 1661 (1996); Gregory B. Rodgers, *The Effectiveness of Child-Resistant Packaging for Aspirin*, 156 Archives Pediatrics & Adolescent Med. 929 (2002).

66. Diane C. Thompson & Frederick P. Rivara, *Pool Fencing for Preventing Drowning of Children*, Cochrane Database of Systematic Revs. (1998), CD001047; Cora Peterson et al., *Unrealised Potential of Pool Fencing and Life Jackets to Prevent US Drownings*, 32 Injury Prevention 495 (2025); Virginia Graeme Baker Pool and Spa Safety Act, Pub. L. No. 110-140, tit. XIV, 121 Stat. 1492, 1794 (2007) (codified at 15 U.S.C. §§ 8001–8008) (anti-entrapment drain covers and barrier requirements, enacted after a child's drain entrapment death).

67. See Int'l Code Council, International Residential Code § R311.7 (2018) (stairway width, headroom, maximum riser height, minimum tread depth, nosing, landing, and handrail requirements).

68. U.S. Nuclear Regulatory Comm'n, Safety Goals for the Operations of Nuclear Power Plants; Policy Statement, 51 Fed. Reg. 30,028 (Aug. 21, 1986) (two quantitative health objectives: the added risk of prompt fatality to nearby individuals, and of cancer fatality to the nearby population, each capped at 0.1 percent of the sum of the risks those persons otherwise bear). The August 21 publication is the correction and republication of the statement. See also Zhen Wang et al., *Quantitative Safety Goals for Fusion Power Plants*, 45 Int'l J. Energy Rsch. 9694 (2021) (restating both 0.1 percent objectives and their derivation).

literature adds the aggravating factor this Article's subject supplies: people rationally tolerate far more risk when it is voluntary than when it is imposed,⁶⁹ and a concealed hazard is the limit case of imposed risk, risk its bearer was structurally prevented from ever pricing. The baseline must also be fixed rather than floating: if each unregulated technology's death toll is allowed to inflate the background against which the next is judged, the standard consumes itself, so the benchmark is the world without the product, not the world as prior products have made it.

The trigger standard resolves what might otherwise look like a dilemma about fairness to designers, because once a design's deaths exceed the organic baseline, the designer occupies one of exactly two positions, and neither supports unwatched release. Either the designer sincerely believed the product safe and was wrong about a matter squarely within the designer's charge, in which case the sincerity is no comfort, the belief was incompetent, and the presumption that this designer may release products to the public without supervision is forfeited on the record; or the designer knew. The two branches call for different instruments, incapacity calls for the watcher and the mandated redesign, knowledge calls for the gate and liability, but the deaths are identical in both branches, and there is no third branch in which the deaths are real and the status quo of unwatched release is defensible. Nor can public attention substitute for the instrument, and the specimen is the proof. The North Huntingdon family obtained a cost sharing offer from its builder only after a television investigation aired and the neighbors were alerted;⁷⁰ the identical builder with the identical void, absent a newsroom, pays nothing. A surveillance system that runs on the contingency of journalism is not a system. It is the absence of one, with occasional weather.

69. Chauncey Starr, *Social Benefit Versus Technological Risk*, 165 Science 1232 (1969) (the public accepts risk from voluntary activities roughly one thousand times greater than from involuntary activities of equal benefit); accord Wang et al., *supra* (restating the finding).

70. Schiller, *supra* note 2.

D. The Constitutional Doorway

Nothing in Fourth Amendment doctrine obstructs the surveillance half of the repair. The administrative inspection doctrine was born in a housing case,⁷¹ residential construction is already a pervasively regulated industry on any honest application of the criteria, licensed, permitted, code governed, and inspected as a condition of occupancy, and a post occupancy reporting and inspection scheme confined by statute to cause, scope, and neutral review would sit comfortably within the *Burger* framework while respecting the limits of *Barlow's* and *Patel*.⁷² Florida's statute is the existence proof. The proposal is not to inspect commerce at large. It is to continue watching an industry society already watches, past the moment the watching now arbitrarily stops.

VI. The Knowledge Gate: A Better Hammurabi

A. The Ancient Baseline

The oldest builder liability rule on record needed two sentences. If a builder builds a house for a man and does not make its construction sound, and the house collapses and causes the death of the owner, that builder shall be put to death; if it causes the death of the owner's son, they shall put the builder's son to death.⁷³ Two features of the rule matter here, one to reject and one to recover. The feature to reject is its absence of any culpability qualifier: the rule is pure outcome liability, indifferent to storms, latent flaws, and the passage of centuries, under which a literalist must execute the builder of any ancient structure that falls today. Outcome liability cannot distinguish the careful builder betrayed by an undetectable flaw from the builder who

71. *Camara*, 387 U.S. 523.

72. *Burger*, 482 U.S. 691; *Barlow's*, 436 U.S. 307; *Patel*, 576 U.S. 409.

73. Robert Francis Harper, *THE CODE OF HAMMURABI, KING OF BABYLON* §§ 229–230 (2d ed. 1904); Martha T. Roth, *LAW COLLECTIONS FROM MESOPOTAMIA AND ASIA MINOR*, Laws of Hammurabi ¶¶ 229–233 (2d ed. 1997). The provisions are a standing citation in the process safety literature, which reads them as establishing “an expectation of civilized societies for at least 4000 years that the designer and builder of a technological artifact . . . is responsible for any harm or damage that might result from the failure of that artifact.” Dennis C. Hendershot & John F. Murphy, *Expanding Role of the Loss Prevention Professional*, 26 *Process Safety Progress* 18 (2006).

buried a known hazard, and a legal system that cannot draw that line punishes diligence and recklessness identically. The feature to recover is the one modern law discarded: the rule contains no expiration. Accountability ran with the structure for the structure's life, because the danger did. Four millennia later, the danger still runs with the structure, and the accountability lapses at year twelve.

B. The Gate

The two failure categories the specimen forces apart supply the principle that improves on both regimes. In the first category is the genuinely latent flaw: the void inside the beam, the inclusion inside the billet, the failure no reasonable designer detects because detecting it would require examining every component with technology no reasonable process deploys. The defining feature of this category is that the relevant knowledge was unavailable at the moment of the design decision even to a diligent actor. Repose is defensible here, and this Article defends it: time genuinely erodes the fairness of answering for what could not have been known.

In the second category is the North Huntingdon design, and the Pinto tank, and the ignition switch, and the cladding: choices whose consequences were available knowledge at the instant they were made, available because someone communicated them or because they belong to the competence every member of the relevant trade necessarily carries, followed by arrangements that placed the consequences beyond observation. The defining feature of this category is that the knowledge existed at the decision point and the silence afterward was manufactured. Nothing about the passage of time erodes the fairness of answering for this category, because every equity time creates, lost evidence, faded memory, unfair surprise, was created by the defendant on purpose.

The knowledge gate, then, stated as a domain agnostic principle of design accountability: liability protection that turns on time should be available only where knowledge was unavailable at the moment of the design decision despite reasonable diligence, and never where the designer knew and concealed. The gate keeps what Hammurabi lacked, a culpability line that spares the

diligent, and recovers what modern law abandoned, accountability that concealment cannot outlast. It is also, stated plainly, nothing more than the principle limitations doctrine has applied since *Bailey v. Glover*, extended to the one time bar that presently escapes it. The gate is deliberately indifferent to industry. It asks the same two questions of the builder of a garage, the designer of a fuel tank, the author of a flight control system, and, Part VII suggests, the drafter of a statute: what did you know at the decision point, and could the people bearing the consequences find out.

VII. Two Reforms

Two legislative amendments implement the gate; neither requires novel doctrine, and each is a transplant from machinery already running.

First, statutes of repose should carry a fraudulent concealment exception, providing that the period does not shelter a defendant who, at the time of the design or construction, had actual knowledge of a condition presenting an unreasonable risk of death or serious injury and took affirmative steps that prevented its discovery. Because repose abolishes the right rather than tolling the remedy, the exception must be legislative; the Supreme Court has correctly held that equity cannot supply it,⁷⁴ and the specimen shows the cost of leaving it out. Nor is the amendment an experiment: Minnesota's construction repose statute has carried a fraud exception for decades,⁷⁵ and the estoppel jurisdictions reach the same result through equity.⁷⁶ The exception is deliberately narrow. It does not reopen ordinary defect claims, does not disturb the twelve year bar for the merely negligent, and conditions its application on the two elements, knowledge and concealment, that together dissolve every finality rationale the bar exists to serve. The knowledge element carries its established meaning, actual knowledge or willful blindness,⁷⁷

74. *ANZ Sec.*, 582 U.S. 497.

75. Minn. Stat. § 541.051; *Appletree Square*, 815 F. Supp. 1266.

76. *Robinson v. Shah*, 936 P.2d 784; *Esener*, 240 Ga. App. 21; *Windham*, No. 2005-CT-02086-SCT.

77. *Global-Tech*, 563 U.S. 754.

and the concealment element requires affirmative acts, the sealed wall, the unchanged part number, the lawyer routed research file, not mere silence.

Second, the built environment should receive an early warning regime on the motor vehicle model: a duty on builders of residential structures to report incidents involving death or serious injury associated with structural failure of their constructions, protective orders notwithstanding, to a designated agency holding record inspection and subpoena authority on the pattern of 49 U.S.C. § 30166, with periodic structural inspection of aging residential stock on the pattern Florida has already enacted,⁷⁸ and with physical inspection authority confined within the closely regulated industry doctrine and its precompliance review requirement.⁷⁹ The regime's function is not primarily punitive. It is epistemic. Liability presupposes attribution, and the economic literature is explicit that liability fails precisely where harms resist tracing;⁸⁰ the reporting regime is the detection layer without which the first reform's knowledge element can rarely be proven and the concealed pattern can rarely be found inside any window, however long. The two reforms are two switches, and the argument of this Article is that both are presently off.

There is no path to holding the drafters of the existing statutes liable for the gap, nor should there be; legislative immunity and the absence of any judicially enforceable duty to protect are settled and sound.⁸¹ The accountability available against the builders of bills is the same accountability this Article has applied to the builders of everything else: name the design, trace what it foreseeably rewards, and demand the redesign in public. A statute is a designed structure. This one was drawn with a twelve year void beneath it, and families have been parking on top since.

78. Fla. Stat. § 553.899.

79. *Burger*, 482 U.S. 691; *Patel*, 576 U.S. 409.

80. Shavell, *supra* note 1.

81. *Cf. DeShaney v. Winnebago Cty. Dep't of Soc. Servs.*, 489 U.S. 189 (1989) (no affirmative constitutional duty to protect against private harm).

VIII. Conclusion

A contractor's sledgehammer opened a sealed room under a Pennsylvania garage and found thirty years of corrosion doing exactly what unprotected steel in a wet cavity has always done. Every legal doorway out of that garage was closed, and this Article has argued that the closures were not independent accidents. The repose statute abolished the claim; the abolition was reachable only because the hazard was hidden; the hiding succeeded only because no watcher existed downstream of the certificate of occupancy; and each closure was a design choice by a builder of bills as surely as the void was a design choice by a builder of homes. The archive of Part IV establishes that this is not one builder's story: wherever design decisions with knowable consequences meet time based or visibility based shields, the same strategy appears, in fuel tanks and ignition switches, cigarettes and insulation, flight software and cladding, because the payoff structure, present in each of those domains, produces it. The oldest legal code in wide memory refused to let builder accountability expire, and erred only in refusing to ask what the builder knew. Modern law asks what the builder knew everywhere except at the one door, repose, where the answer matters most. Open the gate on knowledge, install the watcher, and the patient concealer's strategy stops paying, in every industry that designs things people rely on. Until then, the statute remains what the specimen revealed it to be: a subsidy, payable in twelve year installments, to whoever hides a hazard best.

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