

Case Western Reserve Law Review

Volume 33 | Issue 1

1982

The Architect in the Design-Build Model: Designing and Building the Case for Strict Liability in Tort

Barry Joseph Miller

Follow this and additional works at: https://scholarlycommons.law.case.edu/caselrev



Part of the Law Commons

Recommended Citation

Barry Joseph Miller, The Architect in the Design-Build Model: Designing and Building the Case for Strict Liability in Tort, 33 Case W. Res. L. Rev. 116 (1982)

Available at: https://scholarlycommons.law.case.edu/caselrev/vol33/iss1/8

This Note is brought to you for free and open access by the Student Journals at Case Western Reserve University School of Law Scholarly Commons. It has been accepted for inclusion in Case Western Reserve Law Review by an authorized administrator of Case Western Reserve University School of Law Scholarly Commons.

THE ARCHITECT IN THE DESIGN-BUILD MODEL: DESIGNING AND BUILDING THE CASE FOR STRICT LIABILITY IN TORT

The role of architects in the construction process was limited traditionally to the design phase. The liability of such "traditional architects" for defective services is usually limited to negligence. Although a few jurisdictions utilize an implied warranty standard, no traditional architect is presently held strictly liable in tort. The variable and unique nature of each project and the architect's status as a professional are often cited as justifications for this reluctance to apply strict liability in tort.

When the entire construction project, from design to erection, is performed by a single entity—the "designer-builder"—the policy rationales for withholding strict tort liability do not apply. Mass producers of consumer goods are often held to a strict liability in tort standard similar to that expressed in section 402A of the Restatement (Second) of Torts because of their inherent control over the manufacturing and distribution processes. An architect designer-builder can exercise a similar degree of control over all phases of the construction project. The architect designer-builder is, in section 402A's terms, a "seller engaged in the business of selling . . . a product"—with that product being the finished building. This Note extensively analyzes the liability of architects for defective work and concludes that, when functioning as a designer-builder, the architect should be held to a strict liability in tort standard.

Introduction

THE ARCHITECT'S¹ professional status directly relates to the nature of the services provided to his or her clients.² Under the traditional model,³ the architect is held to a negligence, or "professional," standard⁴ of liability—the only measure most jurisdictions apply to determine an architect's liability for defective services.⁵ These jurisdictions refuse to apply strict liability—either implied warranty or strict liability in tort—reasoning that the rationales supporting strict liability are not applicable to the rendition of traditional architectural services.⁶

^{1.} This Note concerns professionals in the building industry referred to for purposes of this Note as architects. The discussion and conclusions, however, apply equally to engineers and other construction professionals. There is little practical significance between the term "architect" and "engineer" when both perform design and supervisory functions. See C. Dunham, R. Young & J. Bockrath, Contracts, Specifications, and Law for Engineers 425 (3d ed. 1979).

^{2.} See infra note 20 and accompanying text.

^{3.} See infra notes 13-24 and accompanying text.

^{4.} See infra notes 28-32 and accompanying text.

^{5.} See infra notes 40-45 and accompanying text.

^{6.} See infra notes 54-63 and accompanying text.

This Note focuses on the architect as designer-builder⁷ and the effect this nontraditional model of providing building services will have on professionals operating within its scope. The fundamental changes which the design-build model creates will be examined.⁸ Following an exploration of the policies supporting a negligence standard of liability in light of the changes caused by the design-build model,⁹ the Note shows that courts presently hold designer-builders to an implied warranty standard of liability for construction and design defects.¹⁰ The Note argues that the designer-builder can better absorb the costs associated with defective products than can the traditional architect.¹¹ By analyzing the policy rationales behind strict tort liability, the Note concludes that designer-builders should be held strictly liable in tort for defects resulting in injury.¹²

I. THE TRADITIONAL MODEL

To understand the fundamental changes the design-build model brings to the construction industry, it is necessary to review the traditional model of providing architectural services. This provides a basis for comparing the increased liability exposure of designer-builders.

A. Historical Development and the Traditional Model

The architect's relationship to the building process has historically vacillated between mere design to actual participation in the erection of the building; illustrating that when an architect associates too closely with the erection of a project, his or her privileged professional status is threatened. The ancient cultures of Egypt, Greece, and Rome viewed the architect as a professional whose responsibilities extended only to the design and general supervision of the construction process. ¹⁴ The guild system of the Middle

^{7.} The term "designer-builder" is used in this Note to describe the single entity under the design-build model of building services, *see infra* notes 64-217 and accompanying text, that provides both design and construction services. For a general discussion of the attributes of the designer-builder, see *infra* notes 65-70 and accompanying text.

^{8.} See infra notes 64-89 and accompanying text.

^{9.} See infra notes 90-112 and accompanying text.

^{10.} See infra notes 113-44 and accompanying text.

^{11.} See infra notes 148-220 and accompanying text.

^{12.} See infra text accompanying and following note 230.

S. Kostof, The Architect: Chapters in the History of the Profession 30 (1977).

^{14.} Kostof recounts that "[a]t least in a supervisory sense, the architect led an army of

Ages destroyed the architect's privileged professional standing.¹⁵ Architects regained their professional standing during the Renaissance, when the separation of design and supervision duties from other construction-related functions was reestablished.

The European concept of the architect as a professional, separate and distinct from the builder, carried over to the colonies, although most colonial construction was performed by designer-builders. ¹⁶ The modern embodiment of the traditional model of architectural services took form during the Industrial Revolution, when the division of labor, the development of the leisure class, and the growth of cities led to architectural sophistication.

The traditional model is the predominant form of architectural practice today.¹⁷ The owner, the architect, and the contractor form the foundational triad of the traditional model, with custom and contractual obligation defining the responsibilities of each.¹⁸ The owner usually delineates the project requirements and obtains sufficient financing to cover development costs. The owner also provides the architect and contractor with full legal, utility, and physical information regarding the building site.¹⁹ The architect creates and coordinates the building design and construction documents—the building drawings and specifications. The architect's responsibilities also include observation at the building site to ensure that the actual construction complies with the construc-

craftsmen and specialists in the manufacture and assembly of the stones that made the gleaming marvels of the Greek landscape." Id. at 24-25.

^{15. &}quot;The notable shift of the profession since the collapse of the Roman Empire—[was] from an intellectual pursuit that required a liberal education as a base, to an empirical skill that could be learned within the restricted compass of apprenticeship." *Id.* at 60. The medieval architect not only oversaw the design of the project, but also worked alongside the other members of the guilds as one of their own. *Id.* at 61.

^{16.} R. McLaughlin, Architect 79 (1967). The author notes that "[w]hat made him a professional architect was his method of preparing plans and taking bids from builders. Before that, the practice was for an owner to secure competitive packages from a designer-craftsman, who submitted a design and a price together." *Id*.

^{17.} See Kahn, Introduction: The Changing Role of the Architect, 23 St. Louis U.L.J. 216, 216 (1979). Kahn states:

In comparatively recent times this concept [master builder] has been fragmented. No one person is now in charge of the project from conception to completion. While the architect was formerly the builder, it is now the contractor who is in charge of the actual erection of the structure, and the architect is primarily retained to provide the design for a proposed project and to lend his assistance in its implementation.

Id.

^{18.} See infra note 23.

^{19.} See generally American Institute of Architects, Architect's Handbook of Professional Practice (1969); C. Cowgill & B. Small, Architectural Practice (3d ed. 1959).

tion documents.²⁰ The contractor's primary responsibilities include erecting the project according to the construction documents, supervising and directing the work at the building site, and selecting the means, methods, and techniques of erecting the project.²¹ The contractor also assumes responsibility for the safe progress of the project and thus, a safe working environment for his or her employees.²² A contractor typically acts in one of two distinct capacities: as a general contractor, responsible for the entire project through control of various subcontractors, or as one of several prime contractors, each responsible for a particular aspect of the project.

Standardized contracts have formalized these distinct responsibilities in the traditional model.²³ The architect's tort liability is determined by whether these standardized contractual responsibilities, express or implied, are fulfilled.²⁴

B. Tort Liability of the Traditional Architect

Most jurisdictions hold an architect operating in the traditional model to only a negligence standard when determining liability for defects in the performance of architectural services.²⁵ While some courts impose strict liability based on breach of an implied warranty,²⁶ no traditional architect has been held strictly liable in tort.²⁷

^{20.} AMERICAN INSTITUTE OF ARCHITECTS, ARCHITECT'S HANDBOOK OF PROFESSIONAL PRACTICE (1969); AMERICAN INSTITUTE OF ARCHITECTS, GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION A201 (1976 ed.); C. COWGILL & B. SMALL, *supra* note 19.

^{21.} See American Institute of Architects, General Conditions of the Contract for Construction A201 (1976 ed.).

^{22.} Some courts, however, have imposed liability upon the architect for his responsibility to supervise the progress of the project and thereby to insure its safe progress through control of the methods of construction. The architect may exert this control by stopping the work for noncompliance, or intervening to ensure compliance, with the construction documents. See Note, Liability of Design Professionals—The Necessity of Fault, 58 IOWA L. Rev. 1221, 1240 (1973).

^{23.} See American Institute of Architects, Standard Form of Agreement Between Owner and Architect B141 (1977 ed.); American Institute of Architects, Standard Form of Agreement Between Owner and Contractor—A Stipulated Sum A101 (1977 ed.); American Institute of Architects, General Conditions of the Contract for Construction A201 (1976 ed.).

^{24.} See generally Note, supra note 22 (general survey of design professional's liability).

^{25.} See infra notes 28-45 and accompanying text.

^{26.} See infra notes 46-49 and accompanying text.

^{27.} See infra notes 50-63 and accompanying text.

1. The Traditional Architect and the Negligence Standard

The professional status of the traditional architect determines the negligence standard applied in assessing liability for defective services.²⁸ This standard states that

[t]he undertaking of an architect implies that he possesses skill and ability, including taste, sufficient to enable him to perform the required services at least ordinarily and reasonably well; and that he will exercise and apply in the given case his skill and ability, his judgment and taste, reasonably and without neglect. But the undertaking does not imply or warrant a satisfactory result.²⁹

This standard was applied in *Gagne v. Bertran*³⁰ where a driller of soil test holes failed to discover the presence of fill dirt on the building site, necessitating the installation of a more expensive foundation system than originally planned. The California Supreme Court, noting that the plaintiffs had "purchase[d] service, not insurance,"³¹ declined to impose strict liability. Limiting the professional's liability to negligence,³² the court reasoned that, given the nature of the services provided, it was unrealistic to expect infallibility.³³

The liability of traditional architects was further limited by the requirement that injured recipients of architectural services demonstrate contractual privity.³⁴ The courts, however, employed several methods to circumvent this requirement, thereby allowing third parties to directly sue the negligent architect.³⁵ The privity

^{28.} See Chapel v. Clark, 117 Mich. 638, 640, 76 N.W. 62, 62 (1898); Bell, Professional Negligence of Architects and Engineers, 12 VAND. L. REV. 711 (1959); Note, Professional Negligence, 121 U. PA. L. REV. 627, 633 (1973).

^{29.} Coombs v. Beede, 89 Me. 187, 188, 36 A. 104, 105 (1896).

^{30. 43} Cal. 2d 481, 275 P.2d 15 (1954).

^{31.} Id. at 489, 275 P.2d at 21.

^{32.} Id.

^{33.} Id.

^{34.} The privity doctrine was enunciated in Winterbottom v. Wright, 152 Eng. Rep. 402 (Ex. 1842), where the court held that one not in contractual privity with another would be barred from recovery. *Id.* at 405. Thus, the injured mailcoach driver was refused recovery from the negligent coach repairman due to lack of privity since the repairman's contract was between himself and the mailcoach's owner. The privity requirement was routinely applied to architects by the courts. *See*, *e.g.*, Geare v. Sturgis, 14 F.2d 256 (D.C. Cir. 1926).

^{35.} These doctrines included misrepresentation, where the architect was held liable for injuries to third persons if he or she made representations which cause injury to persons like the plaintiff who reasonably relied upon those representations. Alternatively, a third party beneficiary doctrine was used whereby a third party could maintain an action against the architect if the contract manifested an intent to benefit such a party. Note, *supra* note 22, at 1224.

requirement was eventually abandoned in architectural negligence actions in the 1950's.³⁶

Notwithstanding the demise of the privity requirement and the stated clarity of the traditional architect's standard of duty liability is often dependent on the parties involved and the particular service provided.³⁷ Legal problems arise typically in five distinct service categories: cost prediction, design, arbitration, adminstration and certification, and supervision of construction.³⁸ The nature of these functions have underscored recent judicial attempts to extend the traditional architect's liability from negligence to strict liability.³⁹

2. The Traditional Architect and Implied Warranty

Most jurisdictions refuse to increase the standard of liability for defective architectural services from negligence to implied warranty. In City of Mounds View v. Walijarvi, 40 an architect was employed to design an addition to the city hall. After completion, moisture problems occurred which necessitated extensive repairs. 41 In declining to impose an implied warranty standard, the court noted that "[t]he majority position limits the liability of architects and others rendering 'professional' services to those situations in which the professional is negligent in the provision of his or her services." Reasoning that professionals deal with "inex-

^{36.} Inman v. Binghamton Hous. Auth., 3 N.Y.2d 137, 143 N.E.2d 895, 164 N.Y.S.2d 699 (1957) (leading case eliminating privity as a defense in architectural malpractice actions). One commentator observed that

[[]I]iability was predicated upon the establishment of the elements of negligence and the existence of a legally recognized relationship or privity with the architect. The duty of the architect was extended so that in the preparation of plans and specifications the exercise of ordinary care in design was for the protection of any person who foreseeably could be injured by the designer's failure to exercise such care.

Note, supra note 22, at 1275 (emphasis added); see also MacPherson v. Buick Motor Co., 217 N.Y. 382, 111 N.E. 1050 (1906) (recovery allowed for damages suffered by automobile's owner notwithstanding lack of privity between owner and manufacturer). See generally Note, Architects' and Engineers' Third Party Negligence Liability—The Fall of the House of Privity, 10 W. Res. L. Rev. 563, 568-71 (1959).

^{37.} Note, supra note 22, at 1229.

^{38.} Id.

^{39.} See Lehr, The Application of Products Liability Principles to Professional Services, 48 Ins. Couns. J. 434, 445 (1981); Note, Liabilities of California Building Contractors and Construction Professionals: The Need for Equality in Legal Responsibilities, 15 Cal. W.L. Rev. 305, 306 (1979); Note, Products and the Professional: Strict Liability in the Sales-Service Hybrid Transaction, 24 Hastings L.J. 111, 132 (1972).

^{40. 263} N.W.2d 420 (Minn. 1978).

^{41.} Id. at 422.

^{42.} Id.

act sciences" and must rely upon their skilled judgment to perform their duties,⁴³ the court deemed error to be an inescapable possibility.⁴⁴ Viewing the law as requiring only the skill and judgment exercised by similarly situated professionals, the court felt it more equitable that purchasers of architectural services bear the risk of unforeseen circumstances which damage the finished project.⁴⁵

A minority of jurisdictions do impose an implied warranty standard upon traditional architects, justifying the result as flowing from the common and fair dealings between the contracting parties. In Broyles v. Brown Engineering Co., the court held an engineer strictly liable under an implied warranty theory for producing defective plans when the engineer's faulty drawings of a subdivision's drainage system caused extensive damage. The court observed that because the professional engineer held himself out as an expert, it was not unreasonable to expect a guarantee of satisfactory results. An implied warranty standard, therefore, requires the professional to impliedly warrant that his or her drawings and specifications will be sufficient for their intended purpose.

3. The Traditional Architect and Strict Liability in Tort

No jurisdiction subjects the traditional architect to strict tort liability⁵⁰ similar to that expressed in section 402A of the Restate-

^{43.} Id. at 424.

^{44.} Id.

^{45.} Additionally, the court reasoned that because of the nature of the architect-client relationship, an injured third party need not search through a distribution chain for the source of his problem. The inability of consumers to locate the source of a product's defect has been cited as an underlying rationale for imposing strict liability upon manufacturers. See infra note 58 and accompanying text. Furthermore, the court observed that, unlike a mass-producer, who can test and refine his product before it reaches the consumer, each project confronting the architect presents its own unique situation. 263 N.W.2d at 424–25.

^{46.} See Broyles v. Brown Eng'g Co., 275 Ala. 35, 151 So. 2d 767 (1963); Federal Mogul Corp. v. Universal Constr. Co., 376 So. 2d 716 (Ala. Civ. App. 1979).

^{47. 275} Ala. 35, 151 So. 2d 767 (1963).

^{48.} Id. at 40, 151 So. 2d at 772.

^{49.} The court stated:

A contracting civil engineer employed to survey and submit plans and specifications for drainage of an area of land as here involved, when he accepts employment, being competent and qualified as he holds himself out to be, should expect to be charged with a guaranty of reasonable results, and we think that in his dealings and in common fairness he does so expect. Resistance as here to accountability does not dissipate the fairness and justice of such an implication.

Id.

^{50.} For a discussion of strict tort liability, see Prosser, The Assault Upon the Citadel

ment (Second) of Torts.⁵¹ Section 402A focuses on the *condition* of the product⁵² rather than the *actions* of the other party. Subjecting the traditional architect to strict tort liability, therefore, would require a showing that the architect's product—his services—were defective and "unreasonably dangerous to the user or consumer."⁵³

The courts have found, however, that the rationales underlying the strict tort standard are inapplicable to services.⁵⁴ In La Rossa v. Scientific Design Co.,⁵⁵ the court determined an engineering firm's liability under negligence principles.⁵⁶ The decedent's wife in La Rossa sought to hold the design engineers of a phthalic anhydride processing plant strictly liable for her husband's death, which resulted from his exposure to vanadium during the plant's construction.⁵⁷ The court observed that consumers of professional

(Strict Liability to the Consumer), 69 YALE L.J. 1099 (1960); Prosser, The Fall of the Citadel (Strict Liability to the Consumer), 50 MINN. L. REV. 791 (1966).

- 51. RESTATEMENT (SECOND) OF TORTS § 402A (1965) states:
- Special Liability of Seller of Product for Physical Harm to User or Consumer
- (1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if
 - (a) the seller is engaged in the business of selling such a product, and
- (b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.
- (2) The rule stated in Subsection (1) applies although
- (a) the seller has exercised all possible care in the preparation and sale of his product, and
- (b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.
- 52. Lehr, supra note 39, at 434. Lehr states:

Strict liability ("liability without fault") does not necessarily mean that the defendant is faultless (not culpable), but merely that the plaintiff does not have to prove fault in order to recover. Strict liability in products deals with the condition of an object, whereas negligence deals with the actions of a reasonable man.

- Id. (emphasis in original).
- 53. RESTATEMENT (SECOND) OF TORTS § 402A(1) (1965). This requires architects to insure that their services are free from any and all "unreasonably dangerous" defects. This should be contrasted with a negligence action, where the injured party must establish the architects' failure to exercise the standard of care expected of similarly situated architects. See Lehr, supra note 39, at 449.
- 54. But see RESTATEMENT (SECOND) OF TORTS § 402A comment c (1965). The comment indicates that

the seller, by marketing his product for use and consumption, has undertaken and assumed a special responsibility toward any member of the consuming public who may be injured by it; that the public has the right to and does expect, in the case of products which it needs and for which it is forced to rely upon the seller, that reputable sellers will stand behind their goods.

Id.; see infra notes 122-31 and accompanying text.

- 55. 402 F.2d 937 (3d Cir. 1968).
- 56. Id. at 943.
- 57. Id. at 939.

services are not confronted with the burdens facing purchasers of mass produced goods, who must trace the article through the channels of trade to an original manufacturer in order to hold the responsible party liable for the defect.⁵⁸ Thus, the performance of traditional architectural services is not closely analogous to the manufacture of goods, and therefore the policy rationales underlying strict liability in tort are not fully applicable.

Those courts which impose a strict liability in tort standard on the performance of commercial services⁵⁹ still refuse to extend this standard to the performance of professional services. In Newmark v. Gimbel's, Inc., 60 a case involving a defective hair care product, the court applied a strict tort standard to the defendant-operator's use of the defective product, irrespective of the service aspect involved in the case. The transaction was viewed as "a hybrid partaking of incidents of a sale and a service."61 Traditional restrictions against the application of a strict liability standard to a wholly service arrangement, therefore, were less compelling. Although it considered the plaintiff to be a consumer of both the manufacturer's product and the professional's services, the court expressly declined to apply a strict liability in tort standard to the performance of professional services. The court reasoned that the performance of professional services is not routine in nature, nor are the variables encountered in the application of the professional's judgment standardized.⁶² Finally, the court determined

^{58.} Id. at 942-43. But see 2 F. Harper & F. James, The Law of Torts 794-95 (1956), where they state:

There is a growing belief, however, that in this mechanical age the victims of accidents can, as a class, ill afford to bear the loss; that the social consequences of uncompensated loss are of far greater importance than the amount of the loss itself; and that better results will come from distributing such losses among all the beneficiaries of the mechanical process than by letting compensation turn upon an inquiry into fault.

Id.

^{59.} See Newmark v. Gimbel's, Inc., 54 N.J. 585, 258 A.2d 697 (1969); Note, Products and the Professional: Strict Liability in the Sales-Service Hybrid Transaction, 24 HASTINGS L.J. 111 (1972).

^{60. 54} N.J. 585, 258 A.2d 697 (1969). Here a patron of a beauty shop was given a permanent wave treatment which caused hair loss and skin burns (contact dermatitis). *Id.* at 589-91, 258 A.2d at 699. The plaintiff argued that, notwithstanding the presence of a service element in the transaction, there was an implied warranty of fitness extending to the products involved in the rendition of services.

^{61.} Id. at 593, 258 A.2d at 701.

^{62.} The court described the vast difference between commercial services and professional services:

[[]The professional's] performance is not mechanical or routine because each patient requires individual study and formulation of an informed judgment as to the physical or mental disability or condition presented, and the course of treatment

that the policies underlying strict liability in tort did not justify its application to professionals.⁶³

II. THE DESIGN-BUILD MODEL

The architect designer-builder is more closely involved with the construction phase of the project than is a traditional architect. Because of the services provided by the architect designer-builders, a strict liability in tort standard arguably should apply when the buildings they produce cause injury. Since architect designer-builders are analogous to manufacturers, an analysis of the policy rationales underlying strict liability in tort further supports its application in the design-build context.⁶⁴

A. The Design-Build Approach

The distinguishing feature of the design-build model is the absence of the triangular relationship inherent within the traditional model. In the design-build model, the owner executes a single contract with either the architect or the contractor for both the design and construction of the project.⁶⁵ This single contract fea-

needed. . . . Such men are not producers or sellers of property in any reasonably acceptable sense of the term. In a primary sense they furnish services in the form of an opinion of the patient's condition based upon their experienced analysis of the objective and subjective complaints, and in the form of recommended and, at times, personally administered medicines and treatment. . . . Thus their paramount function—the essence of their function—ought to be regarded as the furnishing of opinions and services.

Id. at 596-97, 258 A.2d at 703.

63. The court stated:

In our judgment, the nature of the services, the utility of and the need for them, involving as they do the health and even survival of many people, are so important to the general welfare as to outweigh in the policy scale any need for the imposition on dentists and doctors of the rules of strict liability in tort.

Id. at 597, 258 A.2d at 703.

- 64. But cf. supra text following note 58 (since traditional architects are not analogous to goods manufacturers, application of strict liability in tort should not be applicable).
- 65. The contract between the owner and the designer-builder may be arranged in three different forms. Under the "competitive bidding" option, the design-build entity is chosen based on competitive proposals from various designer-builders. The owner may pre-establish the project's requirements or define them after the designer-builder is chosen. The primary advantage of the competitive bidding option is the ability to establish the project's costs in its initial stages, thus allowing public entities with fixed funding to use the design-build model. The owner retains responsibility for project financing throughout the design-construction process. See American Institute of Architects, Project Delivery Approaches 22 (1976).

Closely related to the competitive bidding option is the "direct selection" option, in which the owner selects the designer-builder through negotiation. Project requirements are established before or concurrent with the negotiation process. The owner in the direct selection process maintains an active role throughout the design-build process by adjusting

ture contrasts with the traditional model⁶⁶ where separate entities deliver design and construction services.⁶⁷ The design-build entity itself may assume two different forms: the "integrated services" entity, combining both design and construction functions, or the "prime contractor" entity, where the designer-builder performs either the design or the construction function and subcontracts all other services.⁶⁸ The architect in the design-build model may serve as either the prime contractor-principal⁶⁹ or subcontractor-agent of the design-build entity.⁷⁰

Although it is a relatively recent development in the modern construction industry, the design-build model is gaining almost immediate acceptance in the marketplace⁷¹ due in part to its supe-

project requirements to changing costs and by obtaining both construction and long term financing for the project. *Id*.

A third type of design-build contract is the "turnkey" approach, so named because the sole responsibilities of the owner are to take possession of the completed construction project, pay the contract price, and "turn the key in the door." The owner and designer-builder enter into a fixed sum sales contract, whereby the owner provides the project requirements and the designer-builder produces the finished project. The turnkey contract places the responsibility for design, construction, and the acquisition of a site, requisite governmental approval, and interim construction financing on the designer-builder. *Id*.

- 66. See supra text accompanying notes 18-23.
- 67. AMERICAN INSTITUTE OF ARCHITECTS, PROJECT DELIVERY APPROACHES 20 (1976). "In the design-build approach, the owner procures both design and construction services at one time, from one entity, based on a statement of requirements. The proposal and award tasks are moved 'up front'—directly following planning." *Id.*; Note, *Design-Build Contracts in Virginia*, 14 U. RICH. L. REV. 791, 798 (1980).
- 68. American Institute of Architects, Project Delivery Approaches 23–25 (1976).
- 69. This Note specifically focuses on the architect as the principal within the design-build entity. As a principal, the architect designer-builder is at polar opposites from an architect acting as the owner's agent. By analyzing the nature of design-build services, which differs fundamentally from that provided by the traditional architect, it is apparent that a strict liability standard should apply.
- 70. As agent for the design-build entity, the architect is analogous to his or her traditional counterpart, since the responsibilities of the respective parties are defined under traditional contractual forms. The essential difference between the traditional model and the architect as the designer-builder's subcontractor is the contracting parties. In the design-build model, the architect is the contractor's, and not the owner's, agent. Since the architect, as the designer-builder subcontractor, retains traditional service characteristics, the policy rationales for retaining a negligence-only standard still apply.
- 71. A 1975 survey revealed that of 383 recently erected construction projects valued at \$5,000,000 or more, 28% utilized the single contract, or design-build model. Most of the design-build projects were manufacturing facilities, while only 15% of all nonmanufacturing facilities, such as office buildings and educational facilities, utilized this approach. See Survey Measures Use Of Design-Construct Contracts by Industry, AM. INST. ARCHITECTS J., Nov. 1975, at 6 (citing FORTUNE, CORPORATE PRACTICES AND ATTITUDES TOWARDS INDUSTRIAL/COMMERCIAL CONSTRUCTION (1975)).

rior economic advantages.⁷² The owner in the traditional model must invest both time and money in planning and preparation prior to the establishment of a project price.⁷³ The linear, systematic nature of the traditional model, necessitating the completion of one phase of the project before the next may commence, makes its use very time consuming.⁷⁴ In highly inflationary times, any delay associated with planning or erecting a project causes significant increases in cost and a corresponding decrease in project profitability.⁷⁵

The design-build model, conversely, is not a phased, linear approach, but rather a systematic model where the planning, design, and construction phases occur simultaneously.⁷⁶ The integration of the design and building functions permits responsive planning in the early stages of the project and provides the designer-builder with immediate time and cost information. Early access to this information reduces the time required to modify or change project requirements and, therefore, decreases the costs associated with these changes.⁷⁷ It is this inherent responsiveness to time-delay

^{72.} See infra notes 79-84 and accompanying text.

^{73.} The owner invests considerable time and money for planning and contracting before the architect even releases the drawings and specifications for bid to prospective contractors. See generally AMERICAN INSTITUTE OF ARCHITECTS, STANDARD FORM OF AGREEMENT BETWEEN OWNER AND ARCHITECT B141 (1977 ed.) (standard contract between owner and architect establishing contractual responsibilities of both parties).

^{74.} Time and cost problems represent the traditonal model's most serious drawbacks. Construction cannot begin before completion of the design phase, which must await completion of the programming phase. See AMERICAN INSTITUTE OF ARCHITECTS, PROJECT DELIVERY APPROACHES 6-10 (1976). Along with the desire to compress the time frame is the need to reduce construction financing. When construction is completed, construction financing is "rolled over" into long term financing at reduced interest rates. See also Note, supra note 67, at 797.

^{75.} One commentator observes:

Inflation in construction and financing costs has placed a premium on speed in the development process. Once the developer [owner] has decided to build, each month's delay is a month's lost rent. But, . . . the financial penalties for delay are much greater than mere loss of income. . . By cutting design-construction time from 24 to 18 months, and thereby generating early cash-flow receipts from a building, a developer may cut his equity cash participation by as much as 30 percent. This cash-investment reduction increases financial leverage, or profit-equity ratio, and leverage is the key to financially successful development.

C. GRIFFIN, DEVELOPMENT BUILDING: THE TEAM APPROACH 15 (1972).

^{76.} Note, supra note 67, at 798.

^{77.} This approach, where the various design and construction phases take place concurrently, is commonly referred to as "fast tracking." Under a fast track system, basic program requirements, such as building location on the site, utility locations, and overall building parameters, are established first. Next, the foundation and structural system are designed and released for bids. During construction of the building shell, planning and design functions for the remainder of the project are completed. Thus, all three phases of building activity—planning, design, and construction—occur simultaneously. "Fast track-

costs which has accounted for the construction industry's rapid acceptance of the design-build model.

Beyond mere cost and time savings, the design-build model fundamentally redefines the roles which the owner, architect, and contractor occupy in the traditional model.⁷⁸ One commentator argues that the design-build model removes the internal conflict, waste, and clouding of responsibility that is inherent between these three entities.⁷⁹ Moreover, this same commentator identifies several significant advantages which the architect designer-builder enjoys over the traditional architect, such as sufficient control over design and construction functions to assure correct project performance. Additionally, the architect designer-builder would purchase and assemble the building materials, thus insuring proper selection and installation, 80 The architect designerbuilder's control over construction methodology would include direct participation in creating safe working conditions.81 Injured employees would be compensated under workers' compensation provisions, thus eliminating suits against architects by injured workers over whom they had no control.82 The architect designerbuilder, furthermore, is in a stronger financial position than the traditional architect.83 Significant cost savings by eliminating the waste in communication during construction and combining the profit from both the design and erection of the project provide the architect designer-builder with greater remuneration than that available to the traditional architect.84

Notwithstanding these inherent advantages, through 1978 the participation of architects in the design-build model was minimal.⁸⁵ Established prohibitions to participation based on ethical

ing" also permits the early ordering of building elements which require lengthy appropriation periods, further decreasing construction time. *Id.* at 798-99.

^{78.} See supra notes 74-75 and accompanying text.

^{79.} See Merritt, Up Against the Wall, Master Builder: The Architect's Legal Status, 23 St. Louis U.L.J. 384, 420 (1979).

^{80.} Id. at 420-21.

^{81.} Id. at 421.

^{82.} Id.

^{83.} Id.

^{84.} Id.

^{85.} The majority of registered architects in the United States belong to the American Institute of Architects (AIA)—a professional organization similar to the American Medical Association or the American Bar Association. The AIA had a longstanding ethical prohibition against membership participation in design-build entities. "[Members] may not engage in building contracting where compensation, direct or indirect, is derived from profit on labor and materials furnished in the building process." AMERICAN INSTITUTE OF ARCHITECTS, THE STANDARDS OF ETHICAL PRACTICE J330 (1974 ed.).

concerns focused on the nature of the architect's relationship as the owner's agent in the building process.⁸⁶ Since these longstanding prohibitions to participation as designer-builders were recently lifted,⁸⁷ the level of participation of architects in the designbuild model is expected to increase due to competitive pressures from the marketplace.

The fundamental role changes produced when the traditional architect becomes the architect designer-builder raise significant questions regarding potential liability for defects in the project. Commentators suggest that designer-builders would be liable for injuries to workers at the work site, defaults which injure the surety's interests, and failures in design or construction quality.⁸⁸ Thus, the designer-builder is wholly liable for deficiencies which heretofore were the separate liabilities of the architect and the contractor in the traditional model.⁸⁹

B. The Existing Tort Liability of the Architect Designer-Builder

When determining the appropriate liability standard for an architect designer-builder most courts focus on the architect's professional status. The conclusiveness placed upon this status is evident even in those jurisdictions unwilling to hold nonprofessional designer-builders strictly liable. Those jurisdictions, however, that impose an implied warranty standard on a nonprofessional designer-builder refuse to impose a standard higher than negligence to similarly situated professional designer-builders. By examining the role of the designer-builder in light of the policies underlying strict liability in tort, it becomes evident that both professional and nonprofessional designer-builders should be held to that strict standard.

1. The Designer-Builder and the Negligence Standard

A dichotomy exists in the standards used to determine the negligence of a professional and that of an ordinary, "reasonable person." The professional standard of care requires the exercise of

^{86.} See Merritt, supra note 79, at 420.

^{87.} After several years of discussion, the AIA voted in 1978 to allow its members to engage in design-build transactions. *See* AMERICAN INSTITUTE OF ARCHITECTS, ETHICAL PRINCIPLES 6J400 (1981).

^{88.} Note, supra note 67, at 799.

^{89.} See Merritt, supra note 79, at 421; Note, supra note 67, at 799.

average professionally acceptable conduct,90 which is really "a standard of minimum professionally acceptable conduct."91 Conversely, the ordinary "reasonable person" standard requires the average, nonprofessional individual to exercise average, prudent reasonable care. 92 Because this reasonable person's behavior must not only be average, but also prudent, the nonprofessional is held to a standard of care that is actually higher than that of the professional.93 The distinction between the professional standard and the reasonable person standard is typically justified by a representation, implied to all professionals, that they will follow customary procedures in their professional dealings.⁹⁴ Another justification advanced is that the average person is incompetent to adequately determine what is professional negligence without expert guidance from similarly situated professionals.95 Arguably, however, once a professional performs services beyond the scope of his or her customary professional services, these justifying rationales become inapplicable.

In Stuart v. Crestview Mutual Water Co. 96 a professional standard was applied to a professional operating beyond the scope of his usual services. 97 The property owner in Stuart brought implied warranty and negligence actions against the municipal water corporation, the developer, and the engineer who designed, engi-

Curran, supra note 90, at 538 (emphasis in original).

^{90.} Curran, Professional Negligence—Some General Comments, 12 VAND. L. REV. 535, 538 (1959).

^{91.} Id. (emphasis in original).

^{92.} Id. This requirement of average reasonable prudence is a stricter standard of conduct than mere average general conduct because the average individual must exhibit carefulness as an element of average general conduct. Moreover, to determine what is reasonable, prudent conduct for a particular individual, distinctive physical characteristics, such as blindness, are noted. See W. PROSSER, HANDBOOK OF THE LAW OF TORTS 151-52 (4th ed. 1971). At a minimum, an average, reasonable, prudent individual is imputed with reasonable intelligence, see id. at 152-53, and note is accorded any additional knowledge possessed due to special or surrounding circumstances. See Curran, supra note 90, at 537.

^{93.} Curran observes that

[[]t]he standard chosen for all professions would seem to be basically the same It is the learning and skill "ordinarily possessed and exercised" by the profession. This is a rather questionable standard. . . . [I]n the "reasonable man" concept, the law requires more than average conduct, it requires average prudent conduct. This is "up the scale" from the average. Yet for professionals, we seem to be satisfied with average or minimum acceptable conduct.

^{94.} See W. PROSSER, supra note 92, at 165.

^{95.} *Id*.

^{96. 34} Cal. App. 3d 802, 110 Cal. Rptr. 543 (1973).

^{97.} The court quoted the professional standard enunciated in Gagne v. Bertram, 43 Cal. 2d 481, 489, 275 P.2d 15, 21 (1954); see supra notes 30-33 and accompanying text.

neered, and *constructed* the water distribution system.⁹⁸ The owner's property was destroyed by fire because the water supply and pressure were inadequate. The California Court of Appeal affirmed the lower court's determination that the complaint⁹⁹ did not state a cause of action against the engineer for strict liability. The court reached this result even though the engineer, by engaging *in the business of construction*, was performing an activity beyond the statutory sphere of engineering duties in California.¹⁰⁰ The court, thus, focused upon the professional status of the engineer and ignored the actual services rendered.¹⁰¹

While the Stuart court applied the professional standard to the professional designer-builder, earlier, in Halliday v. Greene, 102 it had held a nonprofessional designer-builder accountable to the higher reasonable person standard. In Halliday, a licensed general contractor planned, designed, constructed, and operated an apartment complex. On two of the units, the designer-builder obtained a building code variance which reduced the number of staircases required from two to one. During a fire at one of the two units, the plaintiffs were injured while attempting to descend the single staircase. The complaint alleged breach of an implied warranty of fitness for the unit as a whole and negligence in the design and construction of the staircase. The court, however, applied a negligence standard, rejecting the strict liability aspect of the complaint. 104 The court's standard was whether "the

^{98. 34} Cal. App. 3d at 805-06, 110 Cal. Rptr. at 545.

^{99.} The proposed amended complaint stated:

Jansen Associates [the project engineers] are in the business of designing, engineering and constructing water development systems, and knew and intended that the water distribution system would be used to supply water for fire protection services for persons such as plaintiffs who lived in the Crestview water area.

Id.

^{100.} California law defines engineering duties as including the planning, design, and supervision of construction—not the actual construction itself. CAL. Bus. & Prof. Code § 6701 (West Supp. 1983). Construction supervision, moreover, "does not include responsibility for the superintendence of construction processes." Id. § 6703.1 (West 1975). By actually engaging in construction, therefore, a California engineer is arguably performing an activity beyond the scope of his or her duties.

^{101.} The court characterized the engineer's contractual obligations as professional services which could not be analogized to manufacturers. Thus, the engineer was not in the best position vis-a-vis the consumer to spread the costs associated with building defects. 34 Cal. App. 3d at 811, 110 Cal. Rptr. at 549.

^{102. 244} Cal. App. 2d 482, 53 Cal. Rptr. 267 (1966).

^{103.} Id. at 483-84, 53 Cal. Rptr. at 269.

^{104.} In holding that strict liability does not apply to the landlord-tenant relationship, the court relied instead upon the ability of the tenant to make an effective inspection of the premises prior to the establishment of the leasehold. The court felt that the essence of the

builder . . . knew, or as an experienced builder should have known" that particular safeguards were necessary in the design and construction of a staircase. Thus, the court applied a reasonable person standard —arguably a higher standard than the professional standard 107—to a nonprofessional designer-builder.

The application of two different standards of negligence to similarly situated designer-builders cannot be justified by the rationales supporting the distinction between the two standards. 108 A single standard should apply to both the professional and non-professional designer-builder when they engage in identical transactions. 109 The reasonable person standard both achieves uniformity of treatment and accommodates the inherent differences between professional and nonprofessional designer-builders. 110 Use of a reasonable person standard would hold an architect designer-builder, whose skills and knowledge differ from that of a contractor designer-builder to the standard of care that a prudent person with the same skill and knowledge would have exhibited in a similar transaction.

The underlying assumption of the above discussion is that a strict liability standard is inappropriate for the architect designer-builder. This assumption has been questioned by a growing number of jurisdictions which hold designer-builders strictly liable for product defects. 112

- 105. Id. at 487, 53 Cal. Rptr. at 271.
- 106. See supra note 92 and accompanying text.
- 107. See supra note 93 and accompanying text.
- 108. See supra notes 94-95 and accompanying text.

cause of action was based in negligence and the landlord's duty was to inform the tenant about latent defects. *Id.* at 486-87, 53 Cal. Rptr. at 271.

^{109.} See Note, Liabilities of California Building Contractors and Construction Professionals: The Need for Equality in Legal Responsibilities, 15 Cal. W.L. Rev. 305, 305-06 (1979). The author argues that when the contractor's and professional's tasks have become indistinguishable, and the professional receives the benefit of preferential treatment due to his or her status as a professional, an inequitable burden is placed upon the contractor. Id. at 306.

^{110.} Arguably, the designer-builder could be treated as another classification of professional, with the professional standard applied uniformly to all designer-builders. This option, however, does not recognize that, unlike most professions, not all designer-builders have similar qualifications, skills, or educational backgrounds. Therefore, until standardization of designer-builder qualifications occurs, it is more equitable to judge each individual designer-builder on his or her respective qualifications.

^{111.} See, e.g., Stuart v. Crestview Mut. Water Co., 34 Cal. App. 3d 802, 110 Cal. Rptr. 543 (1973); supra notes 96-101 and accompanying text.

^{112.} See Schipper v. Levitt & Sons, Inc., 44 N.J. 70, 207 A.2d 314 (1965); infra notes 158-60 and accompanying text.

2. The Designer-Builder and Implied Warranty

Courts generally refuse to hold traditional architects to an implied warranty standard, 113 asserting that the indeterminate factors architects must manipulate 114 make it impossible for them to guarantee a result. A warranty action focuses on the relative positions of the buyer and seller. The court examines the seller's representations and breach occurs when these representations are not fulfilled. 115 In refusing to invoke an implied warranty standard to architects, most courts reason that when an architect, as a professional, makes representations regarding his or her services, it is with the implied understanding that they will merely reach the level of competence of the profession as a whole. As one court stated:

With respect to the alleged "implied warranty of fitness," we see no reason for application of this theory in circumstances involving professional libability. . . . [A] professional, does not "warrant" his service or the tangible evidence of his skill to be "merchantable" or "fit for an intended use." These are terms uniquely applicable to goods. Rather, in the preparation of design and specifications as the basis of construction, the . . . architect "warrants" that he will or has exercised his skill according to a certain standard of care, that he acted reasonably and without neglect. Breach of this "warranty" occurs if he was negligent. 116

Any reliance, therefore, by the consumer on representations which

^{113.} See supra notes 40-45 and accompanying text.

^{114.} See City of Mounds View v. Walijarvi, 263 N.W.2d 420, 424 (Minn. 1978); supra notes 40-45 and accompanying text.

^{115.} Prosser states:

[[]A]ny affirmation of fact made by the seller concerning the goods, including any description of them, and any promise relating to them, becomes an express warranty if it is relied on by the buyer as part of the bargain. The implied warranties of quality are reduced to two: a warranty that the goods are fit for the particular purpose of the buyer, when that purpose is made known to the seller, and the latter knows that the buyer is relying upon his skill or judgment to select and furnish suitable goods; and a warranty that the goods are of merchantable quality, when they are bought from one who deals in goods of that description.

It is essential to a warranty that the buyer shall rely on the seller's express or implied assurance. There is no recovery where the defects in the goods are known to buyer or obvious to him; or where he elects to make his own inspection and rely solely on it.

W. PROSSER, supra note 92, at 636-37.

^{116.} Audlane Lumber & Builders Supply, Inc. v. D.E. Britt Assoc., Inc., 168 So. 2d 333, 335 (Fla. App. 1964), cert. denied, 173 So. 2d 146 (Fla. 1965). In Audlane Lumber, a truss fabricator argued for imposition of an implied warranty of fitness on the plans which it had purchased from an engineer. Id. at 335. The fabricator was injured when defects and structural inadequacies were discovered in the trusses fabricated from the plans. Id. at 334. The court held that implied warranty is not applicable to professionals. Id. at 335.

exceeds this implied understanding are found to be unreasonable unless the professional expressly and unequivocably warranted a specific result.¹¹⁷

When a traditional architect becomes an architect designerbuilder, the above justifications for withholding the implied warranty standard may no longer apply. Regardless of their status as professionals, an implied warranty standard may be justifiably applied to architect designer-builders because of the extra services performed which traditional architects do not. Courts have begun to recognize this reasoning. For example, in Robertson Lumber Co. v. Stephen Farmers Cooperative Elevator Co. 118 a lumber company agreed to design and build a grain storage building and hired a subcontractor to perform the actual construction. The building collapsed after completion when loaded to ninety five percent of its represented capacity. 119 The Minnesota Supreme Court affirmed the lower court's finding of an implied warranty of fitness that the building would be designed and constructed to accommodate the intended use. 120 The court determined that it was appropriate to impose an implied warranty standard when: (1) the contractor holds him or herself out as competent, (2) the owner has no particular expertise in design and construction, (3) the owner provides no plans or specifications, and (4) the owner conveys his or her reliance on the skill and experience of the contractor after explaining the specific purpose of the building. 121 Under the Robertson test, an implied warranty of fitness for a particular use should apply regardless of the designer-builder's professional

In some professional areas, the mere happening of a bad result does give rise to a justifiable claim. This is most apt to happen where the defendant warrants his work or makes certain types of representation. The most common is the accountant who certifies financial condition. He is often found liable in damages in such cases if the financial condition of a business is not certified, even though he himself (and his employees) were not negligent. The basis is express warranty or a representation "of one's own knowledge" for which strict liability is imposed. Such a situation can apply to engineers and lawyers as well where they make certifications or prepare reports.

Curran, supra note 90, at 542.

^{117.} Curran states:

^{118. 274} Minn. 17, 143 N.W.2d 622 (1966).

^{119.} The court described the nature of the defendant's involvement: "Specifying the type of building was the co-op's only participation, and it was left entirely to the lumber company to supply not only appropriate material but a building contractor to do the actual work. The co-op did, by the terms of its acceptance, approve the contractor proposed." *Id.* at 22, 143 N.W.2d at 625. Based on these facts, the lumber company fits into the description of a design-build firm. *See supra* text accompanying note 68.

^{120. 274} Minn. at 24, 143 N.W.2d at 626.

^{121.} Id.

status. Indeed, the court in City of Mounds View v. Walijarvi ¹²² relied on Robertson to distinguish between the representations of a professional and a designer-builder regarding their respective services. Contracts like those in Robertson, the court argued, are for general contracting services, not for "professional services," and, as such, are subject to the implied warranty standard. ¹²³ By implicitly affirming the applicability of an implied warranty standard, the Walijarvi court, through its reliance on Robertson, emphasized that the dispositive factor is not "professional" status, but the services actually performed by the designer-builder.

An implied warranty has been applied to the "nonprofessional" designer-builder since the 1800's. ¹²⁴ A leading case imposing an implied warranty standard is *Kennedy v. Bowling*. ¹²⁵ In *Kennedy*, the designer-builder agreed to procure a design ¹²⁶ and construct a warehouse for the plaintiff which would support the storage of heavy chemicals. ¹²⁷ After completion of the building,

^{122. 263} N.W.2d 420 (Minn. 1978); see supra notes 40-45 and accompanying text.

^{123. 263} N.W.2d at 424 n.4.

^{124.} E.g., Kellogg Bridge Co. v. Hamilton, 110 U.S. 108 (1884). In Kellogg Bridge, the Court held that the bridge company impliedly warranted that the pilings which it designed and built were reasonably suited for their contemplated use. Id. at 119. The bridge company contracted with the Lake Shore and Michigan Southern Railroad Company to construct a bridge over the Maumee River in Toledo, Ohio. After the bridge company designed the bridge and installed the pilings to support the center span towers, it contracted with Hamilton to finish the bridge. Id. at 108. Hamilton, using the design supplied by Kellogg, had completed the center span when the towers collapsed because the pilings failed. The bridge collapse created additional expenses which Hamilton sought to collect from the bridge company on an implied warranty theory. Id. at 110. The Court, in applying an implied warranty standard, stated:

The law, therefore, implies a warranty that this false work [the pilings] was reasonably suitable for such use as was contemplated by both parties. It was constructed for a particular purpose, and was sold to accomplish that purpose; and it is intrinsically just that the company, which held itself out as possessing the requisite skill to do work of that kind, and therefore as having special knowledge of its own workmanship, should be held to indemnify its vendee against latent defects, arising from the mode of construction

Id. at 119. Thus, the Court applied an implied warranty standard to a designer-builder and expressly rejected the rule of caveat emptor in this transaction.

^{125. 319} Mo. 401, 4 S.W.2d 438 (1928).

^{126.} After Bowling accepted Kennedy's offer he obtained the services of an architect, Mr. Braecklein, to prepare the design for the building. Thus, by subcontracting out the design services, Bowling created a "prime contractor" design-build entity. See supra text accompanying note 68.

^{127.} The operative terms of the agreement were:

I hereby propose that you shall build on my property . . . one three-story building, and contiguously one one-story building according to plans and specifications to be furnished by you at your expense and approved by me, you to buy all material and to employ all the labor used in the construction of said building

the floors could not support the weight of the chemicals and had to be reinforced. The court held that the designer-builder had impliedly warranted a warehouse sufficient for its intended purpose. In reaching this result, the *Kennedy* court determined that the owner had relied upon the designer-builder's representations of his skill and judgment. Moreover, this result was reached without regard for the unique conditions the designer-builder encountered in the performance of his contract—the same type of factors an architect encounters in the performance of his or her services and which the *Walijarvi* court reasoned dictated only a negligence standard. Is I

The Kennedy court's holding was recently affirmed and extended by the Missouri Supreme Court in O'Dell v. Custom Builders Corp. 132 In O'Dell, the designer-builder, Custom, contracted to provide the overall design and outside shell construction of the residence, excluding the foundations and interior finishes. 133 After the design was completed, and although not required by the contract to do so, Custom sent one of its employees to select the location of the house on the owner's property. This same employee also arranged for excavation and installation of the building's foundation. When the foundation system failed, the court determined that the cause was Custom's failure to modify the design of the foundation system, which it had supplied, to the conditions at the site. 134 The court held that Custom impliedly

[D]efendants accepted the statements of plaintiff Kennedy that he knew nothing about the requirement for a building having the strength he desired, and defendants gave their assurance as experienced builders that the suggested and offered plans were sufficient for the purpose, and plaintiffs acted upon that assurance. The evidence was competent, and the question whether defendants undertook to construct the building for a known purpose, a building which would sustain the designated weight, was one for the jury. If they represented themselves as experienced and skillful in the construction of buildings and the designs for such buildings and the plaintiffs relied upon their judgment, and defendants undertook the construction of the building, then the implied warranty arose that in design and workmanship the building should be reasonably fit for the purpose designated.

Because the contract was somewhat ambiguous on this point, the subsequent action by CBC in sending Mr. Schultheis to stake out the property and then arranging for the Conns to do the excavation and begin work on the foundation was highly relevant in determining the reasonableness of plaintiffs' reliance on CBC to make any necessary modification of the foundation design as the need appeared.

^{128.} Id. at 411-12, 4 S.W.2d at 443.

^{129.} Id. at 418, 4 S.W.2d at 445.

^{130.} The court stated:

Id. at 417-18, 4 S.W.2d at 445 (emphasis added).

^{131.} See supra notes 40-45 and accompanying text.

^{132. 560} S.W.2d 862 (Mo. 1978).

^{133.} Id. at 865.

^{134.} The court stated:

warranted both the sufficiency of the plans and the fitness of the structure contemplated by the parties.¹³⁵

In imposing an implied warranty standard the court expressly rejected Custom's argument that, since it was really a builder-vendor, an implied warranty of habitability should apply. 136 A builder-vendor designs and constructs the project on his or her property and then conveys both in a single transaction; a designerbuilder contracts to design and construct the project on the owner's land. 137 Whereas the builder-vendor merely warrants that the house is habitable, the designer-builder warrants that the design provided is fit for its intended purpose. 138 The court looked to the nature of the underlying transaction; the affirmative act of sending its employee to the building site to select a location for the structure and arranging for the construction of the foundation placed Custom squarely in the design-build model. Entities like Custom, therefore, should be subjected to an implied warranty of fitness standard. When the transaction also involves the simultaneous conveyance of the land the designer-builder should arguably also be liable for breach of both the implied warranties of habitability and fitness.

An implied warranty of fitness for a particular purpose was imposed on a professional designer-builder in Prier v. Refrigeration Engineering Co. ¹³⁹ In Prier, an engineering company represented itself as a refrigeration expert and agreed to design and install the refrigeration system for an ice skating rink; the rink later proved to be defective. ¹⁴⁰ Without discussing the professional nature of

Thus, whether CBC should have known of the particular use for which the plaintiffs would use the plans and whether plaintiffs' reliance on the plans as being fit for the use intended was reasonable were questions for the jury.

Id. at 869-70 (emphasis added).

^{135.} Id. at 871.

^{136.} Id. at 870. The implied warranty of habitability applies, however, only in those jurisdictions in which the rule of caveat emptor has been abolished. See W. PROSSER, supra note 92, at 680-82 (4th ed. 1971); Bearman, Caveat Emptor in Sales in Realty—Recent Assaults Upon the Rule, 14 VAND. L. REV. 541, 542 (1961).

^{137.} See supra note 65.

^{138. 560} S.W.2d at 870-71. In transactions involving the sale of real property, most jurisdictions have followed the doctrine of merger. Under the merger doctrine, the contract for the sale of the improvement merges with the deed which conveys ownership to the land and subjects the transaction to property, not contract, principles. See Note, Builder-Vendor Liability for Construction Defects in Houses, 55 MARQ. L. Rev. 369, 372 (1972). But see Smith v. Old Warson Dev. Co., 479 S.W.2d 795, 800 (Mo. 1972) (doctrine of merger not applicable in states where implied warranty is a tort, not contract, concept).

^{139. 74} Wash. 2d 25, 442 P.2d 621 (1968).

^{140.} Id. at 26-27, 442 P.2d at 622-23.

the designer-builder, the court held that the owner's reliance upon the designer-builder's representations during selection¹⁴¹ created an implied warranty of fitness that the project would be suitable for the purpose intended.¹⁴² When an architect engages in a design-build contract, his or her professional status and the enhanced ability to control the construction afforded by the design-build format, without any further representations regarding specific abilities, may be a sufficient "holding out," or representation, on which the owner could rely. There is an implicit representation, based upon the architect's professional status and control position, that he or she is competent in the intricacies of the construction industry. Mere professional status alone, therefore, should not bar the imposition of an implied warranty standard on the architect designer-builder.

The implied warranty applies notwithstanding the presence of the same indeterminate factors confronting the traditional architect.¹⁴³ The distinction in the case of a designer-builder, however, is that participation in all phases of the project—planning, design, and construction—enables greater control and ability to mitigate the effects of these indeterminate factors.¹⁴⁴ Moreover, the imposition of an implied warranty standard treats similarly situated professional and nonprofessional designer-builders equally.

C. The Architect Designer-Builder and Strict Liability in Tort

An implied warranty standard of liability will not provide relief to all parties injured by an architect designer-builder. 145 The

^{141.} A recent survey illustrates the importance of such reliance. The survey reported that the principle criteria by which one particular design-build firm was selected over another when all other factors regarding price were relatively equal was experience with the specific type of project and satisfactory prior work for that owner. See supra note 71.

^{142.} The court stated:

The evidence shows that defendant designed the base upon which the ice sheet rested, and that the base was an inseparable part of the refrigeration system. Where a person holds himself out as qualified to furnish, and does furnish, specifications and plans for a construction project, he thereby impliedly warrants their sufficiency for the purpose in view. . . .

[[]D]efendant made warranties, implied in law if not express, that it would construct an ice sheet upon a base designed by it, which would reasonably function as an ice skating arena.

⁷⁴ Wash. 2d at 29, 442 P.2d at 622-23.

^{143.} The Walijarvi court reasoned that architects deal with imprecise and random variables, and thus should not be subjected to an implied warranty standard. See supra notes 43-44 and accompanying text.

^{144.} See supra notes 79-81 and accompanying text.

^{145.} Some courts impose a privity restriction on the imposition of an implied warranty of habitability on a builder-vendor. The courts state that the first purchaser might agree to

analytical focus of an implied warranty action is upon the actions of the parties involved 146—the seller's representations and the purchaser's subsequent reliance—and not upon the defect which caused the injury itself. The specific actions of the parties thus may prevent the compensation of some injured parties. 147 A strict liability in tort standard, however, where the focus of inquiry is on the defect itself and the product's relative danger to all parties, would represent the ultimate liability that may be imposed upon the architect designer-builder.

1. The Policy Considerations

Strict liability in tort is commonly applied to manufacturers of mass-produced products¹⁴⁸ under the assumption that the manufacturer is in a better position to control and spread the costs incurred by injured consumers.¹⁴⁹ The articulated policy goals behind this cost or risk distribution include spreading the risk among the broadest possible base, imposing the risk on those "most able" to pay; and burdening the enterprise that created the risk.¹⁵⁰

compromise the quality of the building in exchange for a reduction in purchase price. If those compromises become the substance of an implied warranty of habitability action by a subsequent vendee, it would create an inequitable burden upon the builder-vendor. *See* Halliday v. Greene, 244 Cal. App. 2d 482, 53 Cal. Rptr. 267 (1966); Wright v. Creative Corp., 30 Colo. App. 575, 498 P.2d 1179 (1972); Oliver v. City Builders, Inc., 303 So. 2d 466 (Miss. 1974).

The Restatement identifies the difficulty of judicial interpretation of the basis of implied warranty—contract or tort:

A number of courts, seeking a theoretical basis for the liability, have resorted to a "warranty," either running with the goods sold, by analogy to covenants running with the land, or made directly to the consumer without contract. In some instances this theory has proved to be an unfortunate one. Although warranty was in its origin a matter of tort liability, and it is generally agreed that a tort action will still lie for its breach, it has become so identified in practice with a contract of sale between the plaintiff and the defendant that the warranty theory has become something of an obstacle to the recognition of the strict liability where there is no such contract.

RESTATEMENT (SECOND) OF TORTS § 402A comment m (1965).

- 146. See supra note 115 and accompanying text.
- 147. Cf. F. Harper & F. James, 2 Law of Torts 794 (1956) (some innocent victims of dangerous activities will go uncompensated when negligence is sole basis for recovery).
 - 148. See Lehr, supra note 39, at 439.
- 149. See generally Cowan, Some Policy Basis of Products Liability, 17 STAN. L. REV. 1077 (1965) (survey of reasons why strict liability is replacing negligence in products liability law).
- 150. See Calabresi, Some Thoughts on Risk Distribution and the Law of Torts, 70 YALE L.J. 499 (1961) (discussing the differences between these goals and their ability to accomplish their stated objective through the imposition of compensation costs upon the manufacturer of the defective product). The author states:

Three basic justifications support this imposition of strict liability on the manufacturer. First, through its control over manufacturing and distribution processes, the manufacturer can best spread the defective product's costs to all its customers. Second, the manufacturer is better able financially to bear the burden because it derives profits from production of the defective product. Finally, by imposing this burden on the manufacturer, the costs of compensating injured consumers are reflected in production costs and, through the interaction of supply and demand, an optimal output of the product is reached.

In refusing to extend strict liability in tort to traditional architects, courts have determined that these underlying policies do not apply to the same extent as they do to manufacturers.¹⁵⁴ Tradi-

The advantages of interpersonal loss spreading would probably be stated in terms of two propositions; (a) that taking a large sum of money from one person is more likely to result in economic dislocation, and therefore in secondary or avoidable losses, than taking a series of small sums from many people, and (b) that even if the total economic dislocation is the same, many small losses are preferable to one large one, simply because people feel they suffer less if 10,000 of them lost \$1 than if one loses \$10,000.

Id. at 517.

151. Id.

152. This is another way of describing the "deep pocket" theory which has justifiably fallen into disfavor. The theory's basic tenet is that a dollar to a rich man is worth less than a dollar to a poor man, implying that the rich man should bear the costs of injury. See Calabresi, supra note 150, at 527.

153. See id. at 500-17. The internalization of compensation costs allows the consumer of the product, in his or her consumption decision, to determine the relative worth of the product as a function of its price. Id. If the product's price exceeds its relative worth to that consumer, the decision is made not to consume. When consumers decide not to purchase, the decreased demand causes a decrease in production, yielding an optimal output of the product. Without such a process, the product's price would only represent production and distribution costs—not the cost of compensating injured consumers. Thus, the internalization of compensation costs prevents the subsidization of defective products by injured consumers. Id. at 502.

154. See supra notes 50-60 and accompanying text. The central argument of this Note is that the designer-builder's product should be subject to strict liability in tort. It is argued, however, that the Uniform Commercial Code (U.C.C.) is equally applicable. See Shanker, Strict Tort Theory of Products Liability and the Uniform Commercial Code: A Commentary on Jurisprudential Eclipses, Pigeonholes and Communication Barriers, 17 W. Res. L. Rev. 5 (1965); Shanker, A Case of Judicial Chutzpah (The Judicial Adoption of Strict Tort Products Liability Theory), 11 AKRON L. Rev. 697 (1978); Shanker, A Reexamination of Prosser's Products Liability Crossword Game: The Strict or Stricter Liability of Commercial Code Sales Warranty, 29 CASE W. Res. L. Rev. 550 (1979) [hereinafter cited as Shanker, A Reexamination]. Since the U.C.C. under § 2-102 (1978), applies to "transactions in goods," it is not possible to apply the U.C.C. to the designer-builder/owner transaction. U.C.C. § 2-105(1) (1978) defines "goods" as "all things (including specially manufactured goods) which are movable at the time of identification to the contract for sale." Although the U.C.C. does define "goods" to include some things which are attached to realty, they are limited to things "capable of severance without material harm thereto."

tional architects may be in the least advantagious position to spread the costs of compensating injured persons. Moreover,

Id. § 2-107(2) (1978). Therefore, since the "goods" sold in a design-build transaction—buildings—are not severable from the realty without material harm, the U.C.C. would not seem to apply.

Although the U.C.C. does not directly apply to the design-build model, it may be applicable by analogy through a broader reading of the word "goods." Professor Shanker, a leading Uniform Commercial Code commentator, observes that strict liability in tort evolved due to a general feeling that the requirements of sales law—privity, waiver, and notice—were denying consumers basic legal protection in defective products cases, Shanker, A Reexamination, supra, at 560; a strict liability standard based in tort law was advocated which would be, in Prosser's words, "free from the intricacies of sales law." Prosser, The Assault Upon the Citadel (Strict Liability to the Consumer), 69 YALE L.J. 1099, 1133-34 (1960). The strict tort liability standard proposed and subsequently codified in Restatement (Second) of Torts § 402A was advanced prior to the adoption of the U.C.C. in a majority of jurisdictions. Thus, it is argued, strict liability in tort ignores the advancements which the U.C.C. brought to the "intricacies of sales law." See Shanker, A Reexamination, supra, at 572-73.

Professor Shanker argues that the provisions of the U.C.C. apply notwithstanding the existence of reliance upon any representations made by the merchant—the designer-builder. See Shanker, A Reexamination, supra at 562. This result is reached by application of U.C.C. § 1-201(11) (1978), which provides that any rule of law which operates to bind the parties into a sales agreement—such as other U.C.C. provisions—automatically becomes part of the contract between them. Thus, the provisions of U.C.C. § 2-314 requiring the "goods" to be merchantable "if the seller is a merchant with respect to goods of that kind," U.C.C. § 2-314(1) (1978), are applicable to all U.C.C. transactions. The U.C.C.'s implied warranty of merchantability, therefore, applies to the same transactions in the same manner as does the standard in § 402A, which applies if "the seller is engaged in the business of selling such a product." See Shanker, A Reexamination, supra, at 562-63.

The U.C.C. does provide for the possibility of a waiver of § 2-314's implied warranty of merchantability through U.C.C. § 2-316 (1978). Section 2-316 provides for a limited or total waiver of express or implied warranties. The use of a waiver provision, especially as applied against injured third parties, is pointed out as a major factor in the judicial acceptance of a strict liability in tort standard. The courts, however, have allowed contractual waiver of strict liability in tort protection "between business entities of relatively equal bargaining strength." See Keystone Aeronautics Corp. v. R.J. Enstrom Corp., 499 F.2d 146, 149 (3d Cir. 1974). Any attempt, however, to eliminate the U.C.C. imposed warranties in the case of injured consumers would be governed by U.C.C. § 2-719(3) (1978), which makes prime facie unconscionable any attempt to limit consequential damages for physical injury. Even those consumers who are not in privity with the merchant are assured of this protection through U.C.C. § 2-318, Alternatives B or C, which extends the U.C.C.'s protection to "any natural person who may reasonably be expected to use, consume or be affected by the goods." U.C.C. § 2-318 (1978).

Since the U.C.C.'s provisions have liberally modified "the intricacies of sales law" to provide for recovery in situations where recovery would have been denied in pre-U.C.C. cases—through the use of waiver, privity, or notice—the use of a strict liability in tort standard as an exclusive standard of recovery is questioned. Although the U.C.C. has no direct application to the design-build model, it is possible to argue for the U.C.C.'s application by analogy. Thus, the users and consumers of the designer-builder's product would have the benefit of the provisions of the U.C.C. in any action for damages to person or property.

155. See Merritt, supra note 79, at 389. In discussing the assumption that the owner is the typical consumer, the author states:

while the consumer of mass-produced products is not generally familiar with the manufacturing and distribution processes, the purchaser of traditional architectural services can readily identify the parties involved in the project through the existence of contractual relationships between the owner, architect, and contractor. While strict liability in tort may be justifiably imposed on the goods manufacturer due to its ability to find the responsible party and seek indemnification, 157 this rationale may suggest holding the purchaser, not the architect, strictly liable in tort under the traditional model. Whether strict liability in tort should be imposed under the design-build model, therefore, depends on whether the architect designer-builder has the attributes of a manufacturer, particularly the ability to distribute risk.

2. The Designer-Builder as "Seller"

By possessing control over the planning, design, and erection phases of the project, the designer-builder exhibits the attributes of a manufacturer. Several courts have recognized this similarity in the context of builder-vendors. For example, in *Schipper v. Levitt and Sons, Inc.*, 158 the Supreme Court of New Jersey deemed a builder-vendor to be a manufacturer and, thus, subject to strict tort liability for injurious defects in its product. 159 In *Schipper*, the plaintiff, lessee of the original vendees, alleged that due to a design defect in the house built by the defendant, the

Of the parties involved in a project, it is the owner who has the most at stake. It is the owner who has invested his cash, credit, and often the plans of his business operation for years to come, in a single building. It is the owner who initiates and secures financing for the building and determines the scope of the project and the resources to be allocated to it. It is also the owner who determines the ultimate use of the structure or arranges to market it when completed. It is chiefly the owner who stands to benefit over the course of years from the use of the building, and it is the owner for whom the bulk of the profits accrue.

Justice Traynor's policy of placing the burden of risk on the party most able to bear that burden suggests that the owner should be liable for losses occasioned by the construction of his building. Not only is he often the most financially competent party, but it is his customers who are the ultimate beneficiaries of the building, and it is among them that the burden can best be "distributed . . . as a cost of doing business." [Escola v. Coca Cola Bottling Co., 24 Cal. 2d 453, 462, 150 P.2d 336, 441 (1944) (Traynor, J., concurring).] In the manufactured chattels analogy, it is the owner, not the architect, who is in the position most comparable to that of the manufacturer.

Id at 388

^{156.} See La Rossa v. Scientific Design Co., 402 F.2d 937, 942 (3d Cir. 1968); City of Mounds View v. Walijarvi, 263 N.W.2d 420, 425 (Minn. 1978).

^{157.} See Lehr, supra note 38, at 440 (quoting Calabresi, supra note 150, at 506-07).

^{158. 44} N.J. 70, 207 A.2d 314 (1965).

^{159.} Id. at 90, 207 A.2d at 325.

plaintiff's son was badly scalded by excessively hot water from the bathroom faucet. The court analogized Levitt's mass production and sale of residences to the mass production and sale of automobiles, reasoning that the same policy arguments supported the imposition of a strict liability in tort standard on automobile manufacturers and builder-vendors. Purchasers of mass-produced homes were seen as no more able to protect themselves through the deed than were purchasers of automobiles through the bill of sale. The court expressly held that when an entity is "the architect, the engineer, the planner, the designer, the builder, and the contractor" with large scale operations, it is a "manufacturer" and, therefore, subject to strict liability.

A strict tort standard was imposed on another builder-vendor in *Kriegler v. Eichler Homes, Inc.* ¹⁶⁴ The builder-vendor in *Kriegler* installed a radiant heating system in a development home. The system's tubing, which was constructed of steel due to a shortage of copper during the Korean War, corroded due to improper placement in the concrete floor slab. ¹⁶⁵ Eichler, the builder-vendor, had constructed over 4000 homes using this particular radiant heating system. ¹⁶⁶ Applying the *Schipper* rationale, the court held Eichler strictly liable in tort. ¹⁶⁷ The court stated that public interest requires that the developer responsible for the defect and better situated economically must bear the resulting costs. ¹⁶⁸

Both the Schipper and Kriegler courts, by emphasizing the

^{160.} Id. at 76-77, 207 A.2d at 317-18. The plaintiff alleged that Levitt failed to separate the hot water used for domestic purposes from the higher temperature water supplied for heating purposes or, alternatively, to install a mixing valve to solve the problem. Id., 207 A.2d at 318.

^{161.} Id. at 90, 207 A.2d at 325.

^{162.} Id. at 91, 207 A.2d at 326.

^{163.} Id. at 80, 207 A.2d at 320.

^{164. 269} Cal. App. 2d 224, 74 Cal. Rptr. 749 (1969).

^{165.} Id. at 225-26, 74 Cal. Rptr. at 751. While the use of steel pipe as a component of a radiant heating system is not defective per se, it does require greater care during installation than copper pipe. In Kriegler, Eichler's installation of the steel pipe was faulty and as a result corrosion occurred causing the radiant heating system to fail. Id. at 226, 74 Cal. Rptr. at 751.

^{166.} Id.

^{167.} The court stated:

We think, in terms of today's society, there are no meaningful distinctions between Eichler's mass production and sale of homes and the mass production and sale of automobiles and that the pertinent overriding policy considerations are the same.

Id. at 227, 74 Cal. Rptr. at 752.

^{168.} Id. at 228, 74 Cal. Rptr. at 753.

mass production characteristics of the defendants' respective businesses, analogized a builder-vendor to a mass manufacturer of products. More recent decisions, however, instead of examining mass manufacturing techniques, focus on determining whether the builder-vendor is a "seller" or "in the business of selling." 169 In Avner v. Longridge Estates, 170 for instance, a builder-vendor who was not a mass developer was subjected to strict tort liability.¹⁷¹ In Avner, the defendant-developer bought land, subdivided it into lots, and sold one of the lots to the plaintiff. Settlement caused by the decomposition of organic fill material and inadequate compaction during lot preparation damaged the house the plaintiff had built on the lot. 172 The defendant argued that building lot developers are not analogous to mass manufacturers of goods. The Avner court rejected this argument, reasoning that the techniques used to develop building lots, like those used to mass produce goods, are routine and standardized. 173 The court was unable to distinguish the defendant's responsibilities from those of the builder-vendor in Kriegler. 174 The court determined, therefore, that a builder-vendor of improvements to property was analogous to a builder-vendor of property itself, for purposes of imposing liability for defects, 175 declaring that "the manufacturer of a lot may be held strictly liable in tort for damages suffered by the owner as a proximate result of any defects in the manufacturing process."176

The Avner court, without considering the size of the developer's operations as bearing on its liability, merely characterized that operation as "the manufacturing of lots." Thus the developer was sufficiently linked to "the business of selling" to justify imposing the strict liability standard. Avner, therefore, may suggest a shift from the factual inquiry of the mass distribution poten-

^{169.} See RESTATEMENT (SECOND) OF TORTS, § 402A(1)(a) (1965); supra note 50.

^{170. 272} Cal. App. 2d 607, 77 Cal. Rptr. 633 (1969).

^{171.} Id. at 615, 77 Cal. Rptr. at 639.

^{172.} Id. at 609, 77 Cal. Rptr. at 635.

^{173.} Id. at 615, 77 Cal. Rptr. at 639.

^{174.} Id.

^{175.} The court stated:

We are unable to distinguish the obligation of a builder to a purchaser for a defective radiant heating system installed in a cement floor slab... from the obligation of a manufacturer of a lot to a purchaser for defective subsurface conditions resulting from improper filling and grading that cause instability.

Id. (emphasis added).

^{176.} Id.

^{177.} Id.

tial of builder-vendors to a mere assumption that the buildervendor is per se better situated to spread and control risks associated with defects in their products.¹⁷⁸

The absence of a realty transfer in a designer-builder transaction distinguishes it from the builder-vendor transaction. This distinction might, arguably, make a court less reluctant to impose strict tort liability on designer-builders than on builder-vendors. As illustrated in the implied warranty area, however, this distinction has not resulted in the imposition of a higher standard of liability to designer-builders. It may be inferred, however, that the expansion of strict liability in tort to builder-vendors may signal an extension of that same liability to designer-builders.

This inference was tested in Abdul-Warith v. Arthur G. McKee and Co., 180 where the issue was whether a strict liability in tort standard should extend to a professional designer-builder. The court held that the defendant engineering-construction firm's liability would be determined under a strict tort standard, 181 finding that the defendant was "an engineering and contracting firm, which designed and constructed the skip bridge under a contract." The complaint urged the application of section 402A of the Restatement (Second) of Torts 183 to hold the designer-builder strictly liable for creating an "unreasonably dangerous" skip bridge which injured the plaintiff. 184 The court rejected the defendant's contention that it was not a section 402A seller, reasoning that the company did not qualify under the section 402A established service exemption. 185 The court, characterizing the transaction as a hybrid in which the defendant supplied both services and the skip bridge noted that

where the architect or engineer simply provides the design or merely supervises, without actually participating in, the construction of the challenged product, he has not been held strictly liable; where, however, the professional actually assembles

^{178.} See Note, supra note 109, at 320-21.

^{179.} See supra text accompanying notes 136-38.

^{180. 488} F. Supp. 306 (E.D. Pa. 1980).

^{181.} Id. at 310-11.

^{182.} Id. at 308 (emphasis added). A skip bridge is an assembly which carries materials from the stockhouse to the blast furnace. The defendant, McKee, designed and installed the skip bridge from specifications and materials supplied by the owner, U.S. Steel. The parties in this transaction resemble the competitive bid design-build model involving an integrated services entity. See supra note 65.

^{183.} See supra note 51.

^{184. 488} F. Supp. at 308.

^{185.} Id.; see supra notes 50-58 and accompanying text.

or erects the allegedly defective item, strict liability will attach. 186

The defendant in McKee asserted that, unlike a large, mass producer of goods, it was not better situated to distribute the cost of compensating injured consumers. The court rejected this argument, stating that "the volume of a defendant's sales is irrelevant to characterization as a seller;"187 instead, the proper inquiry was whether the designer-builder "carried on an established and wellrecognized kind of business" 188 which was regularly maintained. Finding that McKee had so carried on an established business, the court found that it was a section 402A seller and, therefore, strictly liable in tort. 189 McKee represents a significant shift in emphasis from that in Schipper 190 and Kriegler. 191 Instead of examining the ability of the designer-builder to spread compensation costs to the consumers of its product, the McKee court assumes that the enterprise has that capacity merely by engaging "in the business of selling" that particular product. 192 The court, therefore, imposes as a precondition to operating as a designer-builder, an obligation to accept the consequences of defects in its products, regardless of ability to spread or distribute the costs created by these defects. 193

^{186. 488} F. Supp. at 310-11 n.3 (emphasis added). This reasoning is in marked contrast to the *Stuart* holding. *See supra* notes 96-101 and accompanying text. The court in *Stuart*, by focusing on the profesional qualifications of the designer-builder, instead of the actual services provided, refused to impose even an implied warranty standard of liability.

^{187. 488} F. Supp. at 311.

^{188.} Id. (quoting Stewart v. Uniroyal, Inc., 72 Pa. D.&C.2d 179, 202 (C.P. Allegheny County 1974), aff'd, 233 Pa. Super. 761, 339 A.2d 815 (Pa. Super. Ct. 1975)).

^{189.} Id.

^{190.} See supra notes 158-63 and accompanying text.

^{191.} See supra notes 163-68 and accompanying text.

^{192.} Conversely, if the enterprise does not have sufficient internal cost spreading capacity, insurance is available which would spread the cost among all designer-builders as a class. Even with the internal inconsistencies associated with the use of insurance as a cost spreading, or more likely, a cost distributing device, enterprise liability demands that the enterprise bear all the costs associated with that enterprise. See generally James, Accident Liability Reconsidered: The Impact of Liability Insurance, 57 YALE L.J. 549 (1948) (examining the benefits to society of loss spreading by enterprises through insurance).

^{193.} In response to the situation where the costs of product defects has exceeded the ability of the enterprise to assimilate, either through internal cost spreading devices or external cost distributing insurance, Professor Morris states:

The answer given is that the entrepreneur should have adequately funded or insured. The entrepreneur must make provision for the costs of his enterprise or suffer financial failure. The law makes the risk of enterprise liability a cost of the enterprise. The entrepreneur who does not make provision for this cost should fail, just as one who does not provide for his labor cost or for interest on his borrowed capital will be put out of business. As Professor Ehrenzweig puts it, the law should not concern itself with the uninsured enterpreneur, but should decree liability in areas where "the defendant could reasonably be expected to carry such insurance."

If the designer-builder is forced to absorb the costs associated with product defects as merely another cost of doing business upon entry, ¹⁹⁴ any inquiry into its past experience as a design-build entity would be, arguably, irrelevant. Moreover, since the architect is already familiar with the risks inherent in the building industry, there would be a stronger argument for imposing strict liability in tort when he or she enters the design-build model. This result is partially based upon architects' experience and ability to foresee and minimize costs arising from their actions. Thus, the analysis should be directed at whether the designer-builder is a "seller" and is "in the business of selling," that particular product, notwithstanding whether they have done so in the past. ¹⁹⁵

3. Buildings as "Products"

If the architect designer-builder is a "seller... engaged in the business of selling," does he or she produce a section 402A "product"? This issue was addressed in Cox v. Shaffer, here the plaintiff alleged that the defendant-designer-builder's grain silo, which was manufactured without ventilation, was an unreasonably dangerous product subject to a strict liability in tort standard. The court, without discussion, held that the silo was not a product within section 402A "by virtue of its very clear language." Expressly stating that any building attached to the owner's property is not a product, the court found section 402A inapplicable because no "product" was involved, notwithstanding

YALE L.J. 554, 556 (1961) (quoting Ehrenzweig, *Assurance Oblige—A Comparative Study*, 15 LAW & CONTEMP. PROBS. 445, 451 (1950)).

^{194.} *Id*.

^{195.} The court in *McKee* recognized this theoretical discrepancy between the policy rationale underlying strict liability in tort and how that standard is implemented; it felt constrained, however, by the textual limitations imposed by the language of § 402A. The court stated that Pennsylvania courts had generally been expansive in holding strictly liable suppliers of products based upon their special responsibility to the consuming public. It determined that the application of § 402A in Pennsylvania, however, required the exclusion of the occasional seller from its provisions. 488 F. Supp. at 310.

^{196.} RESTATEMENT (SECOND) OF TORTS § 402A(1)(a) (1965); see supra note 51.

^{197. 223} Pa. Super. 429, 302 A.2d 456 (Pa. Super. Ct. 1973).

^{198.} Id. at 430, 302 A.2d at 456.

^{199.} Id. at 431, 302 A.2d at 457. The court felt that the "clear" language of § 402A was so explicit on this point that there was no reason to discuss the policy rationales underlying products liability. Moreover, the court reasoned that the requirement of an oxygen free environment inside any silo was a question of fact for the jury in a negligence action. Id. at 430-32, 302 A.2d at 456-57.

^{200.} Id. at 431, 302 A.2d at 457.

a determination that the designer-builder was a seller engaged in the business of selling.

A similar result was reached in Lowrie v. City of Evanston.²⁰¹ In Lowrie, the plaintiff's complaint alleged the defective design, construction, and operation of an open-air parking garage.²⁰² The court determined that the question whether the parking garage was a product under section 402A required consideration of the public policy rationales underlying strict liability in tort.²⁰³ In holding that the parking garage was not a "product" within section 402A,²⁰⁴ the court distinguished Lowrie from Schipper²⁰⁵ and Kriegler,²⁰⁶ reasoning that strict liability in tort was imposed in those cases on contractors who sold defective products in addition to the house; stating that in neither instance was the house itself determined to be a product.²⁰⁷ The Lowrie court, therefore, was trying to differentiate between defects within the components of a finished product and defects in the product itself.²⁰⁸

We have considered those underlying policy reasons in their relation to the development of the strict products liability concept, and we have come to the conclusion that a building such as is involved here is not a product within the meaning of the use of that term in § 402A.

Id. at 384, 365 N.E.2d at 928. The text of their discussion did not appear in the opinion, nor did the court explain why it felt that a parking garage failed to meet the underlying public policy rationales of products liability.

- 205. See supra notes 158-63 and accompanying text.
- 206. See supra notes 164-68 and accompanying text.
- 207. Id. at 383, 365 N.E.2d at 928.

208. This fallacious argument appears to be a distinction without substance. It is difficult to find a product more integrated into a building than a radiant heating system imbedded in the concrete floor slab. See Kriegler v. Eichler Homes, Inc., 269 Cal. App. 2d 224, 74 Cal. Rptr. 749 (1969); supra notes 164–68 and accompanying text. Almost every product is merely an arrangement of components and the failure of one is a failure of the product as a whole. One policy rationale underlying the development of strict liability in tort was the inability of the consumer vis- a-vis the manufacturer to control and spread the risks and costs associated with defective products. See supra notes 148–49 & 151 and accompanying text. The consumer's position has not changed relative to the manufacturer when the defect involves the product as a whole rather than merely one component part. This analysis, however, merely begs the question: when is the product itself defective? When every component part is defective? If this is not the case, then one defective component part would create a defective product.

^{201. 50} III. App. 3d 376, 365 N.E.2d 923 (1977).

^{202.} Id. at 378, 365 N.E.2d at 924-25.

^{203.} The court treated the issue of whether a "building" such as a parking garage is a "product" as one of first impression. Undertaking a lengthy analysis of the word "product" as defined in § 402A, the court determined that the application of that section to different types of products is based on the ability of that particular product to satisfy the public policy rationales underlying § 402A. *Id.* at 383, 365 N.E.2d at 928.

^{204.} The court stated:

The court in *McKee*, ²⁰⁹ similarly, faced the issue whether the skip bridge was a product under section 402A. ²¹⁰ Although the court avoided this issue by finding that the skip bridge was not defective, ²¹¹ it did discuss the bridge's status as a section 402A product in dicta. ²¹² The court reasoned that the distinction made in *Cox* and *Lowrie* between "buildings" and "products" was that "buildings" constituted real property. "As real property," the *Mc-Kee* court observed, "in contradistinction to a chattel or a piece of equipment, the silo would be beyond the purview of section 402A." Therefore, the court reasoned that merely because "buildings" are characterized as real property, they are not products under section 402A, regardless of whether the land was also conveyed in the original transaction.

Moorman Manufacturing Co. v. National Tank Co.,²¹⁴ like Cox,²¹⁵ addressed the issue whether a grain silo is a product under section 402A. Undertaking a lengthy analysis of the public policy underpinnings of strict liability,²¹⁶ the court labeled the grain silo a "product," noting that "[t]he mere fact that the tank has apparently become a part of the real estate is not, of itself, sufficient reason to say that it is not a product." The court, therefore, expressly found that since the policy underpinnings of strict tort liability fit the situation, such liability would attach to

^{209.} Abdul-Warith v. Arthur G. McKee and Co., 488 F. Supp. 306 (E.D. Pa. 1980); see supra notes 180-93 and accompanying text.

^{210. 488} F. Supp. at 312.

^{211.} Id. at 312-13.

^{212.} Id. at 311-12.

^{213.} Id. at 312.

^{214. 92} Ill. App. 3d 136, 414 N.E.2d 1302 (1980).

^{215.} See supra notes 197-200 and accompanying text.

^{216.} The court focused on the superior ability of the manufacturer, vis-a-vis the consumer, to spread the costs of defective products, stating that

[[]w]hen a manufacturer has placed a faulty product into the stream of commerce and the buyer has paid the price demanded, the manufacturer who has reaped a profit is the most appropriate party to bear the loss. . . . The manufacturer of a faulty product is in the position to spread the cost of that fault to other buyers or to insure against such cost. Of course, a manufacturer may put into the stream of commerce so many faulty products that it can no longer obtain insurance or must price its goods too high to compete in the marketplace. We cannot, however, see any evil in a rule of law that compels a manufacturer in one way or another to refrain from putting worthless goods onto the market.

Id, at 143, 414 N.E.2d at 1308-09. The court, thus, expressly adopted an enterprise liability standard. This standard assumes that the manufacturer is in the best position to distribute the costs associated with defective products. See supra notes 149-52 and accompanying text.

^{217. 92} Ill. App. 3d at 146, 414 N.E.2d at 1311.

the designer-builder's product notwithstanding its attachment to real property.

The public policy rationales clearly support the application of strict liability in tort to the designer-builder's product regardless of any attachment of that "product" to real property. The manufacturer is still in the better position to control, spread, and distribute the costs associated with defective products regardless of whether they are attached to real property. Moreover, the manufacturer is still the party that introduced the product into the marketplace and, thus, should bear the risk as merely another cost of production. Therefore, the "product" of designer-builders—"buildings"—should be within the ambit of a strict liability in tort standard for defects within that "product."

Under the design-build model, therefore, the architect's role is fundamentally different than that under the traditional model.²¹⁸ The architect designer-builder exerts control over both the design and construction phases of the project.²¹⁹ This increased control, examined under the public policy rationales underlying strict liability in tort,²²⁰ justify the imposition of that standard on the architect designer-builder.

III. CONCLUSION

Because most courts feel that traditional architects cannot control indeterminant design factors, they are reluctant to hold them liable to higher than a negligence standard.²²¹ The traditional architect is usually judged by the professional standard²²²—how the average architect would have responded in the same situation. Thus, the courts have deemed it more equitable for the purchasers of architectural services to absorb the costs of defects not caused by the architect's negligence.²²³

When the architect engages in the design-build model, however, there should be a reexamination of this refusal to impose either an implied warranty or strict liability in tort standard. Under the design-build model, the architect designer-builder has complete control over the planning, design, and construction of the project and, therefore, is in a better position to control these

^{218.} See supra note 20 and accompanying text.

^{219.} See supra notes 78-82 and accompanying text.

^{220.} See supra notes 148-57 and accompanying text.

^{221.} See supra notes 40-45 and accompanying text.

^{222.} See supra notes 28-32 and accompanying text.

^{223.} See supra notes 40-45 and accompanying text.

factors than a traditional architect.²²⁴ When the architect is operating the design-build entity as a principal, and is not merely a traditional architect employed by the design-build entity, the rationales justifying a negligence only standard of liability are absent.²²⁵ Some courts have imposed an implied warranty of fitness on designer-builders.²²⁶ Transactions involving designer-builders should be distinguished from those involving builder-vendors, where an implied warranty of habitability is applied. The underlying rationales, however, apply with equal validity to both designer-builders and builder-vendors.²²⁷

Notwithstanding the willingness to impose an implied warranty standard to a designer-builder, courts have resisted any further expansion of liability.²²⁸ By examining the underlying policy considerations justifying the application of strict liability in tort to a manufacturer it is apparent that the designer-builder should also face a strict liability in tort standard for defective products.²²⁹

Designer-builders, whether professionals or nonprofessionals, are also "sellers," and their product—a "building"—is also a "product" under section 402A of the Restatement (Second) of Torts. Section 402A should apply if examination of the public policy considerations underlying strict liability in tort justify imposition. An architect designer-builder is a "seller" who is "engaged in the business of selling" a product. If the designer-builder's "product" has an "unreasonably dangerous" defect which causes injury, then a strict liability in tort standard should be used to evaluate that designer-builder's liability.

BARRY JOSEPH MILLER

^{224.} See supra notes 78-79 and accompanying text.

^{225.} See supra notes 113-17 and accompanying text.

^{226.} See supra notes 118-38 and accompanying text.

^{227.} See supra notes 136-38 and accompanying text.

^{228.} See supra notes 154-57 and accompanying text.

^{229.} See supra notes 148-53 and accompanying text.

^{230.} See supra notes 158-95 and accompanying text.

^{231.} See supra notes 196-217 and accompanying text.