5.40D-1 DESIGN DEFECT — GENERALLY (Approved 4/99; Revised 5/10)

NOTE TO JUDGE

A design defect may be established by different methods. One method is the *Consumer Expectations Test.* Another method is applying the *Reasonable Safer Design* standard or the *Risk-Utility Analysis*.[1]

The *Consumer Expectations Test*[2] typically applies where the product "like a bicycle whose brakes do not hold because of an improper design" is "self-evident(ly)...not reasonably suitable and safe and fails to perform, contrary to the user's reasonable expectation that it would 'safely do the jobs for which it was built'". *Suter v. San Angelo Foundry & Machine Co.*, 81 *N.J.* 150, 170-171 (1979).

The design of a product is obviously defective when there are no relevant considerations which make the danger inherent in the product, or reasonably necessary to its functioning. In this respect, such defects are akin to manufacturing defect cases in which the defect is proven by circumstantial evidence. For such a product the usual *Risk-Utility Analysis* is unnecessary. The only material question

---

[1] The Committee has weighed the phrases "alternative safer design," "reasonable alternative design" and "reasonable safer design." We have concluded that they are identical substantively but that the phrase "reasonable safer design" most clearly conveys the plaintiff's burden — that the designer's choice was unreasonable because it omitted an alternative that was practical, feasible, and safer overall. *Lewis v. American Cyanamid,* 155 *N.J.* 544, 571 (1998).

The principle is expressed in the *Restatement (Third) of Torts: Products Liability*, § (b), Reporters Note, Cmt f:

> 2. The proposition that, in order to determine that a design is not reasonably safe, the alternative must contribute to greater overall safety needs no citation; it is axiomatic. If the alternative design proffered by the plaintiff does not make the product safer, let alone if it makes it more dangerous, such an alternative is not reasonable. In such a case, the fact that the alternative design would have avoided injury in a specific case is of no moment.

[2] This theory is usually not charged. It should be charged only in cases where the *Risk-Utility Analysis* is not appropriate. *See,* for example *Suter v. San Angelo Foundry & Machine Co., supra; Feldman v. Lederle Laboratories*, 97 *N.J.* 429 (1984); *Mettinger v. W.W. Lowensten, Inc.*, 292 *N.J. Super.* 293 (App. Div. 1996), *modified o.b.,* 153 *N.J.* 371 (1998); and *O'Brien v. Muskin*, 94 *N.J.* 169 (1983).

is whether the product has been so designed that it poses a danger that is contrary to the user's reasonable expectations. *See N.J.S.A.* 2A:58C-2, note 3 below.

A product falling within the *Consumer Expectations Test* category was a food slicing machine which was not equipped with an interlocked safety device to stop the blade from running after the guard was removed to wipe clean the blade. *Mettinger, supra*, note 1.[3] The existence of a defect can be proven by circumstantial evidence. *Myrlak v. Port Authority of New York and New Jersey et al.*, 157 *N.J.* 84 (1999) [adopting "Indeterminate Product Test" of section 3 of the *Restatement (Third) of Torts: Products Liability*].

Another method of proving the existence of a design defect is the *Risk-Utility Analysis*. There the defect is established by proof that the product's risks or dangers outweigh its usefulness and therefore, a reasonably careful manufacturer or seller would not have sold the product at all in the form in which it was sold. This involves a balancing or weighing of a number of factors known as risk/utility factors. *Cepeda v. Cumberland Engineering Co.*, 76 *N.J.* 152 (1978); *O'Brien v. Muskin Corp., supra*[4]; *Brown v. U.S. Stove*, 98 *N.J.* 155, 173 (1984); *Michalko v. Cooke Color & Chemical Co.*, 91 *N.J.* 386 (1982); *N.J.S.A.* 2A:58C-2[5].

---

[3] "Consumer expectations" also may be a defense, under *N.J.S.A.* 2A:58C-3(a)(2). For example, if a reasonable consumer expects a knife blade to be sharp, its sharpness, although dangerous, is not a defect. The defense does not apply to "equipment used in the workplace" or to dangers that can be "feasibly eliminated without impairing the usefulness of the product."

[4] *O'Brien* has been limited by statute, *N.J.S.A.* 2A:58C-3b. An alternative safer design need not be shown

> if the court, on the basis of clear and convincing evidence, makes all of the following determinations:
>
> (1) The product is egregiously unsafe or ultra-hazardous;
>
> (2) The ordinary user or consumer of the product cannot reasonably be expected to have knowledge of the product's risks, or the product poses a risk of serious injury to persons other than the user or consumer; and
>
> (3) The product has "little or no usefulness."

[5] *N.J.S.A.* 2A:58C-2. A manufacturer or seller of a product shall be liable in a product liability action only if the claimant proves by a preponderance of the evidence that the product causing the harm was not reasonably fit, suitable or safe for its intended purpose because it: a. deviated from the design specifications, formulae, or performance standards of the manufacturer or from otherwise

In many or perhaps most cases the core issue is whether or not a *Reasonable Safer Design* would have reduced the risk or dangers of the product to the greatest extent possible consistent with the product's continued utility, *i.e.*, without impairing its usefulness and without making it too expensive for it to be reasonably marketable. In such cases, only the charge on reasonable safer design need be given. There, the plaintiff has only to show the existence of a safe and reasonably feasible alternative to the defendant's product and that, in light of the omitted safer alternative, the product was not reasonably safe as manufactured or sold. *Lewis v. American Cyanamid Co.*, *supra*; *Smith v. Keller Ladder Co.*, 275 *N.J. Super.* 280 (App. Div. 1994).[6] The *Restatement (Third) of Torts: Products Liability* is fundamentally consistent with New Jersey's products liability case law and statute regarding product defect.[7]

---

identical units manufactured to the same manufacturing specifications or formulae, or b. failed to contain adequate warnings or instructions, or c. was designed in a defective manner.

[6] Citing *Restatement (Third) of Torts* at 2(b) (Tent. Draft No. 1 1994):

> Under this provision, "to establish a *prima facie* case of defect, plaintiff must prove the availability of a technologically feasible and practical alternative design that would have reduced or prevented plaintiff's harm." *Id.*, comment d.

This principle has now been adopted in the final version of the American Law Institute's *Third Restatement of the Law Torts: Products Liability*, adopted, May 22, 1997, which provides, in section 2(b):

> Section 2. Categories of Product Defect
>
> A product ... (b) is defective in design when the foreseeable risks of harm posed by the product could have been reduced or avoided by the (cont.) adoption of a *Reasonable Alternative Design* ... and the omission of the alternative design renders the product not reasonably safe.

The Reporters, in *Comment d. Design defects: general considerations,* remark:

> Assessment of a product design in most instances requires a comparison between an alternative design and the product design that caused the injury, undertaken from the point of view of a reasonable person.

[7] *Congiusti v. Ingersoll-Rand*, 306 *N.J. Super*. 126, 138-139 (App. Div. 1997) ["(I)n this case, as in most other design defect cases that are not controlled by the absolute defenses to design defect claims in the *Products Liability Act*, *N.J.S.A.* 2A:58C-3a, the issue centers upon whether, in the words of the *Restatement (Third) of Torts: Products Liability* at 2(b) (1997 Proposed Final Draft), there was a '*Reasonable Alternative Design* ... and the omission of the alternative design renders the

There are three affirmative statutory defenses to certain design defect claims.[8] They are: 1) there was not a practical and technically feasible

---

product not reasonably safe'."]; *Grzanka v. Pfeifer*, 301 *N.J. Super.* 563 (App. Div. 1997) [Plaintiff must show not only alternative design, but reasonably foreseeable risk such that the "the omission of the alternative design renders the product not reasonably safe..."]; but *see Saez v. S&S Corrugated Paper Machinery Co.*, 302 *N.J. Super.* 545 (App. Div. 1997) [*Third Restatement* strongly criticizes New Jersey law on product line successor's liability.] *See also*, William A. Dreier, *Design Defects Under the Proposed Section 2(b) of the Restatement (Third) of Torts: Products Liability - a Judge's View*, 30 *U. of Michigan Journal of Law Reform* 221 (1997); William A. Dreier, *The Restatement (Third) of Torts: Products Liability and New Jersey Law—Not Quite Perfect Together*, 50 *Rutgers Law Review* 2059 (1998), reprinted in Dreier, *et al.*, *New Jersey Products Liability and Toxic Torts Law* (Gann 1999).

[8] *N.J.S.A.* 2A:58C-3. Defenses

a. In any product liability action against a manufacturer or seller for harm allegedly caused by a product that was designed in a defective manner, the manufacturer or seller shall not be liable if:

(1) At the time the product left the control of the manufacturer, there was not a practical and technically feasible alternative design that would have prevented the harm without substantially impairing the reasonably anticipated or intended function of the product; or

(2) The characteristics of the product are known to the ordinary consumer or user, and the harm was caused by an unsafe aspect of the product that is an inherent characteristic of the product and that would be recognized by the ordinary person who uses or consumes the product with the ordinary knowledge common to the class of persons for whom the product is intended, except that this paragraph shall not apply to industrial machinery or other equipment used in the workplace and it is not intended to apply to dangers posed by products such as machinery or equipment that can feasibly be eliminated without impairing the usefulness of the product; or

(3) The harm was caused by an unavoidably unsafe aspect of the product and the product was accompanied by an adequate warning or instruction as defined in section 4 of this act.

b. The provisions of paragraph (1) of subsection a. of this section shall not apply if the court, on the basis of clear and convincing evidence, makes all of the following determinations:

(1) The product is egregiously unsafe or ultra-hazardous;

(2) The ordinary user or consumer of the product cannot reasonably be expected to have knowledge of the product's risks, or the product poses a risk of serious injury to persons other than the user or consumer; and

alternative design, 2) the harm was caused by an unsafe aspect of the product that is an inherent characteristic[9] of the product[10], and 3) the harm was caused by an unavoidably unsafe aspect of the product and the product was accompanied by an adequate warning or instruction.

---

(3) The product has little or no usefulness.

c. No provision of subsection a. of this section is intended to establish any rule, or alter any existing rule, with respect to the burden of proof.

[9] *Roberts v. Rich Foods*, 139 *N.J.* 365, 380, 382 (1995) explains that:

> an inherent danger arises from an aspect of the product that is indispensable to its intended use...a feature of a product that is desirable but not necessary is not an inherent characteristic: an inherent characteristic is an essential characteristic. The elimination of an essential characteristic might not render the product totally useless, but it would measurably reduce the product's appropriateness for its central function. We make one final observation about jury evaluation of the second exception to the 3(a)(2) defense: juries will inevitably weigh the extent to which the elimination of the inherent danger would impair usefulness against the extent to which the change would improve a hazardous condition. *See* also *Mercer Mutual Ins. Co. v. Proudman, et al.*, 396 *N.J. Super.* 309, *certif. denied*, 194 *N.J.* 270 (2007).

[10] Since most product liability cases involve equipment used in the workplace, this defense is usually inapplicable. *N.J.S.A.* 2A:58C-3(a)(2).