

## CANADIAN DESIGN-BUILD INSTITUTE

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Those undertaking design-build projects must become educated to the potential risks that they face in taking on the role as the “design-builder”, and being the sole contract holder to an owner with responsibility for both construction and design. Whilst the common insurance products available for project address many of the identified physical perils to a project, there are certain specific insurance policy exclusions which should be reviewed and understood. A common focus is upon the “Faulty Design Exclusion” which is found in many property insurance policies, and similar Builders Risk insurance policies. A common Faulty Design Exclusion will exclude coverage for: “cost of making good faulty or defective workmanship, material or design...”

The following paper speaks to the legal measurement of design to provide guidance as to when a design may be determined to be “faulty” and to which coverage under your project’s builders risk policy may not respond for damages suffered.

The Risk Management Committee of the Canadian Design Build Institute will continue to circulate articles of this nature to members as they become available. We trust this will be found to be of interest and beneficial to the members.

### **WHEN IS A DESIGN “FAULTY”?**

by John R. Singleton, Q.C.  
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The Supreme Court of Canada, in *Canadian National Railway Co. v. Royal and Sun Alliance Insurance Co. of Canada*, 2008 SCC 66, has rendered a long awaited decision on the proper interpretation of the “faulty” design, workmanship or material exclusion in an all-risk or builder’s risk policy of property insurance.

Prior to this decision, Courts across Canada and abroad struggled to define the breadth of the exclusion. In B.C., the application of the exclusion was said to be justified when a loss was occasioned by design failure; the fact of the failure discharged the insurer’s obligation to prove the loss was excluded from coverage. In Ontario, the Judges of the trial and appellate Courts divided over whether a design simply had to account for all foreseeable risks, however remote or whether, in addition, the design had to withstand those foreseeable risks.

CNR concerned a tunnel boring machine used to construct a railway tunnel under a river. When dirt bypassed the seals and penetrated the cutting head, repairs had to be done and the project suffered delay. CNR knew that structural steel would bend under load or pressure, i.e. that “differential deflection” was both inevitable and foreseeable. It



argued that it could not foresee the risk of excess differential deflection sufficient to cause a loss to a machine designed to the state of the art at the time its design was finalized.

The insurer argued that failure plus foreseeability of the risk that resulted in the physical damage to the thing insured was enough to show that the design fell within the ambit of the exclusion. The majority of the Court disagreed, yet fashioned a test for the application of the exclusion that, as a matter of practice, is likely to operate to the benefit of insurers more often than not.

In the majority's view, a "faulty or improper design" must be measured against a comparative standard. A design does not have to be perfect in relation to all foreseeable risks in order to fall within coverage. Citing Vancouver's leaky condo crisis, the Court reasoned that "industry" standard is too low a comparative. Rather, the applicable standard of comparison falls in between a standard of perfection and the industry standard.

In order to prove the application of the exclusion, an insurer will have to show more than a failure in circumstances of foreseeable risk. In the words of Binnie J. for the majority:

The insurers are entitled to the benefit of the exemption unless the design met the very highest of standards of the day and failure occurred simply because engineering knowledge was inadequate to the task at hand. The *Oxford English Dictionary* (online edition) defines "state of the art" as  
*the current stage of development of a practical or technological subject; freq. (esp. in attrib. use) implying the use of the latest techniques in a product or activity.*

Despite its failure, the boring machine was the result of innovative design. It was designed to the limits of engineering knowledge to accommodate all the foreseeable risks it might encounter. While the design ultimately proved to be defective, it was not "improper" or "faulty" within the meaning of the exclusion clause. As a result, coverage was found.

In the minority's view, the exclusion would apply where the design failed to withstand all foreseeable risks. Rothstein J. concluded that no comparative standard was required to interpret the exclusion. The machine's innovative design was therefore of no consequence and the loss should have been excluded.

The decision in *CNR* does bring some clarity to the debate over the application of the "faulty" exclusion. The exclusion will not apply simply because failure results. The Court is equally clear that the exclusion can be applied where the design itself is not the product of negligence. The difference between the majority and dissenting judgments is that the majority found coverage where the insured could have done no more in the design of the thing insured. The majority of the Court said that this is not a standard of



perfection and yet, as a matter of practice, it is. Designing to the “highest standards of the day” and to the limits of available knowledge is perfection in practice, if not in theory. The majority’s decision has little regard for economics or practicalities. Insurers will most often encounter designs that are constrained by budgets, not the limits of a field of knowledge. Litigation is sure to ensue over what is or is not “state of the art”, or what the “highest standard of the day” really is in any given fact situation. But, at the end of the day, the decision in *CNR* creates a high hurdle for those who seek to recover under a policy of property insurance for losses occasioned by “faulty” design.

For more information, contact

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