

# PROFESSIONAL LIABILITIES IN CONSTRUCTION: EXPOSURES AND RESPONSES

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Occupations are regarded as professionals where the nature of their work requires specialised skill. Construction professionals such as architects, engineers and surveyors are no exception. These professionals involved in project developments are expected to provide a high standard of service. In addition to their contractual duties towards their engagers, there also exists a duty towards the community. Whilst professional institutions have laid down stringent rules to regulate, monitor and control the competence level of their members, construction professionals are subjected to commercial pressures for speedy delivery and working with minimum, or even insufficient information. Increasing complexity and advances in technology are added dimensions to the exposures to professional liability claims. In this context, the use of compulsory professional indemnity insurance schemes has been topical in the last decade. This paper examines the requirements on skill and competence, under statute and code of conduct of the relevant professional institutions. This paper also reports a survey study seeking to identify the common causes of exposures to professional liabilities claims faces by architects, engineers and surveyors practicing in Hong Kong. The result of the study indicates that there exists major differences in the type of exposures among the three groups of construction professional. The study also reveals that these professionals prefer to rely on internal quality assurance schemes to reduce their exposure.

Keywords: Exposures, negligence, professional competence, quality assurance.

## INTRODUCTION

Occupations are regarded as professionals as they possess specialised skill. They are often respected for their specialised knowledge and expertise. Recently, more claims have been directed towards construction professionals for negligence. The possible reasons that have led to this situation are many folded. Firstly, the development process has become more complicated and complex. Secondly, keeping track with the rapid advance in technology is no easy task. Thirdly, the time pressure for speedy delivery has further aggravated the whole situation. These all made the task of professional more challenging but inherently more risky. From the users' perspective, expectation towards professional services has also become higher. Coupled with the extension in the tort of negligence and a higher awareness of their legal right, claim against construction professionals has become more common.

This paper gives a brief review of the registration requirement and the relevant code of conduct for construction professionals in Hong Kong. This paper also reports a study that seeks to identify the common liability exposures faced by architects, engineers and quantity surveyors practising in Hong Kong and their preferred method to reduce such exposures.

## **REGISTRATION OF CONSTRUCTION PROFESSIONALS IN HONG KONG**

Registration is the listing of names of persons who have some common distinguishing characteristics. Statutory registration is administered by a body created by legal statute. Professional registration is usually statutory registration.

Following discussions between the Works Branch of the Hong Kong Government and the construction professions in 1986/1987, the Registration Boards for Architects, Engineers, Planners and Surveyors were established by Ordinance in 1990/1991. The Architects Registration Ordinance and the Engineers Registration Ordinance came into effect on 4th May 1990. These Ordinances set out the requirements for the admission to the registers and carry a common objective of providing disciplinary control of the professional activities.

With regard to disciplinary control, all the three Ordinances contain a provision stating that in deciding whether a registered professional has committed a disciplinary offence, regard should be made to the code of professional conduct promulgated by the Board or currently in use by the professional institute.

### **CODE OF PROFESSIONAL CONDUCT**

In Hong Kong, the Professional Institutes recognised by the Ordinances as relevant are; The Hong Kong Institute of Architects (HKIA), The Hong Kong Institution of Engineers (HKIE) and The Hong Kong Institute of Surveyors (HKIS).

The Code of Professional Conduct for the HKIA centres on four principles, promoting faithful performance of duties and be responsible to both clients and the public at large.

In the case of the HKIE, there are four main rules of conduct with similar tenor of that of the HKIA.

The Rules of Conduct of the Hong Kong Institute of Surveyors set out the detailed procedures to handle disciplinary actions. The regulation of the member is governed by the embracing requirement that no member shall conduct himself in a manner unbecoming other members of the Institute, prejudice his professional status or the reputation of the Institute.

### **SCOPE OF PROFESSIONAL LIABILITY**

Construction professionals may be held liable to their engagers and also to those affected by their work. With regard to the liabilities towards their engagers, the situation of concurrent liability exists. Concurrent liability is the legal term describing the situation when a party is liable to another party for damages for both breach of contract and in tort as a result of the first party's wrongful action (Duncan Wallace 1986).

Contractual liability arises from the existence of contractual relationship between the client and the professional. The obligations and rights of the parties are set out in the conditions of contract of engagement. These obligations may be expressed or implied.

Construction professionals may also owe tortious liability towards their engagers or those affected by their work. In the context of construction professionals, the principle course of action is the tort of negligence (Streeter, 1988).

Tort of negligence results from the failure of persons to meet a reasonable standard of care in their conduct. When that failure is the cause of injury or damage to the interest of another, a legal cause of action exists. Liability in tort of negligence, three elements must be present (Rogers 1989):

- 1) The professional owed a duty of care to the innocent party;
- 2) There was a breach of that duty;
- 3) The innocent party has suffered damages as a result of that breach.

Proving the existence of a duty of care is often the most critical in negligence cases. The origins of the present law relating to the duty of care lie in the judgment of Lord Atkin in *Donoghue v Stevenson* [1932] AC 562. Lord Atkin stated that there is a general principle in English law that a person must take reasonable care to avoid acts or omissions which he can reasonably foresee will be likely to injure his neighbour. The importance of Lord Atkin's judgment lay in its willingness to recognise that was a statement of general principle which was capable of application to new fact situations.

The development of the tort of negligence had reached its 'high-water mark' in *Anis, Merton London Borough Council* [1978] AC 728 (Powell-Smith 1992). In the period post *Anis*, the courts were prepared to extend the ambit of the duty of care. In the case of *Junior Books v The Veitchi Company Ltd* [1983] AC 520, where the House of Lords held that a factory owner could sue a sub-contractor in tort. The effect of this judgment was to undermine, to a large extent, the doctrine of privity of contract. In the same context construction professionals may be exposed negligence claims by the end-users. Fortunately, the generality of the principle in *Anis* was under attacked in subsequent cases and was overruled on its facts by the House of Lords in *Murphy v Brentwood District Council* [1990] 2 All ER 908. The House stated its preference of the 'analogy approach' where novel categories of negligence should be developed incrementally and by analogy with established categories (Williamson 1992).

Proving such a duty of care between clients and construction professionals poses little difficulty. It is also submitted that a sufficient relationship of proximity between construction professional and the purchaser of the facilities, subsequent to the original client (who appointed the construction professionals).

The second element, breach of duty is subject to the reasonable man test. The standard of care expected from a professional is judged by the standard of skill and knowledge of a reasonable member of that profession. The third element requires that recoverable damages must flow directly from the breach.

## **LIABILITIES EXPOSURES IN CONSTRUCTION**

There existed an ample source of literature in relation with professional liabilities (Barros D'Sa 1987, Cornes 1985, Culverwell 1989, Doran 1986, Harrison 1988, Thomas 1984, Wickins 1991). Literature review of the above enlisted the following liability exposures grouped according to the nature of the profession.

- a) Liability exposures -Architects and Engineers
  - Breach of duty of exercise reasonable care and knowledge.
  - Insufficient site investigation.
  - Giving misleading statement.

- Providing insufficient details or accuracy of design.
- Errors in drawings and specifications.
- Design unfit for its intended purposes.
- Non-compliance with the relevant provisions of regulation.
- Giving inappropriate advice on the choice and terms of contract.
- Giving inappropriate recommendation on the choice of contractor. ~
- Failing to keep client informed on essential matters.
- Breach of duties owed by other consultants.
- Insufficient on site inspection.
- Failing to certify payment reasonably.
- Damage or Injury to third party.
- Exceeding the agreed time or budget limit.
- Latent defects discovered within the limitation period.

b) Liability Exposures -Quantity Surveyors

- Giving misleading pre-contract estimate.
- Errors in bills of quantity.
- Giving inappropriate advice in contractual matters.
- Failing to keep client informed on matters with significant cost implication.
- Breach of duty to monitor or control the cost as work in progress.
- Under-estimation during construction.
- Errors in claim assessment.

The liability exposures listed above are fairly self explanatory and formed the basis for the questionnaire development.

## **THE STUDY: EXPOSURES AND RESPONSES**

In view of the increasing claim in relation to professional practice, it is of practical interest to have the view of the industry of their liability exposures and their preferred method in response to reduce such exposures.

There are two aspects in this study. Firstly, the respondents were asked to select from a 5- point scale of likelihood of occurrence against each of the liability exposures (1: very low, 2: low, 3: occasional, 4: high, 5: very high). Secondly, the respondents were also asked to choose from a list of six, the most preferred method to reduce the risk of exposure. The six choices made available to the respondents were:

- A. Internal quality assurance system.
- B. Legal advice.
- C. Statutory control over professional qualification.

- D. Institutional control over professional practice.
- E. Conservative design, material and technology.
- F. Others, please specify.

Questionnaires were mailed to a sample of organisations randomly selected from the directory for professionals. A total of seventy-five organisations were approached (twenty five for each profession) by mail and prior telephone call. The number of response received and the response rates are given in Table I below:

Profession	No. of respondents	Percentage
Architect	12	48%
Engineer	12	48%
Quantity Surveyor	22	88%

**Table 1: Response Rate to the Study**

## FINDINGS OF THE STUDY

The ranking by likelihood of occurrence was established by comparing the average likelihood scores (LS) as indicated in the questionnaires. Should more than one exposure happens to have the same LS, the ranking was determined by the respective percentage of response having a rating at or above 3. The LS and ranking for architect and engineer samples are presented in Table 2. The same for the quantity surveyor are shown in Table 3.

Liability Exposures: Likelihood Score and Ranking				
Liability Exposures	Architect		Engineers	
	LS	Ranking	LS	Ranking
Breach of duty to exercise reasonable care and knowledge.	2.50	11	2.71	10
Insufficient site investigation	2.25	14	3.57	2
Providing insufficient details or accuracy of design	2.88	6	3.00	4
Design is unfit for its intended purposes	2.00	15	2.57	11
Non-compliance with the relevant provisions of regulations	2.00	16	1.71	16
Giving inappropriate recommendation on the choice of contractor	2.50	10	2.43	12
Latent defects discovered within the limitation period	3.00	5	2.86	7
Breach of duties owed by other consultants	3.25	3	2.71	9
Insufficient on-site inspection	3.50	2	3.71	1
Failing to certify payment reasonably	2.63	9	2.29	13
Damage or injury to third party	3.63	1	2.86	6
Exceeding the agreed time or budget limit	2.75	7	2.71	8
Giving misleading statement	3.13	4	2.00	15
Errors in drawings and specifications	2.38	13	3.00	3

Liability Exposures: Likelihood Score and Ranking				
Giving inappropriate advice on the choice and terms of contract	2.38	12	2.14	14
Failing to keep client informed on essential matters	2.75	8	3.00	5

**Table 2: Liabilities Exposures: Likelihood Score (LS) and Ranking (Architect and Engineer sample)**

Liability Exposures: Likelihood Score and Ranking		
Liability Exposures	Quantity surveyor	
	LS	Ranking
Giving misleading pre-contract estimate	2.71	5
Errors in bills of quantity	3.14	1
Giving inappropriate advice on contractual matters	2.71	4
Failing to keep client informed on matters with significant cost implications	3.00	2
Breach of duty to monitor or control the cost as work in progress	2.50	6
Underestimation during construction	2.43	7
Error in claim assessment	2.79	3

**Table 3: Liabilities Exposures: Likelihood Score (LS) and Ranking (Quantity surveyor sample)**

It can be observed from the two tables that the respondents generally do not consider these liability exposures significant threat to their practice. The range of LS mainly lies between 2 to 3, indicating the likelihood of occurrence is low. Even if these occur, it would only be occasional at the most. Hence, the following discussion will center on those exposures that have LS greater than 3.

In the case of the architect sample, the highest LS is for the exposure of 'Damage or injury to third party'. Construction activities are inherently dangerous operations. In a compact city like Hong Kong, construction works are usually carried out at close proximity with existing structures. The potential danger is even higher where construction involves deep basement work. Although the contractor is primarily responsible for the safe operation, nevertheless, project architect also has to assume the supervisory role. In this respect, he is also the potential defendant in a damage claim by third party.

'Insufficient on-site inspection' has a LS of 3.5, ranks second on the list. This addresses the responsibility of a project architect to ensure that the works are completed in accordance with the quality and standard required by the contract. In Hong Kong, resident architect is rare and site inspections are usually carried out by clerk of works. The relative high ranking of this exposure probably is the result of the insufficient personal attention. 'Breach of duties owed by other consultants' ranks third and has a LS of 3.25. Project architects typically assume the role of leader of the design team and hence have to coordinate and integrate the works of the other consultants.

'Giving misleading statement' ranks fourth and has a LS of 3.13. Giving advice and suggestion are part of the routine for project architects. The LS score reflects the relative high frequency of such activities.

For the engineer sample, there are only two exposures having LS greater than 3.0, both have close relation with the physical works directly. 'Insufficient site investigation' affects the structural design, in particular, the substructure work. Nevertheless, due to time and budget pressure, thorough site investigation is seldom available. In Hong Kong, Engineers typically carried out site inspection and almost non-deniable if such works are not performed professionally.

For the quantity surveyor sample, only 'Errors in bills of quantities' has LS above 3. This reflects the same old problem of inadequate time and information for the preparation of bills of quantities persists in Hong Kong.

The findings reflect the difference in roles played by the three construction professional groups. Architects, having to deal with both the design and administration of the project, are subjected to higher degree of exposures to professional liabilities. In the situation of the engineers and the quantity surveyors, because of less administrative duties, their exposures mainly confine to the product they produced for their clients.

## THE PREFERRED METHOD TO REDUCE LIABILITY EXPOSURES

Table 4 and 5 show the respondents' preferred method to reduce the liability exposures. The number under each of the methods is the number of respondent choosing that method as the most preferred option.

Preferred Method to Reduce Liability Exposures						
Liability Exposures/Preferred Method to reduce Exposures	Quantity Surveyors					
	A	B	C	D	E	F
Giving misleading pre-contract estimate	11	0	0	5	2	4
Errors in bills of quantities	12	0	1	3	2	4
Giving inappropriate advice on contractual matter	3	11	0	5	0	3
Failing to keep client informed on matters with significant cost implication.	11	0	0	5	1	5
Breach of duty to monitor the cost as work in progress	12	0	0	6	1	3
Under-estimation during construction	14	0	0	4	1	3
Errors in claim assessment	6	8	0	5	0	3

**Table 4: The Most Preferred Method to Reduce Liability Exposures (Quantity Surveyors)**

- A. Internal Quality Assurance
- B. Legal Advice
- C. Statutory control over professional qualification
- D. Institutional control over professional practice
- E. Conservative design, material and technology
- F. Others

For both the architect and engineer samples, the majority of the respondents had chosen the use of internal quality assurance scheme as the most preferred method to reduce the exposure (in 14 exposures out of a total 16). The same pattern is exhibited in the quantity surveyor sample (5 out of 7).

Preferred Method to Reduce Liability Exposures												
Liability Exposures/Preferred Method to Reduce Exposures	A	B	C	D	E	F	A	B	C	D	E	F
Breach of duty to exercise reasonable care and knowledge	6	1	1	3	1	0	6	3	0	2	1	0
Insufficient site investigation	8	0	1	1	1	1	3	0	0	1	6	2
Providing insufficient details or accuracy of design	7	0	0	1	3	1	5	0	0	1	4	2
Design is unfit for its intended purposes	7	1	0	1	3	0	9	0	0	0	2	1
Non-compliance with the relevant provisions of regulation	6	1	1	1	3	0	9	0	0	1	1	1
Giving inappropriate recommendation on the choice of contractor	8	1	0	2	0	1	8	2	0	0	0	2
Breach of duties owed by other consultants	3	3	5	1	0	0	8	0	1	1	0	2
Insufficient on site inspection	5	1	3	1	1	1	5	0	2	0	2	3
Failing to certify payment reasonably	9	1	0	2	0	0	7	1	1	1	0	2
Damage or injury to third party	6	2	3	0	0	1	5	2	1	0	1	3
Exceeding the agreed time or budget limit	7	2	1	0	1	1	7	1	0	0	1	3
Latent defects discovered within the limitation period	7	1	3	1	0	0	4	2	2	1	2	2
Giving misleading statement	6	3	0	2	0	1	6	3	0	0	0	3
Errors in drawings and specification	9	0	0	1	2	0	5	0	0	1	4	2
Giving inappropriate advice on the choice and terms of contract	1	9	0	1	1	0	0	8	1	1	0	2
Failing to keep client informed on essential matters	9	1	0	1	0	1	7	1	1	0	0	3

**Table 5: The Most Preferred Method to Reduce Liability Exposures (Architects and Engineers)**

- A. Internal Quality Assurance
- B. Legal Advice
- C. Statutory control over Professional qualification
- D. Institutional control over professional practice
- E. Conservative design, material and technology
- F. Others

This poses a general picture that construction professionals practicing in Hong Kong have strong confidence in their ability and competence in both providing and ensuring a high standard of professional services. Reverting to outside control to ensure quality is not favoured by the respondents. However, in some instances, external advice is seen appropriate. These typically arise in situations where there are possibilities for future legal action. Hence, for exposures like giving advice on contract terms, contractual matters and claims, seeking legal advice is the preferred strategy.



There are two interesting points to be highlighted. Firstly, the architect sample indicated the acceptance of a tighter statutory control over qualification as a mean to minimise the liability exposure of 'Breach of duties owed by other consultants'. Secondly, the engineer sample indicated that in order to guard against the exposure arising from 'Insufficient site investigation', a conservative approach to design, choice of material would be adopted. In addition, innovative technology would also be avoided.

## **CONCLUDING REMARKS**

This study is subject to the limitation of small number of respondents, however, the study does indicate that architects, engineers and quantity surveyors practicing in Hong Kong have strong confidence in the provision of high standard professional service. Exposures to liability are inevitable in every venture, institutional requirements serve as the first safeguard for the maintenance of professional standard. Within professional organisations, a sound quality assurance system seems to be seen as the method to guard against omissions and oversights.

## **REFERENCES**

- Barros D'Sa, A.A.J. (1993) *Professional liability and construction: occasional paper no. 35*, CIOB.
- Comes, D. (1985) *Design liability of architects and engineers, 2nd edition*. Oxford: BSP Professional Books.
- Culverwell, D. (1989) *Professional liability*. The institution of Civil Engineers. London: Thomas Telford.
- Doran, A.G. (1986) Limitation of professional liability. *The Hong Kong Surveyor*, 2(5), 10-11.
- Duncan Wallace, I.N. (1986) *Construction contracts: principles and policies in tort and contract*. London: Sweet and Maxwell.
- Powell-Smith, V. (1992) Considering the effect of *murphy v brentwood*. *Contract Journal*, 16/01/02, 8.
- Rogers, W.V.H. (1989) *Winfield and jolowicz on tort*, 13th edition. London: Sweet and Maxwell.
- Streeter, H. (1988) *Professional liability of architects and engineers*. Canada: John Wiley and Sons Inc.
- Thomas, N.P. G. (1984) *Professional indemnity claims: an architect's guide*. London: The Architectural Press.
- Wickins, R. (1991) *Professional liability*, 2nd edition. Hong Kong: Hong Kong University Press.
- Williamson, A. (1992) The law of negligence in the aftermath of *murphy v brentwood* district council: arbitration, February 1992, 43-50.