Defective Work - Minimising the Problems

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Defective work and poor workmanship are problems which have been around for a long time and for which standard forms of building contract should be well versed - but are they? This article examines some of the typical standard provisions which deal with what is commonly called "making good defects" and why such standard provisions do not always achieve their aims.

General Obligations

usually have general Contractors a obligation under most standard forms of contract to construct and complete the works to a predetermined specification and sometimes a dual standard by adding that the works should also be to the reasonable satisfaction of the architect. Inherent in such obligations is a duty for the contractor to replace defective work with work, which is in accordance with the contract. For example, clause 1(1) of the HKIA Standard Building of Contract Quantities) provides that:

"The Main Contractor shall upon and subject to these Conditions carry out, take full responsibility for the care of, and complete the Works shown upon the Contract Drawings and described by or referred to in the Contract Bills and in these Conditions in every respect to the reasonable satisfaction of the Architect."

Clause 6(1) of the HKIA Form states that:-

"All materials, goods and workmanship shall so far as procurable be of the respective kinds and standards described in the Contract Bills."

There are then implied terms which, although not expressly written in standard forms of contract, the courts will impute or presume to be the intention of the parties, e.g.

"The contractor must do the work in a good and workmanlike manner."

It is evident from clauses 1(1) and 6(1) that the main contractor's obligations under the HKIA Form are twofold: to "carry out" and "complete" the works, in all respects, whether express or implied, in accordance with the contract. The main contractor will therefore be in breach of the contract whenever his works fail to comply with the requirements stated in the contract.

Defects in the Construction Period

The status of any non-conformity during the construction period is open to two views:-

- One view is that the non-conformity does not become an actionable breach of contract provided that the main contractor puts the non-conformity right timeously before it completes the works.
- The alternative view is that the nonconformity is immediately a breach of contract.

BERA believe that a practical and sensible approach is to determine whether the nonconformity can be replaced easily, at some convenient time before completion of the contract, and without affecting the quality of the remaining works, i.e. replacement of defective work is usually more difficult, time consuming and costly if it is carried out later rather than earlier. For example, if replacement of a defective window frame is deferred until after completion of other trades which follow the installation of the window frame (e.g. glazing, external tiling and internal finishes), there will be inevitable additional costs in replacing the window frame once such other trades have been completed. There may be further additional costs if the external scaffold has since been dismantled and needs to be reerected. There can therefore be good reason

for contractors to ensure that defective materials and goods are either:

- replaced prior to installation; and/or
- made good in a timely manner.

However, it appears to be a ploy by many contractors to carry on regardless in the hope that an employer will eventually accept some defective work in order to avoid the disruption, which would be created by its rectification or replacement.

Timely Inspections

To protect an employer's interests (time, quality and money) inspections of work in progress should be made in a timely manner. This allows for defective goods or materials and poor workmanship to be identified at an early stage and to be replaced or rectified before large areas of the defective work are carried out in such a defective manner.

There is no substitute for an experienced and diligent clerk of works carrying out such timely inspections and notifying the architect / contractor of deficient work as each activity commences. If a clerk of works or architect knowingly allows defective work to continue then they are not serving the best interests of their employer and the resultant mess will have to be resolved, sometimes at considerable expense to their employer.

Powers To Instruct

Accordingly, there are mechanisms in most standard forms of contract for architects to ensure the timely making good of defects. Under the HKIA Form, the architect may instruct the main contractor to:-

- open up for inspection or tests any work covered up [clause 6(3)]; and
- remove from site any work, materials or goods which are not in accordance with the contract [clause 6(4)].

However, the power to "remove" defective work is not always a practical solution. For example, if window openings in a concrete wall are formed out of tolerance and as a result can no longer accommodate the window frames, there is little point in the architect instructing the "removal" of the wall when modification to the openings would achieve the same end. It would seem that the best the architect can do in such circumstances is:

- issue a notice of non-conformance to record his dissatisfaction; and
- rely on the main contractor's general obligations to "complete" the works in accordance with the contract [clause 1(1) of the HKIA Form].

The Swire Properties Ltd's Standard Form of Building Contract has similar provisions to clause 6(4) of the HKIA Form but with the added protection of the words "rectification, replacement, modification or removal" to cater for such circumstances.

Remedies

If the main contractor fails to make good defective work, having being instructed to so do, then the architect has a number of options under the HKIA and Swire Forms:

- if the main contractor "refuses or persistently neglects" to comply with a notice to remove defective work, then provided that the works are "materially affected" by the refusal or neglect, the employer may terminate the main contractor's employment [clause 25(1)(c) of the HKIA and Swire Forms]; or
- alternatively, without going to the extreme length of terminating the main contractor's employment, the employer may employ and pay others to carry out the work and recover the cost from the main contractor [clause 2(1) of the HKIA Form and clause 2(5) of the Swire Form].

In any event, an interim payment certificate should only include for "work

properly executed", therefore, any defective work that has been detected by the Architect should be excluded from the estimated value of the work [clause 30(2) of the HKIA and Swire Forms].

Defects Liability Clause

Upon completion of the works, the architect will usually issue a certificate of practical completion (PCC) to certify that the works have been completed in accordance with the contract. There are several views upon what constitutes practical completion but they are not covered in this article.

Should further defects appear within the statutory limitation period, the employer will normally have a common law right to make a claim in damages against the contractor.

However, rather than the employer making good the defects and suing for damages, it is usually more cost effective and efficient for the contractor responsible for the original work to make good the defects. Therefore, most standard forms of contract will include a defects liability clause which provides that the contractor will make good defects which within pre-defined appear a period following practical completion. This period, known as the defects liability period (DLP), normally runs for a period of 12 months after the issue of the PCC.

Under clause 15 of the HKIA Form, the main contractor is obliged to make good such defects, within a reasonable time of expiry of the DLP, at his own cost. The architect may also instruct the main contractor to make good defective work prior to expiry of the DLP.

After the expiry of the DLP, the employers recourse if further defects are found is at common law.

Common Failures

Listed below are just a few reasons why standard contractual mechanisms for dealing with defects may not always achieve their aims:-

- dispute liability factor. The contractor may dispute liability for the defective work and instead blame some other factor such as the architect's design. The contractor may believe there is good negotiating advantage to be had in not expeditiously making good such work until liability has been resolved.
- The 'you get what you pay for' factor. Competitive tendering can result in prices that are not sufficient to procure and/or construct what is specified in the contract documents. This can result in sub-contractors cutting corners to regain a profitable situation (e.g. the use of marble from Egypt instead of Italy). The sub-contractor will be reluctant to replace such work if rectification or replacement costs are substantial.
- The common standards factor.

 Contractors argue that the standards which they are achieving are the standards usually found in the industry. Employers who require better than such standards should ensure that the contract refers to "high quality" and "the best achievable standards" and be prepared to pay for it.
- The interpretation factor. Many specifications are open to interpretation on such things as shade variations, smoothness, evenness, texture and the like where precise measurements cannot be taken and compliance or non-compliance is a matter of opinion.
- The money factor. It is not uncommon, on projects in delay for an employer to begin levying liquidated damages around the time of the Occupation Permit. Starving the project of funds in its final few weeks, will lead to all sorts

- of repercussions in terms of payments to suppliers and sub-contractors. As soon as cash stops flowing from employer to contractor to sub-contractor to sub-subcontractor to worker then, usually, making good defects slows and even stops.
- The supervisory factor. The architect's competence and resolve will form a key part in making good defects. Yet, how often on residential developments, do architects leave the identification of defects until after the sale and purchase agreement? The developer of my Hong Kong property issued to me a blank defects schedule (with carbon copies) and stickers for me to identify the defects. BERA believe that this is blatantly wrong, as defects should and could have been identified by the architect before, or at the latest, the practical completion inspections. Such practices can only instill a mentality in some contractors of "let's see what we can get away with".
- The time factor. Unrealistic contract periods set by the employer are neither conducive to good quality nor the timely making good of defects during the construction period.
- The sub-contracting factor. The multilayered sub-contracting regime found in Hong Kong is synonymous with poor workmanship and quality. Measures needed to make good defects are often diluted or varied, like a game of Chinese whispers, by the time the requisite instructions filter down to the worker on site.

Swire Properties' Approach

The Swire Form has similar provisions to the HKIA Form but with a few extra safeguards for the employer to minimize potential problems:-

- Written undertaking. Clause 15(1) of the Swire Form provides that, prior to the architect issuing the PCC, a written undertaking to finish any outstanding works, within an agreed period should be provided by the main contractor. Therefore, if the architect is to allow the main contractor to 'carry over' incomplete minor defects apparent at practical completion into the DLP, the completion obligations for such work should be clearly stated in the written undertaking.
- **Employ others**. Generally it is believed that a defects liability clause will confer a right on the main contractor to have the opportunity of making good defects. However, there are some circumstances where this right may not be in the employer's best interest. For example, the employer may have lost all confidence in the main contractor's ability to make good the defects. Accordingly, clause 15(8) of the Swire Form provides that if, in the opinion of the architect, it is more "suitable and beneficial" that remedial work rectified by others, then the employer may employ others to rectify the defective work and recover the cost from the main contractor.
- Accept the defective work. Clause 15(9) of the Swire Form states that the architect may accept the defective work and omit the value of the defective work as a variation with an amount to "reflect the reduction in the value of the work to the Employer resulting in the presence therein of the said defective [work]". Suppose, for example, the main contractor had installed grade B maple flooring but the specification called for grade A. If the architect so desired he could accept the inferior grade of flooring, and compensate the employer
 - an omission from the contract sum for the difference in value between

- grade A and grade B maple flooring; and
- omit an amount to reflect the reduced amenity value of the flooring.
- QAQC Procedures. The Swire Form is backed up by a comprehensive schedule of QAQC procedures.
- **Performance bond**. The performance bond required under clause 31 of the Swire Form is not released until the issue of the final certificate, thereby, giving the employer added financial security throughout the DLP, should the main contractor subsequently default in his obligations to make good any defects.

A Word About QAQC

In the early 80's, QAQC procedures became the answer for the quality control deficiencies of the industry. QAQC continued into the 90's and is still found in contracts today, such as the Swire contracts.

Do such procedures work? Well they are certainly designed to work and the procedures, if followed, would improve quality by identifying and rectifying or eliminating defects at an early stage.

However, QAQC has a price tag, not only in the cost of persons to operate it, but observance in terms of design, manufacture and construction. Contractors, subcontractors and architects incur additional cost in operating a rigorous QAQC regime. When times inevitably became tougher, and prices declined (both contractor's tenders and architect's fees), observance of QAQC procedures waned and the industry again suffered from quality problems.

As poor quality is one of the ailments of the industry today, it shows that 20+ years of QAQC have not been successful. The procedures are there, they are not difficult to understand, or operate, but they are neglected and quality suffers as a result.

Conclusions

The success or otherwise of defect control and making good defects can be linked to a variety of factors, however, the underlying factor is nearly always '\$' related. The seriousness of the '\$' implications will likely govern a contractor's / sub-contractor's willingness to carry out and complete his obligations under the contract.

If a defaulting contractor (or sub-contractor) has insufficient funds and/or is not prepared to sustain further losses, then the HKIA Form, unamended, may not always provide employers with the protection that they should have. Experience shows that such contract provisions should be drafted (or amended) to give employers sufficient flexibility to minimise any such eventual problems that may arise.

In the most serious cases, this will mean giving the employer the choice of employing others to rectify the defects and, in the least serious, the choice of accepting the defective work with an appropriate financial adjustment to the final contract sum.

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