

59/98

Case No 662/95

**IN THE SUPREME COURT OF APPEAL
OF SOUTH AFRICA**

In the matter of:

STRIJDOM PARK EXTENSION 6 (PTY) LIMITED Appellant

and

ABCON (PTY) LIMITED Respondent

CORAM: HEFER, HOWIE *et* ZULMAN JJA

DATE OF HEARING: 17 August 1998

DATE OF JUDGMENT: 28 August 1998

J U D G M E N T

/HOWIE JA: . . .

HOWIE JA:

Appellant was the employer in terms of a building contract and respondent the contractor. The work involved the erection of a warehouse, including the laying of an engineer-designed, steel-reinforced concrete slab separating the ground-floor from the basement. About two years subsequent to appellant's having taken occupation the slab failed comprehensively and was replaced. As a result, appellant sued respondent and the engineer, Mr E C Pienaar, in the Witwatersrand Local Division for damages, being *i a* the cost of replacement. The claim was based primarily on the alleged breach by respondent of the building contract and the alleged breach by Pienaar of the agreement in terms of which appellant employed him to design the slab. During the trial the claim against Pienaar was settled. At the conclusion of the hearing the Court *a quo* (Goldstein J) dismissed the claim against respondent. The learned Judge did so on the single ground that respondent was absolved

from any liability by a particular clause of the building contract. With the trial Court's leave, appellant appeals.

On the pleadings it was common cause that the slab had deflected and cracked. Appellant alleged, however, that the slab had failed completely and required replacement, which state of affairs was due to respondent's breach of contract in having failed *in* to construct the slab in a proper and workmanlike manner. Respondent denied that allegation and went on to aver that it had constructed the slab in accordance with Pienaar's design and that the slab had deflected and cracked because such design was defective in many respects which were enumerated in the plea and in respondent's particulars for trial.

On appeal it was no longer in dispute that the slab had had to be replaced but it was still in contention whether respondent had breached the building contract and whether the failure of the slab was at least partly attributable to faulty engineering design.

The undisputed evidence was that when the slab was demolished in order to have it replaced, examination showed that the slab's failure had been due to the collapse of the upper of two criss-cross mats of steel bars that had been encased in the concrete to reinforce it. Prior to casting the slab, when the two mats were assembled, they were kept apart by steel stools on which the upper mat rested. Each stool was made from a single length of tubular mild steel 10 mm thick, bent in such a way as to comprise a horizontal piece, a vertical leg at either end and an extended horizontal foot on each leg, stability being provided by the feet pointing in opposite directions.

The examination referred to demonstrated that the collapse of the upper mat was due, in turn, to the collapse of the stools, many of which were found bent out of shape, with their feet splayed. It was also found that contact between the upper mat and the stools had been limited to one bar of the mat resting on the centre of the horizontal piece of each

stool. It was common cause before us that the stool collapse must have occurred during the casting of the slab when concrete was poured over and into the network of reinforcing steel.

The building contract in issue was in the standard form approved and recommended by, amongst others, the Institute of South African Architects and the South African Building Industries Federation. It recorded respondent's undertaking to build the warehouse in accordance with the drawings and specifications prepared by appellant's architect, Mr R Schleifer of ACT Projects CC. It is appropriate to cite here certain provisions of the contract. They are material to the outcome of the appeal and they also need stating before further recounting the relevant facts. The clauses in question read as follows:

“13.1 Definitions

For the purposes of this clause:

- 13.1.1. ‘the completion list’ shall mean the written list detailing the work remaining to be done on those

parts of the Works handed over to the Employer by the Contractor:

13.1.2 'the preliminary completion list' shall mean the written list in which is specified all such work as is required to be done by the Contractor in order to entitle him to receive a certificate of practical completion:

13.1.3 'the defects list' shall mean the written list of patent defects in which the Architect has specified any defects identified by him at the end of the patent defects liability period:

13.1.4 'the patent defects liability period' shall mean the period beginning on the date of practical completion of the Works, or the relevant parts thereof, and terminating three months from that date.

13.2 Practical Completion

13.2.1 When, in the opinion of the Architect, the Works, or any parts thereof which the Contractor has agreed to hand over earlier to the Employer in accordance with

the provisions of the schedule to these terms, are reasonably complete the Contractor shall hand over to the Employer the Works, or such completed parts, as the case may be, provided that the practical completion certificate for the Works as a whole shall not be issued prior to the date specified in the schedule to these terms unless by agreement between the parties. The Architect in each such case shall issue forthwith to the Employer and to the Contractor a certificate of practical completion and, for those parts handed over, a completion list. The Contractor shall not, in respect of those parts handed over, be obliged to execute work other than that specified in the completion list.

- 13.2.2 Work remaining to be done at the date of practical completion shall be subject to later inspection by the Architect within fourteen days of written notification by the Contractor that such work has been completed. The period during which the Contractor is liable for defects in such work shall commence on the date of approval by the Architect.
- 13.2.3 Practical completion of the Works, or any relevant parts thereof, shall be deemed for all purposes of this

agreement to have taken place on the day named in such certificate of practical completion.

- 13.2.4 Should the Architect fail to issue a certificate of practical completion and the completion list, he shall, within fourteen days of receiving written demand from the Contractor, issue to the Contractor the preliminary completion list.

13.3 Defects Liability

- 13.3.1 Any defects in the workmanship and materials and any damage caused to the Works thereby, which may appear within the patent defects liability period, due to materials or workmanship not being in accordance with this agreement shall be made good by the Contractor at his own cost.

- 13.3.2 With fourteen days after the expiration of the patent defects liability period the Architect shall deliver to the contractor the defects list of items which are required to be made good by the Contractor. The Contractor shall forthwith commence the work required to be performed and shall complete the same within a reasonable period. The Contractor's

liability to make good in terms of the sub-clause shall be restricted to the items specified in the defects list.

- 13.3.3 Nothing in clause 13 shall be construed so as to restrict or remove in any way the Contractor's liability for any defects or insufficiencies in the Works or materials which a reasonable examination would not have disclosed.

13.4 Certificate of Completion

When, in the opinion of the Architect, the work specified in the defects list has been completed, he shall issue a certificate of completion of the Works. The completion of making good defects shall be deemed for all purposes of this contract to have taken place on the day named in such certificate.

...

- 25.5 Upon the issue of the certificate of completion of the Works in terms of clause 13.4 and provided that the Architect has timeously received the documents referred to in clause 10.2 the Architect shall issue a final certificate of the value of the Works executed by the Contractor. . .

25.6 Where a penultimate certificate has been issued in terms of clause 25.5 then, within one month of the issue of such penultimate certificate and provided the Architect has timeously received the documents referred to in clause 25.5 he shall issue a final certificate of the value of the Works executed by the Contractor.

25.7 A final certificate [that] has been issued in terms of clause 25.5 and 25.6 save as regards all defects and insufficiencies in the Works or materials which a reasonable examination would not have disclosed, shall be conclusive evidence as to the sufficiency of the said Works and materials, and of the value thereof.”

To enlarge the factual picture for present purposes, construction work began in September 1989. The slab was cast on 3 November of that year. Prior to the pouring of the concrete of the slab Pienaar endorsed a document issued by respondent, and headed “Site Instruction”, with the following words above his signature:

“Checked and approved reinforcement to slab (to basement).
Column head levels correct height.”

For the construction of the slab respondent engaged independent contractors respectively to assemble the reinforcing steel, to supply and pour ready-mixed concrete and finally to level the concrete. The pouring was effected by pumping the concrete through a large pipe over the assembled reinforcement. On completion of its construction the slab rested on what might be termed edge columns on all four sides and was suspended over the basement by eight free-standing columns on the concrete floor, or surface bed, of the basement. On two sides, where there were retaining walls against the natural earth reinforced concrete edge beams were interposed between the slab and the edge columns.

By May 1990 shear cracking had appeared in one of the edge beams and circular cracking on the surface of the slab over two of the free-standing columns. (In what follows only the free-standing columns

are relevant and I refer to them simply as "the columns".) Accordingly appellant appointed another engineer, Mr N A Barker, to investigate and report on the integrity of the slab. He was of the view that the cracking over the columns was due to inadequacy of steel reinforcement over the column heads. This was because the slab had been designed in accordance with the no longer current Code of Practice CP 114, which, unlike later codes, permitted less reinforcement over columns. As regards the crack in the edge beam, there seemed little doubt that it stemmed from appellant's tenant, who had by then taken occupation, having overloaded the slab in storing building materials. This cracking was remedied by suspending the fractured beam from a new beam constructed immediately above it.

The circular cracking, however, became widespread as the months passed, occurring over more and more columns. Barker discussed the problem with Pienaar on various occasions but remedial

action was not soon forthcoming. In the interim, on 5 September 1990 and in accordance with clause 13.2.1 of the building contract ("the contract"), the architect issued a certificate of practical completion of the entire project. In terms of clause 13.1.4 of the contract that marked the start of the three-month patent defects liability period. (For convenience I shall refer to it simply as "the defects period".) This came and went without implementation of a resolution to the cracking problem. The architect (by this time Mr R Schleifer had died and had been succeeded in that capacity by his son) did not list the cracking as a defect under clause 13.1.3. In fact no defects list was issued. Nor was a certificate of completion in terms of clause 13.4 issued or a final certificate pursuant to clause 25.

Eventually, in July 1991, action was taken to remedy the cracking over the columns. The solution had been determined upon by Barker in conjunction with Pienaar and involved enlarging the column

heads immediately beneath the slab so as to give it greater support.

Despite those measures, cracking of a different sort, and far more extensive, later appeared on the top surface of the slab. These cracks were longitudinal and began at one column and extended some way towards the next. They got bigger and eventually met, resulting in a complete crack from one column to another. By mid-1992 they had widened and had even appeared on the undersurface of the slab. This situation worsened and ultimately, in 1993, the slab was condemned and replaced.

The presently relevant evidence advanced on behalf of appellant was given by three witnesses. The first was Mr A D Combrink, a director of appellant and a qualified civil engineer with many years' experience as a civil engineer and building contractor. The second was Barker, a qualified civil engineer, having retired after a long career in practice as such. The third was Mr H T Harbuz, a qualified civil

engineer still in active practice.

The evidence for respondent was that of Mr I V J Naude and Mr D S Savage. Naude was respondent's general foreman and site agent on the job in question and Savage was its assistant contracts manager.

Combrink, Barker and Harbuz were unanimous in their expressed view that assembling the reinforcement mats and maintaining them in the correct position was the contractor's responsibility and not a matter of engineering design. According to them, proper construction practice demanded *it* that wherever possible two bars, not one, of the upper mat be placed on each stool and that the feet of the stools be tied to the lower mat. (Two bars per stool was attainable in respect of most of the slab.) Had those requirements been met, the weight of neither the concrete nor the casting would have caused displacement. In the event, the failure to meet those requirements caused the collapse of the

stools, the concomitant collapse of the upper mat and the eventual failure of the slab. It is also clear from the evidence of these three witnesses that the depression and collapse of the upper mat would have been easily discernible while the concrete pouring was in progress. Naude and respondent's other personnel involved with the slab casting ought to have been on the lookout for such eventuality, should have seen the collapse and have taken appropriate action by stopping the process and calling in Pienaar.

From Naude's evidence it emerges that he had no knowledge of placing steel reinforcement. He saw nothing wrong with the way the steel contractor had assembled the reinforcement in question and could not recall whether the feet of the stools were tied. It is plain that he left every relevant decision in this regard to the steel contractor and to Pienaar who was on site before and at the start of the pouring and who, as already mentioned, signed a site instruction to the effect that he had checked and

approved the reinforcement.

Naude added that Combrink was also on site during the pouring and in fact inspected and approved some of the shuttering used in the casting of the slab. Combrink denied this when it was put to him and maintained that he only arrived after the pouring was over and the concrete was being levelled. Significantly, Naude described Combrink as a very difficult client who continually intervened and found fault with respondent's workmanship. A study of the evidence leaves little doubt that Combrink, whether from the nature of his profession and experience or his personality, demanded careful adherence to practice and specification in the quest for a sound job of work. Had he noticed that the steel assembly was deficient in either of the two crucial respects referred to it is highly likely that he would have complained and sought rectification. The fact that he did not raise such complaint makes it improbable that Naude's allegation as to Combrink's presence is true.

As far as the collapse of the upper mat is concerned, Naude said there was nothing of the sort to be seen. Had he observed it he would have stopped the pouring immediately. If the top mat had collapsed to the extent that it was found to have done, he said he would have had no difficulty seeing that happen, if it occurred, when the poured concrete impacted upon the steel. However, if it occurred later for any reason, then he could not have seen it. Asked how the collapse could possibly have resulted, Naude ventured the explanation that it was possibly due to workers having trampled on the concrete after it had been cast. That possibility was effectively refuted by appellant's witnesses however, who said that workers' boots would indeed have sunk into the wet concrete for some small way but not so deeply that they would have caused displacement of the upper mat. Concerning his observations while the pouring was in progress, Naude professes to have paid very close attention to proceedings. He said he focused on the concrete as it

was being poured right in front of him and was unaware of what was going on even four metres away. Had that been true, it is difficult to fathom how he could have missed seeing the upper mat collapsing. Moreover, given his reliance on the steel contractor and Pienaar, it is unlikely that Naude would have expected any mishap. Indeed it is, in the overall assessment, probable that he placed just as much reliance upon the other contractors and that is the reason for his having failed to observe what plainly did occur.

As far as Savage's evidence is concerned, it was his responsibility to co-ordinate the various stages of the construction work, not to involve himself with the work actually being done or the quality of it. Nevertheless he claimed to have seen the reinforcement before concreting began and not to have seen any displacement. He said he noticed nothing wrong with the steelwork and was unaware that the feet of the stools had not been tied. Savage said he was on site during the

entire time that the concrete was being poured and saw nothing unusual happen to the top mat of the reinforcement. He, too, claimed that Combrink had been on site while the slab was being cast and pointedly referred to Combrink's omission to point out anything untoward about the steel. He, himself, saw nothing wrong in there being only one bar per stool. Like Naude, Savage was unable to offer any feasible explanation for the failure of the slab.

In the view the trial Judge took of the matter it was unnecessary to record his impressions of the witnesses or to evaluate their testimony. Despite the absence of any findings in those respects, however, it is plain from the record that the evidence of appellant's three witnesses was clear, logical and persuasive. And it was not contradicted by other expert opinion. Combrink, of course, had an interest in the outcome of the litigation but he was supported by Barker and Harbuz who were disinterested witnesses. By contrast, the evidence of Naude and

Savage reads unimpressively. The mere fact that neither saw that the feet of the stools had not been tied detracts critically from the worth of their professed observations. Neither could advance any satisfactory explanation for the collapse of the top mat, something which undeniably happened during the concreting operation and which, according to the expert evidence, should easily have been noticed by someone in Naude's position. His primary responsibility was to see to it that the reinforcement was not displaced. The evidence that Combrink was on site during the casting of the slab and observed the steel in position seems to me to have been a limp attempt to show that nothing could have been amiss and that in any event he approved. I have already pointed to the likelihood that Combrink, especially on Naude's and Savage's own assessment of him, would have complained had he truly seen the manner in which the reinforcement had been assembled.

On the evidence, therefore, appellant established very clearly

that the slab failed because respondent did not carry out its construction in a proper and workmanlike manner, thereby breaching the building contract.

Respondent's counsel contended that defective engineering design was also involved in the failure of the slab. The two grounds for this contention were that the stools were of insufficient rigidity and that Pienaar approved the way in which the reinforcement was installed. It is true that the design defects alleged in the plea included the allegation that the stools were "too flimsy" but, significantly, this was not repeated in respondent's particulars for trial which, at appellant's invitation, detailed numerous respects in which it was proposed to show that Pienaar's design had been defective. In addition, this allegation was never put to appellant's witnesses. More importantly, there is no evidence to suggest, much less demonstrate, that the stools were indeed of inadequate strength.

As to Pienaar's approval of the steel, it was argued that this

had the effect of incorporating in his design the methods by which the steel contractor had put the reinforcement together. On the evidence, Pienaar's design did not show that there had to be two bars of the top mat per stool nor that the feet of each stool had to be fastened. The evidence makes it plain, nonetheless, that it was not Pienaar's duty to incorporate those details in his design and that, as mentioned before, those two requirements are part and parcel of proper construction practice and solely the contractor's responsibility. Moreover, the engineer's contractual duty is to his client, not to the contractor. It is not even his duty to the contractor (although it might well be his duty to his client) to intervene if the latter appears to be going wrong unless it is apparent to him that the contractor does not know his business and is going to go wrong. In short, it is the contractor's decision how he carries out the construction work and he cannot pass the blame for defective work on to the engineer (or architect, for that matter). In these respects see Clayton v Woodman and

Son (Buildings) Limited [1962] 2 All ER 33 (CA) at 39 I - 40 A and 40 I - 41 E ([1962] 1 WLR 585 at 593 - 595) and Oldschool v Gleeson (Construction) Limited 4 BLR 103 at 123 and 130 - 131. It has been said that a duty to intervene would arise if the contractor appears set on an “incredible act of folly” (see Jackson and Powell on Professional Negligence 4th ed 211 par 2.127). However, Pienaar was not called to describe precisely what he did see of the steel assembly and if, as the authorities have it, he was obliged only to see that the design had been implemented and not to ascertain how respondent was carrying out the work, he would have had no reason to determine how many bars per stool there were or whether the stools had been fixed. Moreover, he was entitled to expect, as was appellant, that respondent would in any case, once concreting started, watch out for any displacement and take self-evidently appropriate action if it occurred..

It follows that appellant proved that respondent's breach was

the sole cause of the failure of the slab.

This being so, the only possible defence left to respondent was that based on clause 13. In upholding it, the Court *a quo* took the view that clause 13.3.3 required one to postulate an examination which would have revealed the defect and then to enquire whether such examination would have been reasonable in all the circumstances. Applying that approach, the Court said that it was common cause (as indeed it was) that an x-ray of the slab or removal of sample concrete cores would have revealed displacement of the upper mat and that both procedures were cheap and effective. The Judge then said:

“Could anyone embarking on either or both in 1990 be regarded as having acted otherwise than reasonably? It would seem self-evidently, not.”

Before considering his reasons for that answer it is necessary to state that the question that elicited it was misdirected. The true

enquiry is not whether such tests would have been unreasonable. The question is whether any investigation as to the state of the upper mat was reasonably required at all.

Preliminary to a consideration of that question is the need, firstly, to determine the time of the “reasonable examination” referred to in clause 13.3.3. For respondent it was contended that such time was any time throughout the construction process, not just at the end of the defects period. In this regard the words

“defects and insufficiencies in the works or materials which
a reasonable examination would not have disclosed”

were considered by the House of Lords in East Ham Borough Council v Bernard Sunley and Sons, Ltd [1965] 3 All ER 619. The majority decision (there was only one dissenting speech on this point) was based on an interpretation of the clause in that case which was the counterpart of clause 25.7 in the present matter. It was held that the envisaged examination was one at the date from which the clause speaks *i e*

preparatory to, and for the purpose of, issuing a final certificate, in other words, after completion of the work and rectification of any patent defects. I respectfully agree.

There is reason, of course, to give the words in question a different meaning in clause 13.3.3, but only somewhat. The provisions of clause 13.3.1 impose liability on the contractor for defects which appear, that is to say, become patent, within the defects period and are included in the architect's defects list. That the contractor also retains liability for defects which a reasonable examination would not have disclosed must mean that he is liable for such defects as remain undisclosed by such means after the defects period ends. To compile the defects list the architect therefore would need to wait for expiry of the defects period. In these circumstances, and in order to give the word "patent" the extended meaning the contract obviously intends, the word "appear" in clause 13.3.1 must, I think, include a meaning corresponding

to “appear as a result of reasonable examination”. Accordingly, I consider that clause 13.3.3 speaks as at the end of the defects period and that it is then that the examination referred to in clause 13.3.3 must be conducted.

The next preliminary question raised in argument that must be dealt with before discussing the evidence was one of onus: whether it was for appellant to show that the mat collapse would not have been disclosed by a reasonable examination or for respondent to show the converse. The Court *a quo* found no need to resolve this issue.

As a starting point, it is undoubtedly so that the contractor who has breached his contract is liable at common law for damages and if he seeks the protection of a contractual provision he is, in effect, (even if he denies the breach, as respondent did) confessing and avoiding and, in the event of proof of breach, saddled with the burden of establishing the defence by bringing himself within the terms of the provision concerned.

Moreover, where, as here, resort is had to the protection of clause 13.3.2, whereby, in specified circumstances, the contractor's liability is limited to items on the defects list and excluded if there is no such list, the position differs crucially from the situation where the contractor has the protection of a final certificate. In the latter case an employer suing for damages for defective work, who is met by the defence that a final certificate was issued, could only overcome that defence by showing non-discoverability of the defect despite reasonable examination. In that event, he would, I think, bear the onus of showing such non-discoverability. Clause 13.3.2, however, protects the contractor only in respect of those unlisted defects to which clause 13.3.1 refers. Those are defects "which may appear" within the defects period. The word "may" is inappropriate. Whether or not "may appear" includes "may by reasonable examination appear", it is obvious that if a defect does not in fact appear, or is not in fact disclosed by way of reasonable examination,

then it cannot be made good and the sub-clause can have no application. Consequently, nor can clause 13.3.2, with its limitation of the contractor's liability. And even if the intention in using "may" was to convey "capable of appearing by way of reasonable examination" the same reasoning applies. The words "which may appear" must therefore simply mean "which appear".

On that construction all that appellant needed to show to defeat respondent's pleaded clause 13.3.2 protection was that the fact of the upper mat collapse did not appear within the defects period. There was no need to go further and prove that reasonable examination during that time would not have disclosed the collapse.

A contractor's only possible remaining defence where a defect is unlisted because it is, by the end of the defects period, neither apparent nor disclosed by reasonable examination, is that the defect concerned is such that a reasonable examination would have disclosed it.

From the above analysis it follows that the onus to establish that defence must, as a matter of principle, be on the contractor.

In so far as the pleadings are concerned, appellant said nothing to attract the onus. Neither in its claim nor its replication is there any allegation that the reinforcement collapse was something which a reasonable examination would not have disclosed. Respondent, however, in raising its defence that the defect in the slab was not specified in a defects list, alleged that this was a defect "which a reasonable examination would have disclosed" thereby accepting the onus with which principle in any event burdened it.

The final prefatory aspect is this. The reasonableness of an examination is not determined only by its extent or expense or the ease with which, if applied at the outset, it would have revealed what eventually transpired to be the defect. It is also determined, in my view, by what, at the relevant time - in this case the end of the defects period -

a reasonably careful architect (the East Ham case at 633 H) would have considered to be an appropriate line of investigation given the facts known at that stage.

Turning to the evidence, appellant had, as early as May 1990, engaged Barker to report on the crack in the edge beam and the circular cracking above two columns. The former was due to overloading which had nothing to do with the inherent integrity of the slab. Barker was of the view that the circular cracking was not the result of the overload, seeing that one of the columns was remote from the area where the overloading occurred, but rather the result of inadequate steel reinforcement over the column heads. His recommendation, as mentioned above, was to enlarge the column heads. This was not to eliminate existing cracks but to prevent further cracking. Pienaar made the same recommendation in a letter to appellant on 26 November 1990, that is to say, shortly before the expiry of the defects period. Although

by that time more circular cracking had become apparent, Barker did not consider that there was any other cause. According to his evidence nothing known by the end of 1990 gave any indication that the upper mat had been displaced. Harbuz testified that his view would have been the same at the time. Barker added that he had experienced such cracking in other instances and in those cases there had been no displacement of the reinforcement.

The architect was not called to give evidence and there is nothing on record to show what investigations or enquiries he made. However, applying the objective approach outlined earlier, one cannot but conclude that a reasonable architect in the situation prevailing at the end of the defects period would have consulted Barker. And also consulted Pienaar — the slab was of the latter's design and the problem was essentially an engineering one. No reason exists to think that Barker would have given the architect any other diagnosis and recommendation

than he gave in evidence. From the record it is apparent that Pienaar protested throughout the relevant period that the integrity of the slab was not in danger and no doubt he would have said the same to the architect.

Had these expert views not been available or had the slab not been engineer-designed, a reasonable architect might well have considered it worthwhile to take core samples, but, having such opinions to hand, I can see no reason for thinking that such architect would have disagreed or even doubted them.

Combrink referred in a letter to Pienaar of 15 December 1990 - after the defects period - to "severe cracking". Barker said that this was not his assessment of the cracks and that Combrink, perhaps typically of a client, was understandably worried and thus prone to think that the problem was worse than the symptoms suggested it to be.

The Court *a quo* held that it would have been reasonable for the architect to have ordered the opening up of the slab. Two reasons

were advanced for that view. One was that Pienaar had provided for inadequate reinforcement in the cracked edge beam and also in one of the retaining walls. Therefore it would have been reasonable to check the reinforcement of the slab. The other reason was that Pienaar's design provided for a cover of 15 mm of concrete above the upper reinforcing mat whereas if his other specifications had been adhered to the cover would have been far less. Accordingly, if the actual cover had been checked it could have led to the discovery that it was in fact far greater than specified and that this was so because the top mat had become displaced.

To my mind, with respect, these findings constitute *ex post facto* reasoning. They are also not justified by the evidence. Barker's uncontroverted and unshaken opinion, expressed in evidence as his view at the relevant time, was that the circular cracking had a specific cause, well-recognised by him, unrelated to the situation of the top mat. The

edge beam and the retaining wall were also unrelated. Moreover, if one had wanted to know whether the slab was adequately reinforced one would only have had to consult the drawings and to ask Pienaar and respondent's personnel whether they had been complied with. Except for the amount of reinforcing over the column heads, there was no reason to regard the reinforcement of the slab as inadequate. As for the thickness of the cover over the top mat, there was no evidence that anything at the time reasonably warranted an investigation into this aspect.

Accordingly, I conclude that respondent failed to prove that as at the end of the defects period reasonableness required Barker (or anyone else) to conduct a more extensive examination than he had. The eventually fatal defect in the slab was therefore not one which would at the relevant time have been disclosed by a reasonable examination.

It follows that respondent was liable to appellant in damages, being the expense attached to replacing the slab, and that the appeal must

succeed.

Counsel were agreed that the damages amount to the sum of R585 928,86, and that appellant was entitled to the qualifying fees to be specified in the order below, as well as the costs of two counsel in both courts.

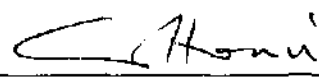
The following order is made:

1. The appeal succeeds, with costs, including the costs of two counsel.
2. The order of the Court *a quo* is set aside and substituted for it is the following:

“The claim succeeds. Defendant is accordingly ordered to pay plaintiff —

- (1) R585 928,86 as and for damages.
- (2) The qualifying fees of Messrs COMBRINK, BARKER, GRIFFITHS, MULCAHY, HARBUZ, VAN BENNEKOM, THOMSON, JACKSON and CONNOLLY.

- (3) Costs of suit, including the costs of two counsel."


C T HOWIE

HEFER JA)

ZULMAN JA)

CONCUR