

Tan Chong Realty Pte Ltd v Victory Industrial Co Pte Ltd  
[2000] SGHC 140

**Case Number** : Suit 2085/1998  
**Decision Date** : 13 July 2000  
**Tribunal/Court** : High Court  
**Coram** : Kan Ting Chiu J  
**Counsel Name(s)** : Chia Foon Yeow (Tan Peng Chin & Partners) for the plaintiffs; Sarbjit Singh Chopra with Kelvin Fong Kai Tong (Lim & Lim) for the defendants  
**Parties** : Tan Chong Realty Pte Ltd — Victory Industrial Co Pte Ltd

**JUDGMENT:**

**Grounds of Decision**

1. The plaintiff Tan Chong Realty Pte Ltd sued the defendants Victory Industrial Co Pte Ltd over the damage to the floor of a warehouse at 790 Upper Bukit Timah Road. The warehouse was constructed in 1986. The plaintiffs bought it in 1990 and leased it to the defendants in 1993.

2. The parties entered into a lease on 17 November 1993. The two provisions of the lease which featured in this action are the defendants covenants in clause 2(iv) -

To keep the interior of the demised premises including the flooring and interior plaster or other surface material or rendering on walls and ceilings and the Landlords fixtures therein including doors, windows, wires, installations and fittings in good an tenantable repair and condition (fair wear and tear expected).

and in clause 2(vii) (b)

Not to use the demised premised or any part thereof other than for the purpose of warehouse usage/light-manufacturing industries. Provided that the Tenant shall not, whether in connection with or for the purposes of the aforesaid use or otherwise:

a) ..

b) bring onto the demises any goods machinery or equipment with an imposed load in excess or 400 pounds per square foot.

3. The defendants occupied the premises from mid October 1993 to the end of 1997. They used the warehouse to store and process large cylindrical paper rolls, which were stacked on their sides like a stack of coins.

4. On 7 April, the plaintiffs maintenance manager Loe Marn Hong observed that there were major cracks on the floor along northen and north-western walls and observed that the floor at the north-western part of the warehouse had cracked and subsided.

5. The plaintiffs decided to engage an engineer to report on the cause of the damage. They appointed Bobby Ho Eng Hean, a professional engineer with 39 years of experience.

6. Mr Ho visited the premises on 9 April and 7 and 20 June and referred to a survey report by Anthony Lim & Associates before he submitted his report dated 30 July 1997 and an addendum thereto dated 23 April 1998.

7. Mr Ho stated in his report that the floor slab of the premises had suffered settlement damage which was most pronounced at the northern and north-western ends and he concluded that the damage was caused as a result of direct overloading in excess of the permitted load of 400 lb per square foot.

8. Mr Ho did not advise on the rectification of the damage he observed, perhaps because that was not sought. Instead, he suggested that to enable the premises to be leased out within the shortest time, the two areas of highest damage be removed and recast.

9. The defendants invited a firm of contractors, Quan Mei Design & Construction Pte Ltd, to put up a quotation for the rectification of the damage. They submitted a quotation dated 10 April, based on what their project directors observations at the site. The work envisaged the breakup and reconstruction of the whole floor for a price of \$314, 954.22. The work was not proceeded with because the plaintiffs decided to restrict the repairs to the areas of highest damage, perhaps with the benefit of Mr Hos suggestion.

10. Instead of laying a new floor, the contractors hacked off and relaid the north-western corner of the floor. They presented their invoice dated 26 June for \$28,659.75 and were paid.

11. The plaintiffs did not recast the entire floor because new tenants, namely Akai Freight Pte Ltd, were found. As Akai wanted to move in quite urgently, there was not enough time for the whole floor to be redone. The partial rectification was done instead, and Akai accepted the premises which they used for storage purposes.. Nevertheless their claim was for the cost of reconstructing the whole floor.

12. Mr Lee Chow Yoke, the plaintiffs service manager tried to justify the claim. He said "the potential for better use is definitely there. We can rent out to people actually doing printing jobs". In other words, although the premises were rented out as a warehouse after the partial rectification, the plaintiffs were proceeding on the basis that if the floor were perfect, the premises could be put to better use with higher returns to them. It was not the plaintiffs case that the premises in its current condition are not suitable for use as a warehouse; Akai was still renting it at the time of the hearing.

13. The plaintiffs claim was for the sum quoted by the contractors, or alternatively, for damages to be assessed, with no claim for the cost of the partial repairs. It was not their case that there was any diminution in the rental value or the warehouse, or that they had incurred in loss in rental income.

14. The defence can be summarised as firstly the defendants were not the lessees when the premises were handed back to the plaintiffs, secondly they did not overload the floor and thirdly the plaintiffs were estopped from complaining about overloading because they had not raised it before they commenced the action.

15. Before I came to a decision on the claim and the defence, I considered the following questions:

- (i) whether the defendants were the lessees,
- (ii) whether there was overloading,
- (iii) whether the plaintiffs were estopped from complaining of overloading,
- (iv) whether the overloading caused the damage,
- (v) whether the plaintiffs claim for the cost of rectification is justified, and
- (vi) whether damages should be assessed.

Whether the defendants were the lessees

16. The defendants did not dispute that they executed the lease of 17 November 1993. They claimed that there was a novation evidenced by their letter of 24 January 1995.

17. In this letter they informed the plaintiffs that

CHANGE OF COMPANY NAME FOR PAPER & PRINT DIVISION

With the effect from 1 January 1995, our Paper & Print Division under Victory Industrial Co Pte Ltd will be known as Victory Mfg Pte Ltd. Our address and contact number shall remain unchanged.

Kindly arrange all future correspondence and billings to our new company.

We appreciate your past support and look forward to further our business relationship for the years to come.

18. The defendants claimed that because the plaintiffs complied with the second paragraph of the letter and because Victory Manufacturing Pte Ltd was a distinct company from the defendants, the lease was novated.

19. Several factors militated against this argument -

(i) The defendants' letter was unclear on the status of Victory Manufacturing. The caption referred to a change of company name. The parties' subsequent conduct showed that they regarded that only as a change of name rather than a change of a party.

(ii) In an earlier action by the defendants against the plaintiffs in Suit No. 1315 of 1996 (subsequently converted to DC (T) Suit No. 1979 of 1997) they sued as "Victory Manufacturing Pte Ltd (formerly known as Victory Industrial Co Pte Ltd)". This showed that they themselves did not realise that Victory Manufacturing was a distinct company.

(iii) When the plaintiffs filed the present action, they originally named the defendants as "Victory Manufacturing Pte Ltd (formerly known as Victory Industrial Co Pte Ltd)", showing that they were as confused as the defendants were on this issue.

20. In these circumstances, it cannot be said that the parties had agreed to a novation of the lease.

*Whether there was overloading*

21. The plaintiffs called witnesses who had seen the paper rolls stacked in the warehouse. They were their former executive manager Angeline Ho, their maintenance manager Loe Mam Hong, and their former assistant manager Tan Ban Hock and their maintenance supervisor Tooh Ming Feng. They observed that the paper rolls were stacked high, their estimations ranged from 5 rolls to 6 or 7 rolls, to the level the roller shutters (4.6 m) and the tie-beam (5.8 m) of the warehouse, but none of them actually measured the heights of the stacks.

22. The defendants did not call any witnesses on this issue. One would have expected them to call the persons who stacked the rolls to explain how that was done, but they did not. Their managing director Yeo Eng Chong admitted that no guidelines were set to ensure against overloading.

23. There was a mute witness on this issue. The warehouse was illuminated by lamps hanging 5.4 m above the ground level. The defendants' expert witness, Philip Jones, a chartered structural engineer and chartered building surveyor, noticed that some lampshades were damaged. He found it likely that the damage was caused by the forklift at full extension hitting the lampshades whilst lifting and stacking the paper rolls.

24. Mr Jones was informed by the defendants that the maximum lift of the forklift was 4.35 m, and that the paper rolls were in widths of 635 mm and 788 mm. From this information he concluded that the forklift could stack the 788 mm rolls 5-high and the 635 mm rolls 6-high, and that the maximum load exerted by such stacks would be around 432 lbs per square foot, and he was of the view that the margin of overloading was insignificant.

25. He had assumed that the forklift carried each roll near the top of the roll. There was no evidence that they were lifted in that way. He agreed that if the rolls were lifted near their bases, they could be lifted higher and more rolls can be placed on a stack. Six rolls of 788 mm width will come up to 4.7 m and 7 rolls of 635 mm width will come up to 4.5 m. Mr Jones hypothesised, which I accept, was that the lampshades were hit when the topmost rolls were lifted up to be set down on the top of the stacks. If the stacks were only 5 or 6 rolls high, they would only have reached 3.9 m and 3.8 m, and it was less likely that the lampshades hanging 5.4 m above ground would be damaged in the stacking operations. When a stack is taller, the weight is greater, and Mr Jones' assessment of a load of 432 lb per square foot will no longer hold true.

26. I found that there was overloading by the defendants.

*Whether the plaintiffs were estopped from complaining of overloading*

27. Except for raising in their pleaded defence, the defendants did not make any serious effort to support this contention. I found no merit in it.

*Whether the overloading caused the damage*

28. The defendants appointed Philip Jones to study and report on the matter, and he subsequently submitted his report. He observed that the floor of the warehouse was formed by concrete slabs 6 m by 7 m which were non-suspended, which I understand to be that they were not built over any support. Mr Jones noticed that while the majority of the floor had settled, the area of greatest settlement was in an area where no paper rolls were stacked.

29. He made two findings-

(i) that the slab thickness of 150 mm specified in the quotation for the proposed reconstruction of the floor (and also the structural plan of the floor) was inadequate. He referred to a work he considered to be authoritative on the subject, *Deacons Concrete Ground Floors Their Design, Construction and Finish* which recommended slab thicknesses of 200 mm for weak subgrade and 175 mm for normal subgrade for industrial premises and warehouses, and

(ii) the differential settlement had been made worse because the north-western corner of the site appeared to be constructed on filled ground, which is by its

nature less compact than undisturbed soil and is prone to settle at a faster rate.

30. He attributed the damage to the poor design of the ground slabs and the poor condition of the soil, was of the view that the damage had occurred before the defendants took possession of the premises.

31. The plaintiffs expert Bobby Ho did not agree with him. In his report, he concluded that the damages was the result of direct overloading in excess of 400 lb per square foot.

32. Mr Ho was cross-examined at length by counsel for the defendants. Two areas of cross-examination were of particular significance, firstly whether the warehouse was constructed on filled ground or a cut ground, and secondly, whether the ground slabs were laid in accordance to the specifications in the structural plan.

33. When counsel for the defendant suggested to him that part of the site was filled ground meaning that the ground was raised by a layer of fill, he disagreed and said that it was a cut site created by removing some of the soil on the top.

34. Addressing the issue of ground strength, Mr Ho confirmed that "(f)or a non-suspended slab in designing the slab one must make sure that the soil must be sufficiently firm", and he went on to say "If I have weak soil, I will never design a non-suspended floor slab because the ground must settle when it is loaded. When we have weak soil condition one always design the floor as a suspended slab" and "(w)hen we design for non-suspended slabs, we dont normally design non-suspended slabs over weak soil, only on firm soil".

35. In the course of the proceedings, the parties agreed that a soil test be carried out to determine the soil condition. Soil & Foundation (Pte) Ltd was engaged to undertake the job. They made two bores adjacent to the warehouse, and noted in their report-

Based on the borehole data and the laboratory test results, the subsoil strata of the site are in a descending order as shown below:

1) Fill composed of firm clayey silt and loose silty sand which is surfaced with asphalt and premix base materials.

2) Kallang Formation Alluvial Member (Ka) composed of soft sandy clay with traces of gravel and peat, and loose to medium dense fine to coarse silty/clayey sand with gravels,

3) Residual Soils composed of firm to hard clayey/sandy silt,

4) Bedrocks of Bukit Timah Granite Formation.

Fill is about 1.0 to 1.5 m thick and is of SPT N-value of 9 at BH2 location.

Soft sandy clay of Kallang Formation Alluvial Member is about 0.5 to 2.0 m thick and is of SPT N-values ranging from 0 to 3.

36. When the borelog reports were produced, Mr Ho accepted that there was fill material and he added that SPT N values below 10 reflect soft ground. When asked to reconsider his evidence in the light of the test results, he conceded that "it would appear that the warehouse was founded on fill over its entire width".

37. The construction of the floor slabs also came under examination. The structural plan specified that dowel bars be incorporated in the slabs. The purpose of such bars is to spread load between the slabs.

38. The problem was that no dowel bars were sighted in the warehouse floor. The contractors who undertook the partial re-

casting of the floor made no mention of dowel bars, and did not provide for them in the areas that they cast. Mr Bobby Ho visited the warehouse after a 2-2.5 m strip of the floor along one side of the warehouse had been broken up. The dowel bars which the structural plan specified to be placed at 600 mm intervals between the slabs would be visible if they were there, but Mr Ho did not see any .

39. I found on the evidence that the floor was constructed without dowel bars. The omission of the bars which were on integral part of the slabs would have resulted in a weaker floor than the designers had envisaged. That in time would increase the likelihood and extent of settlement.

*Whether the plaintiffs quantification of the cost of rectification is justified*

40. The plaintiffs relied on the quotation they received from their contractors. They did not invite other contractors to quote and ensure that they get the best price available. They had not tried to bargain the quoted price down, or refer it to their engineers or consultants for comment. In these circumstances, it is easy to understand that the quotation has not been put to the plaintiffs board of directors for acceptance. Clearly, it was not a satisfactory basis for quantifying the cost of reconstructing the whole floor.

41. There are other questions - whether it was necessary to reconstruct whole floor, and whether it is proper to make the defendants pay for it.

42. The parties agreed to appoint an expert to report in the soil condition, and appointed Dr Wong Ing Hieng for that purpose. Dr Wong, a professional engineer with substantial experience in geotechnical and civil engineering, was furnished with the geotechnical report of Soil & Foundation Pte Ltd, on the basis of which he prepared his report.

43. Dr Wong said in his report that "(t)he upper strata of the Site are loose and the elastic moduli are correspondingly low. These soils are therefore likely to undergo immediate settlements (*sic*) the magnitude of which depends on the applied load." He went on and stated that after the initial process of immediate settlement, "all the strata at the Site contain significant amounts of fines and are therefore likely to undergo time dependent settlements (*sic*)". Dr Wong worked out these settlement figures on the basis of an applied load of 20 kN/m<sup>2</sup> (equipment to 400 lb per square foot) and the data from the two bores, and concluded that would be immediate settlement of 7.6 mm and further settlement of 54 mm at within half a year.

44. I do not know why the parties or the geotechnical engineers who did the tests sited the two bores outside south-east and north-west corners the warehouse rather than within it. This left a question whether the bore tests were truly representative because beneath the warehouse may have been compacted or prepared in other ways before the ground slabs were cast.

45. However, the parties had appointed and instructed the soil investigators together, they had to make do with the results obtained. It was well that they agreed to proceed on the basis that the results represented the general conditions of the soil below the warehouse near the respective boreholes.

46. Dr Wongs finding was that a part of the ground would have settled by more than 61 mm within six months under a load of 20 kN/m<sup>2</sup> or 400 lbs per square foot. Dr Wong was only briefed to take the maximum permissible load into account. Consequently, he did not consider the weight of the concrete slab itself and the layer of blinding of hardcore and sand below it. It is fair to infer that a concrete slab of between 155 mm and 190 mm and a layer of blinding of between 55 mm and 100 mm would add to the load on the soil and result in greater settlement.

47. The borehole logs show that Standard Penetration Test (SPT) readings. Mr Ho had explained that any SPT N-value below 10 is soft. The logs reviewed that the underlying ground was soft to a depth of 5 metres at the north-west corner of the site and a depth of 14 metres at the south-east corner of the site. The warehouse was evidently erected over soft ground.

48. Looking at all the evidence, I found that the plaintiffs had not proved that overloading alone caused the damage. It was not possible to decide with any degree of accuracy what damage the overloading caused in view of the other contributing facts of the weak ground and the defective slab construction. These were matters that cannot be resolved by an order for a hearing to assess damages. I felt that it was necessary to adopt a pragmatic approach to bring matters to a conclusion.

49. On the evidence, the warehouse was in a tenantable state when the defendants took possession, but it required the partial re-laying of the floor before it can be rented out after they left. After the repairs, the new tenants have moved in and remained on the premises without complaint. It would not be right that the defendants should have to pay for a new floor. On the other hand, the plaintiffs should be compensated for the loss incurred as a result of the overloading.

50. In view of the difficulty, if not impossibility of ascertaining the extent of damage and the degree of the defendants culpability two and a half years after the damage was discovered and repaired, I ordered that the defendants to pay the plaintiffs the \$28,659.75 expended on the repairs.

51. To my mind, this conclusion favoured the plaintiffs so far as it resolved their difficulty in discharging the onus on them to prove their loss. It was also fair to the defendants as it obviated the costs and effort of a hearing on damages. The defendants accepted my decision. The plaintiffs, who had their claim reduced from \$314,954.32 to \$28,659.75, are less pleased, and are appealing against it.

Kan Ting Chiu

Judge

Copyright © Government of Singapore.