IN THE KWAZULU-NATAL HIGH COURT, DURBAN

REPUBLIC OF SOUTH AFRICA

CASE NO. 4866/04

In the matter between:

FOIL LAMINATORS (PTY) LTD **PLAINTIFF**

and

EBISONS FURNITURE MANUFACTURERS CC **DEFENDANT**

JUDGMENT

VAN HEERDEN AJ

[1] The plaintiff in this matter is Foil Laminators CC, a close corporation which does business from its premises at Rana Road, Isipingo Rail, Durban, KwaZulu-Natal.

[2] The defendant is Ebisons Furniture Manufacturers CC, a close corporation which does business in Riverview Industrial Park, Verulam, KwaZulu-Natal.

[3] The mentioned entities were involved in a contractual business relationship with each other stretching back to the late 1990's. It came to an

end during or about December 2003 when an irresoluble dispute arose between them, which culminated in the present proceedings.

[4] I commence the background to these proceedings with a brief description of the nature of the parties' respective businesses. The plaintiff commenced trading in the middle 1980's when he acquired a laminating machine which applied, in a continues rolling process, pre-printed wood grain-design paper to raw particle board of various degrees of density, more commonly known as chipboard.

[5] The defendant, in turn, is a concern which manufactures, inter alia, furniture and coffins from the kind of product produced by the plaintiff.

[6] As already mentioned above, during the late 1990's the plaintiff and the defendant, through the driving forces behind these respective concerns, Mr Frans Meuwese for the plaintiff and Mr Schabir Ebrahim, for the defendant, started doing business with each other when the plaintiff commenced supplying the defendant with it's product, at the latter's instance and request.

[7] In the year 2000 the plaintiff pioneered the instillation of a new print line whereby a wood-grain design was printed directly onto raw particle board, the intention being to supply the customer with a superior product. In the past, the foil board by nature of the product had a very thin coating of lacquer on it whereas the paint print board accommodated a layer or coat which was scratch resistant and glossier in appearance. During or about the following

year the defendant was agreeable to substitute the old foil board it had been receiving from the plaintiff up to then with the new product.

[8] At all times during the contractual relationship between the parties, the plaintiff was aware thereof, and accepted the fact, that the defendant applied a so called lacquer layer to the product it received from the plaintiff, be it initially to the foil board or eventually to the paint print board, the sole purpose being to make the end product, with a more glossy finish, aesthetically pleasing to the defendant's customers.

[9] From time to time, during the relationship, problems were encountered with the product supplied by the plaintiff, but these problems were invariably addressed and resolved to the satisfaction of both parties. By way of example it is mentioned that in one instance the defendant complained about a slight colour variation in the product supplied by the plaintiff and in another instance the boards presented with a slightly uneven surface, a so called pitting problem. Mr Meuwese, on behalf of the plaintiff, explained that the colour variation was inevitable, although hardly noticeable, in that the raw boards received from the manufacturers are processed in batches in the plaintiff's factory, a batch being a run of boards produced on a specific day. He explained that one batch may very well differ to a negligible degree from another batch with the same design, due to external factors such as the ink used or a variation in the humidity. Mr Meuwese used the analogy of a lady knitting a jersey who makes sure she has sufficient wool when she starts because if she goes to the shop afterwards to buy the same colour she might

very well end up with a slight variation in colour because it comes from a different dye batch. The pitting problem, according to the defendant, was only an occasional defect in the product the plaintiff, in turn, received from its supplier, but was also at best hardly noticeable. In these instances, the plaintiff offered to substitute such boards and the defendant invariably understood the fact that the plaintiff was not to blame, and accepted such offer.

[10] In November, 2003, however, matters took a turn for the worst. The defendant ordered boards in the sum of approximately R140 000 from the plaintiff, which constituted a portion of a run or batch of boards the plaintiff was to produce on a given day, to comply with the defendant's order. The arrangement was that the plaintiff would keep the balance of the batch in stock for the defendant, the intention being to avoid the aforesaid possible colour discrepancy. It is common cause that the boards were urgently required by the defendant to comply with the demand for furniture over the festive season and that the boards so ordered were delivered to the defendant during the first two weeks of November.

[11] According to Mr Ebrahim, who gave evidence for the defendant at the time, the defendant without further ado commenced manufacturing furniture from the batch in question and delivered some of the finished product to a variety of furniture stores who, in turn, either displayed such furniture or took same into stock. The finished product not supplied to its customers the defendant took into stock, itself. Within a week or so, according to Mr

Ebrahim, some of the defendant's customers started complaining that the furniture it acquired was *"flaking"*, which simply turned out to mean that the coatings that covered the raw particle board were peeling off, leaving unsightly white patches. This prompted Mr Ebrahim to examine the manufactured furniture in defendant's stock where he noticed a similar problem. It was a significant problem. Such pieces of furniture which exhibited signs of flaking were totally unacceptable for trading purposes and some of the furniture stores, with justification, insisted on the defendant replacing such furniture. To exacerbate, if not confuse, the problem, but as an aside, the flaking problem coincided with a pitting problem the parties were also in the process of attending to, at the time.

[12] In the ensuing months the flaking problem resulted in a flurry of correspondence, initially between the respective parties themselves, and later on between their legal representatives. In short, the plaintiff blamed defendant for the problem and insisted on payment for the boards it delivered in November 2003. On the other hand the defendant, in turn, put the problem at the door of the plaintiff, refused to pay the bill for the boards so delivered, claiming that the entire batch was defective.

[13] Both parties felt fortified in their views of who was to blame for the flaking problems by expert advice they respectively received. On 12 November 2003 Technipaint Holdings advised plaintiff that defendant was in the wrong (exhibit C) and on 17 December 2003 a concern called Chemical

Specialities (Pty) Ltd t/a Chemspec, through their divisional technical manager J P Singh advised defendant that the plaintiff was in the wrong (exhibit A16).

[14] A stalemate was soon reached and this resulted in summons being issued by plaintiff in July 2004 for payment in the sum of R139 735.76 for goods sold and delivered. This sum takes into consideration certain credits passed in favour of the defendant in respect of boards presenting with a pitting problem during that time, in the sum of approximately R6000. 00.

[15] The defendant responded with a plea and a counter claim, in essence alleging that the paint print boards delivered to it were latently defective and not fit for its intended purpose. Its counter claim was for payment of R55 979.00 in respect of the losses it suffered in consequence.

[16] To the credit of both parties they continued their attempts to resolve the issue between them but, unfortunately, the more the experts on either side became involved in the matter the more inevitable a show-down in court became.

[17] At trial the only issue at stake was really whether the paint print boards delivered to the defendant during early November 2003 were defective or not. There are obviously a number of usual side issues but their fate is intrinsically interwoven with and related to the main issue.

[18] The determination of the main issue, again, needs to be approached

not in abstract isolation but, instead, within a certain context. The context being, and this has always been common cause, that the plaintiff was aware of, and accepted, the fact that the defendant applied a further coat of lacquer (varnish, paint) to the product delivered to it in order to give it a more glossy appearance. Thus, the product the plaintiff supplied to the defendant, apart from having to be free of defects, also needed to be able to accommodate, within reason, the extra coat applied to it by the defendant. The qualification of *"within reason"* is in turn obviously logical, as would become more apparent hereunder.

[19] Both the plaintiff and defendant called as their first witness their chief executive officer, the said Messrs Meuwese and Ebrahim, respectively. The value of their evidence was mainly to provide some background to the drama which eventually unfolded in court. I say so because it gradually became apparent during their testimony that neither of them possessed the technical knowledge to contribute meaningfully to the resolution of the main issue. Unfortunately, however, an inordinate amount of energy and time was spent in the examination of these witnesses in apparent attempts to show *mala fides* on their part. In my view very little success was achieved in this regard. The thrust of their evidence, insofar as it related to the main issue, was that the respective parties, had done nothing different to what had been done before. According to Mr Meuwese the plaintiff processed the raw product received from its supplier in exactly the same mechanical fashion it had done in the past. (I am not going to elaborate on the nature of this process and it will suffice to say at this stage that the process referred to is described in

more detail in paragraph 3 of exhibit F10). The defendant, in turn, used the same spray painter it had used for well over a decade to apply the final lacquer coat and, according to Mr Ebrahim, he had done nothing different to what he had always been doing in the past when no flaking problems were experienced by the defendant.

[20] Expert evidence was accordingly necessary to meaningfully address the issue in dispute.

[21] The plaintiff called as its expert Mr Patrick A Draper, a witness with impressive credentials and experience in point. Mr Draper became involved in the present dispute during January 2005 when Mr Meuwese secured his services to determine the cause of the flaking problem. At that stage Mr Meuwese placed at the disposal of Mr Draper a kist lid which the former had obtained from the defendant in November 2003, to illustrate the problem at hand. The lid eventually became exhibit 1. One side of the lid has a semi gloss finish. The other side is much more glossy and it is common cause that this is so because of an additional lacquer coating applied thereto by the defendant. The semi glossy side shows no sign of failure and appears to be well bonded. On the glossy side, however, the paint system applied to the particular board apparently failed to adhere properly thereto with some of it delaminating from the board, leaving a whitish substance on the board. Mr Draper explained in his evidence that a common test to determine the quality of paint adhesion is the so called cross hatch test which is performed with a cutter with a series of blades, set either one or two millimetres apart,

depending on the thickness of the coats on the test object. He explained that the test is performed by dragging the blades on the cutter in two passes, at right angles to each other, across the surface of the test object with sufficient force to pierce whatever coats had been applied to the surface of the test object. Adhesive tape is then affixed to the cut area and then withdrawn, pulling away any loose paint from the test area. The purpose of this is to determine the extent of the failure or, then, the strength of the adhesion. The result of the tests performed by Mr Draper, with a two millimetre spaced cutter, showed that the paint, without the top coat applied by Mr Ebrahim, exhibited very good adhesion whereas the side with the extra top coat thereon had extremely poor adhesion.

[22] The aforesaid result was, as already pointed out above, to a large extent not prejudicial to the defendant's case because the product supplied to the defendant was supposed to accommodate the defendant's lacquer coat, within reason of course. The question still to be answered was, accordingly, what caused the side with the extra top coat thereon to have such poor adhesion.

[23] Mr Draper testified that in order to determine the blade setting in a cross hatch test regard must be had to international standards which, according to him, specified that when coating on a test object goes beyond a certain thickness, more than at least 60 to 70 microns in total, a 2 millimetre setting is used and when less than that, a 1 millimetre setting. Mr Draper emphasised that non compliance with this universally accepted standard

would render the test results meaningless. Mr Draper ascertained from Mr Meuwese exactly what coats the plaintiff had applied to the particle board it received from its supplier. Mr Draper also obtained data in respect of the coats so applied. All of this information was gathered, according to Mr Draper, to determine the thickness of the various coats on the test object in order to make sure that the cross hatch tests are performed with the appropriate cutter.

According to such information Mr Draper determined that the coats consisted from bottom to top of, firstly, a 100% solids filler (UV putty) layer which was partially cured under ultra violet lamps. This was followed by a coat of sealer which was fully cured under UV lamps. This, in turn, was followed by two coats of water based paints which were dried by infra red lamps. The wood grain design (printing ink) was then applied in three coats and dried by infra red lamps. A final coat of 100% solid ultra violet resistant lacquer (the so called anti-scratch coat) was then applied and hardened using ultra violet lamps.

[24] Mr Draper testified that from the manufacturer's data sheets he was able to determine the so called dry film thickness of each of the coats, measured in microns (1/1000 of a millimetre). The thickness of the respective coats was as follows: The UV putty coat was 25 microns and the UV sealer 26.8 microns. The two base coats, together, were determined at 20.4 microns and the three coats of printing ink at 0.4 microns in total. The anti-scratch top coat was determined to be 20 microns. I should mention further that this

evidence was not at any stage seriously challenged. The various coats or layers applied by the plaintiff to the raw particle board was accordingly in excess of 90 microns which, according to Mr Draper, made it imperative for him to have performed the cross hatch tests on exhibit 1 with a cutter with a 2 mm blade spacing. Mr Draper testified further that he formed the view that the lacquer the defendant had applied to the product was somehow the cause of the failure and he accordingly thought it advisable to find out more about such lacquer. He then proceeded to obtain a data sheet concerning the product from its producer Chemical Specialities (Pty) Ltd ("Chemspec"), which also happened to be the direct supplier of the lacquer to the defendant. From the information contained in the data sheet so supplied (exhibit K), Mr Draper ascertained that the recommended dry film thickness of the lacquer, once applied, should be no thicker than approximately 45 microns. Mr Draper emphasised that it was in his view important to follow this recommendation, especially when one paint (lacquer) is applied on top of another, such as was the case in the present instance.

[26] Mr Draper thereupon caused samples that flaked off exhibit 1 to be submitted to the appropriate department of the University of Pietermaritzburg, for the edges thereof to be photographed on an electron microscope. The purpose was to precisely identify the different coats applied to the particle board, but more specifically to determine the thickness of the final coat of lacquer thereon. Once the images were made available to Mr Draper (scans 1-4, exhibit F page 20) he testified that he was able to measure the thickness of such lacquer coat by having regard to one of these scans. By doing so he

determined its thickness to be 78.5 microns, which is almost twice the thickness recommended in Chemspec's data sheet. According to Mr Draper the dry film thickness of this top coat was excessive and was in all probability the cause of the failure which resulted in delamination. He explained that as long as the forces of the newly applied paint are less than the inherent strength of the paints beneath it, one would not experience failure. However, when it was more than that then failure would occur at the weakest link which was, in the present instance, in between the base coats applied by the plaintiff. Hence the whitish surface appearance where flaking had occurred. He explained further that two major forces are exerted by newly applied paint, such as the lacquer applied by the defendant. He mentioned that such lacquer once applied, dries and cures. He explained that when it dries the paint loses solvents and sets hard. When it cures, a chemical reaction causes it to set hard. He explained further that the solvent present in the defendant's paint was thinners which made the paint useable and enabled the defendant's spray painter to spray it onto surfaces. Thus, shrinkage would be caused by two forces and the thicker the paint the stronger the forces and the longer the solvents would remain in the product. Mr Draper explained that a strong solvent will attack the paint underneath it, and soften it. Thus, according to Mr Draper, the thicker the paint the longer the solvent hangs around and the more damage it can potentially do. Mr Draper emphasised that the layer of lacquer applied by the defendant at a thickness of 78.5 microns was almost four times as thick as the anti-scratch coat (20 microns) applied by the plaintiff and over and above this, it contained strong solvents as well. According to Mr Draper the original coat was because of the

aforesaid reasons unable to resist the stresses of the lacquer applied by the defendant, and failure occurred. Mr Draper warned further that the volume of catalysts and thinners which are added to paint should be accurately and carefully proportioned otherwise it could change the rate at which it cures. He added that this function is often left to a spray painter who might not be as careful as he should be when mixing in the proportions. Mr Draper also mentioned that weather conditions might very well play a role and, if not properly controlled, could affect quality.

[26] All of the aforegoing led Mr Draper to conclude that the adhesion (bonding of the coats the plaintiff applied to the substrate of the boards) and the cohesion (the bonding of the various coats applied by the plaintiff to each other) were sufficient to prevent failure. According to him this was confirmed and illustrated by the cross hatch tests he had performed on Exhibit 1. It was only once the final lacquer coat was applied by the defendant, way in excess of the recommended thickness, that failure occurred with the resultant flaking taking place. And this, he explained, happened because of the operation of the forces, alluded to above.

[27] Mr Draper testified further that his views as to what was causing the failure was fortified when he examined a number of flaking boards at the premises of the defendant on 11 May 2005, at a meeting arranged for that purpose by the legal representatives of the respective parties. Invariably, so Mr Draper determined at this meeting, the side of the boards lacquered by the defendant failed as opposed to those not lacquered by the latter. The

exception was an off-cut taken from a door of a side pedestal of a headboard, which showed no evidence of flaking, notwithstanding having been coated by the defendant. It consisted of a top piece which was superimposed in a decorative fashion onto a bottom piece. It was alleged at the time by representatives of the defendant that the said top piece was from a batch different to the one complained about. Photographs of this piece, which was tested by Mr Draper, appear as plate 9 on page 24 of exhibit F. This piece and more specifically further off-cuts from it, feature prominently later in this judgment as exhibit 3 (A),(B) and (C), and as exhibit 6. What is further relevant in relation to this meeting is that Mr Ebrahim advised Mr Draper thereat that the defendant was not in possession of any other unconverted board that showed signs of flaking. It is within this context that I mention that Mr Ebrahim later on testified that at the time the aforesaid meeting was taking place he was in possession of large quantities of unconverted board, such as is reflected in exhibit E. The logical conclusion therefore being that the unconverted board the defendant still had left in stock (i.e. boards that had not yet been lacquered by the defendant) at the time of the said meeting did not show any signs of flaking.

[28] In May 2009 Mr Draper repeated the Pietermaritzburg University tests for reasons which are irrelevant for present purposes. This time he did so on the electron microscope at the University of Natal, Durban. He testified that he was present and participated when four, what he terms as photomicrographs, were produced of the edge of paint flakes which originated from exhibit 1. Mr Draper emphasised that special care was taken to

orientate the edge of the flakes in question so that it was 90˚ to the lens of the electron microscope. He testified that the results of this more in depth study confirmed the findings of his previous studies namely that the anti-scratch top coat applied by the plaintiff was substantially at the film thickness calculated by him in his original report (exhibit F11) and the coat applied by the defendant was up to two times the recommended dry film thickness and up to four times the thickness of the anti-scratch coat. The said test results were, of course, substantiated by the said photo images which, in turn, defined and outlined the various coats clearly, more particularly the plaintiff's anti-scratch layer and the defendant's lacquer coat.

[29] During the cross-examination of Mr Meuwese, the said side pedestal door, alluded to above, featured prominently. When the matter became part heard it was decided by the parties to cut this door in half so as to enable each parties to carry out tests thereon, and to report back to court on their findings. It would be remembered that this pedestal door showed no signs of flaking, neither on the top part which was according to the defendant not of the alleged contaminated batch, nor on the bottom part. Mr Draper was more interested in subjecting the bottom part to tests as he had already, on 11 May 2005, conducted a series of cross hatch tests on the top part with a cutter with a 2 millimetre blade setting. In order to properly carry out the present test Mr Draper removed the top part from the bottom part and the former eventually surfaced in these proceedings as exhibit 3C. From the bottom piece he separated a further piece which eventually became exhibit 3B. From exhibit 3B Mr Draper removed three samples on which further tests were conducted

by him in order to determine the film thickness of the top coat applied by defendant. Again, as a result of photomicrographs taken on the said electron microscope, Mr Draper was able to distinguish the dividing line between the two top layers and was accordingly in a position to measure the dry film thickness of the defendant's top coat to be on average 45 microns.

[30] From the results of all the tests he conducted Mr Draper formed the view that in those instances where the final coat of lacquer applied by the defendant did not result in subsequent delamitation it was applied significantly less thickly than the final coats which did result in failure.

[31] The defendant presented as his first expert Mr Yogesh Chauhan, a witness with an equally impressive curriculum vitae. Mr Chauhan is employed at BMW South Africa, at its central laboratories in Pretoria. Mr Chauhan who impressed me with his demeanour was, however, quick to concede that his expertise in paint systems was largely based in the automotive industry and that he was not really familiar with paint print board of the type that features in the present matter. He conceded further that he had not up to then dealt with paint failures on wood, generally, and that the substrate of metal, which one encounters in the motor industry, obviously differs in nature to that found in the wood industry, in so far as it relates to paint systems.

[32] Mr Chauhan became involved in this matter early in March 2006 when he received from the defendant, via the SABS, various converted as well as unconverted boards for microtome sectioning and evaluation, in order to

establish where or rather in which coat, failure occurred. As it happened, what was presented to Mr Chauhan for evaluation was a board with a light oak colour that showed signs of failure and a board with a dark oak colour that showed no such signs. He explained that with the use of the microtome he made a flat cut through samples of the board so supplied to him so that the samples could be used in an optical microscope. He testified that the purpose of microtome sectioning was to produce a clean and uncontaminated flat surface for viewing purposes under magnification in an optical microscope. The desired images were then digitally recorded from the microscope.

[34] According to Mr Chauhan the results gathered from the sectioned samples showed that all the failed samples had a distinctive putty layer present which was not evident in the *"good"* samples. From this Mr Chauhan concluded that delamination (flaking) occurred on the putty layer of those samples where there was failure and on those samples which exhibited no sign of failure there was no visible putty layer. So, he reasoned in his evidence, the putty layer was the culprit that caused failure. Later on, in his reports, Mr Chauhan started referring to the putty layer as *"the white layer"* after it was pointed out to him that, as a matter of fact, delamination did not occur in the putty layer.

[34] Appropos his further observations Mr Chauhan conceded that in the digitally recorded pictures of the aforesaid microtomed sections it was difficult to distinguish the dividing line between the plaintiff's anti-scratch coat and the defendant's lacquer layer. He also conceded that it was difficult for him to

identify the different print layers. I must say, having had regard to the said pictures of the microtomed sections, myself, I found it extremely difficult to identify and distinguish such layers, at all. In this regard I refer to figures 3 - 7 on pages 102 -105 of exhibit F.

[35] After his first court appearance Mr Chauhan was again called upon to microtome section two. Further samples placed at his disposal in order to identify the different coats thereon, and the dry film thickness of the coats. Once again these samples were taken from the side pedestal door of the said headboard, one sample from the top piece and the other from the bottom piece. At this stage I pause to mention that the top piece of the pedestal board, which was as I indicated superimposed onto the bottom piece, was of a high density chipboard. Mr Chauhan described it as *"supa wood"*. The bottom piece consisted of normal chipboard, of a lesser density. Both boards, and thus both samples, were coated by the defendant and showed no signs of flaking, as already pointed out above. Mr Chauhan followed exactly the same routine in preparing the samples and ultimately recording the images digitally under an optical microscope. He testified that he was able to distinguish in each sample only four layers which were, from bottom to top: a filler layer, which he noticed was applied directly to the wood substrate, followed by a white layer, and then the plaintiff's anti-scratch layer followed by the defendant's final lacquer coating. He recorded these findings in exhibit J. Mr Chauhan pointed out that both samples exhibited the same layers, including the distinctive white layer (which Mr Chauhan in his previous report described as the putty layer). He, however, pointed out that the white layer in the

chipboard sample was noticeably variable, whereas in comparison, the supa wood sample showed this layer to be more consistent. From this he then concluded that the variable white layer, being the only feature that was consistent with delamination failure, was therefore directly related to and responsible for the failures.

[36] In cross-examination it was pointed out to Mr Chauhan, and he correctly conceded, that his first report which attributed the failure exclusively to the presence of the white layer was inconsistent with his second report which attributed the failure not to the presence of the white layer but rather to a variable white layer. When it was further pointed out to Mr Chauhan that the board with the inconsistent white layer had been coated by the defendant and that, as a matter of fact, it had not flaked or delaminated, he attempted to explain as follows:

> *"Now, you see, there could be different degrees of failure. It could be that the board could not be quite as resistant to failure as another board, for example, without the white layer, but it just hasn't failed or gone to the extent of failure yet".*

When it was pointed out to him that the board in question was manufactured in 2003 and that it was now 2009 and that there was still no failure he answered as follows:

"Well I don't know whether this actual sample did fail or not but I would say that it has the potential …"

Later on he said the following:

"But it could be that they won't flake at all, but the adhesive properties are not as strong as another board without the white layer, for instance".

I must say that I do not find this reasoning to be very compelling having regard to especially the lapse of time and the fact that flaking has still not occurred.

[37] Mr Chauhan also conceded, significantly, that the purpose of his examination was not to determine the causes of failure but rather where, in relation to the coats, failure did occur. At this stage it is perhaps apposite to mention that Mr Chauhan's version as to where failure occurred was not inconsistent with Mr Draper's finding in this regard, namely in the so-called base coats.

[38] Mr Chauhan was also mandated to measure the dry film thickness of the various coats in respect of the said two samples, especially those of the final two coats applied thereon by the plaintiff and defendant respectively. This mandate was similar to the one Mr Draper received. The two gentlemen received such instructions because, at the time, it had become apparent that

the film thickness of especially the last coat of lacquer applied thereon by the defendant might very well turn out to be of significant importance. The results of Mr Chauhan's measurements are contained in his report, exhibit J. In respect of the supa wood sample (the top piece) Mr Chauhan found the thickness of the plaintiff's scratch resistant coat to be between 4 - 6 microns and that of the defendant's lacquer coat to be 55 microns. In respect of the chipboard bottom sample his findings were that the plaintiff's anti-scratch coat was between 2 and 10 microns thick and that of the defendant's lacquer layer 65 microns. The contention was accordingly advanced on behalf of the defendant that this result puts paid to Mr Draper's contention, in turn, that where the defendant's final lacquer coat exceeded the recommended thickness of ±40 microns failure would occur. In this regard it is to be remembered that Mr Draper contended that, as far as the bottom piece was concerned, failure did not occur because on average the defendant's lacquer coat was applied at a thickness, on average, of 45 microns, thus, within the said recommended range of approximately 40 microns. The different results achieved in the measurements of the two top coats by Mr Draper and Mr Chauhan are, obviously, striking and significant and it is also obvious that such results cannot co-exist. It is accordingly necessary to decide which set of results is to be preferred.

[39] I must say that on the probabilities I consider the measurements taken by Mr Draper to be significantly more accurate and reliable than those taken by Mr Chauhan. I hold this view for the following reasons:

(a) Mr Draper was able to determine, independently from his own measurements, that the dry film thickness of the plaintiff's anti-scratch layer had to be approximately 20 microns by having regard to the solids content and density of the paint, as obtained from its manufacturer's datasheet, read together with the application quantities obtained from the plaintiff's records.

(b) The correctness of the aforesaid thickness was repeatedly confirmed in a variety of samples he tested and measured on two different electron microscopes. The probabilities are remote that all the aforesaid results would be precisely incorrect.

(c) Mr Chauhan's criticism of Mr Draper's measurements was that on the electron microscope the photographs of the edge of the flake had to be at exactly the right angles to the camera lens failing which there would be some distortion which could negatively affect the subsequent measurements. He expressed doubts on whether Mr Draper got it exactly right. Mr Draper however testified that he was alive to this requirement and that he took special care to get the angle just right. In any event, again, it is unlikely in the extreme that the angle in question would have been exactly wrong on each occasion the same measurement was achieved by Mr Draper.

(d) Then, most importantly, it is patently obvious to the naked eye that the photographs taken by Mr Chauhan, and I refer to those in exhibit F page 103 - 105 and exhibit J page 3 - 4, do not even begin to clearly distinguish the dividing lines between the

different coats applied by the plaintiff and the coat applied by the defendant. The same cannot be said of the photographs produced by the plaintiff. In the result Mr Draper had an infinitely better outlined or demarcated subject to measure than Mr Chauhan. This was obviously conducive to a more accurate measurement.

(e) Also, in the appropriate instances, the aggregate of the measurements taken by Mr Draper of the plaintiff's last coat together with the defendant's coat is for all practical purposes the same as the aggregate of the said two coats measured by Mr Chauhan. This in my view, effectively nullifies the contention of a possible incorrect angle to the camera lens, as contended for by Mr Chauhan.

(f) The tests and measurements performed by Mr Draper covered a wide range of samples whereas Mr Chauhan's was effectively confined to one sample.

(g) What was more, the last mentioned sample which, on the defendant's version, ought to have shown signs of flaking because of the varying or inconsistent white line did, as a matter of fact, not flake and Mr Chauhan's explanation as to why this did not happen was not very convincing.

[40] At the end of the day the only significant differences in the respective testimonies of Messrs Draper and Chauhan related to results of the aforesaid measurements and to the possible causes for the failures. In respect of the

latter Mr Chauhan's evidence, as pointed out above, was speculative, without substance and thus unsatisfactory. Otherwise, their views were similar on a number of crucial aspects, inter alia:

(a) Where the failures occurred.

(b) Mr Chauhan and Mr Draper agreed on the latter's view on the factors that could lead to or cause failure, such as set out in paragraph 3 of Mr Draper's report, exhibit F page 17.

(c) That the cross hatch test ought to be performed with a cutter with a correct blade setting, failing which the results would be meaningless.

[41] Mr Jeewan Singh was the other expert witness called by the defendant. He obtained a BSC degree at the University of Durban – Westville and is currently employed at Chemspec as its divisional technical manager. He testified that it is in this capacity that he, inter alia, manages and controls research and development and the quality control laboratories. Chemspek is of course the company which supplied the defendant with the acid-catalyzed lacquer which was used by the latter to give their products its final glossy coat. It is also of course this final coat which, according to the defendant, triggered the flaking problem.

[42] Mr Singh became involved in the matter when, in December 2003, the defendant requested him to test an off cut from a door manufactured from the product supplied by the Plaintiff. Mr Singh's report back to the defendant,

dated 17 December 2003, was rather terse, simply saying that the board *"fails the cross hatch test, prior to us coating it with our acid-catalyzed lacquer".* I pause to mention that it was this report that caused the defendant to refuse to pay the plaintiff for the last batch of boards and to tender the return of those boards not used and it was this report which ultimately set in motion these proceedings.

[43] The very same off cut surfaced again at the said meeting on 11 May 2005 when and where it was dated and signed by the legal representatives of the respective parties.

[44] The said off cut finally became exhibit 4 in these proceedings and the test carried out on it by Mr Singh was there, for all to see. It was a cross hatch test performed with a cutter with a 1 millimetre setting (which according to Mr Draper exerts approximately ten times more stress on the subject matter than would be the case where the test was performed with a 2 millimetre setting). The result was nevertheless, obviously, not a failure. When confronted with this in cross-examination Mr Singh's response was simply that it was a matter of opinion whether the test was a failure or not. In my view, a less than satisfactory response. What was more, Mr Singh failed to mention in his, what turned out to be, vital report that after he had applied coatings of varying thicknesses to the board in question failures occurred in each instance, albeit that the tests were also performed with a 1 millimetre set instrument.

[45] As it were, of course, if not common cause, then it was at no stage seriously disputed by anyone that the aggregate of the coats applied by the plaintiff to his product exceeded a film thickness of 60 microns and when a final coat of lacquer was applied thereto by the defendant it exceeded 60 microns, by far. In such circumstances both Mr Draper and Mr Chauhan were adamant that for a valid cross hatch test to be performed an instrument with a 2 millimetre blade setting was a must failing which, the tests would have no value. According to both of them this was an internationally accepted standard. It was pointed out that, even the procedures laid down for a cross hatch test, as it appears under Mr Singh signature in the written Chemspec specifications (paragraph 4.3 of Annexure I), require this. Yet, Mr Singh stubbornly persisted with the argument that it was of no consequence whether a one or two millimetre blade setting was used when conducting a cross hatch tests.

[46] When the matter was adjourned Mr Singh was instructed by the defendant to do certain further tests. What was placed at his disposal for this purpose was an off cut of the already mentioned door of the side pedestal of the headboard that comprised the said bottom piece with the decorative top piece affixed thereto. This panel,so placed at Mr Singh's disposal, became exhibit 6 in these proceedings. It will be remembered that the door, and naturally the off cut (panel) as well, showed no signs of flaking. In cross-examination Mr Singh confirmed that exhibit 6 was the exact panel he received for testing purposes. According to Mr Singh he performed two kinds

of tests on this panel namely cross hatch adhesion tests and full cure tests (so called MEK rubs). I will refer firstly to the results of the cross hatch tests.

[47] According to Mr Singh he performed a one millimetre cross hatch test on the bottom piece of exhibit 6 because he was told the bottom part was the piece that failed and that he had to test the bonding qualities of this piece. He testified that the test resulted in a total failure. This is reflected on exhibit 6 where the test result is marked with an "x". Mr Singh testified that he *"out of curiosity"* also performed cross hatch tests on the top piece. Initially he attempted to do so with a cutter with a 1 millimetre blade setting but, according to Mr Singh, having tried twice he was unable to score proper scribes on the surface of the top piece because the blades of the instrument had become so blunt that he was forced to change over to a cutter with a 2 millimetre blade setting. He testified that with the latter instrument he performed two cross hatch tests on the top piece with none of them resulting in failure. He confirmed specifically that he, personally, performed the last mentioned cross hatch tests and in this regard referred the court to the black adhesive tape he used (as opposed to clear tape used by Mr. Draper) that was still stuck next to one of the test results. Asked why he did not simply use another cutter with also a 1 millimetre blade spacing to do such tests he explained that Chemspec at the time did not have another one in stock. He explained further that they had to order one from overseas and that same duly arrived well after the said tests had been performed. It was then pointed out to Mr Singh, in cross examination, that the scribes of the cross hatch test immediately adjacent to which Mr Singh's black adhesive tape was stuck had

indeed dragged over onto a panel from which exhibit 6 had been cut, before exhibit 6 had been handed to Mr Singh for testing purposes. It was also pointed out to him that this panel, which still reflects the scribe marks which had been so dragged over, had at all times material been in possession of Mr Draper and had never been in possession of Mr Singh, at any time. This contention was never challenged and appeared to be common cause. The piece in question was handed up to court as exhibit 3. When faced with this anomaly, and more specifically that, as a matter of fact, he could accordingly not have performed the 2 millimetre cross hatch test next to which the black tape was stuck on the top piece of exhibit 6, he simply replied that he could not explain it. When it was further pointed out to him that it was in fact Mr Draper who also performed the other 2 millimetre cross-hatch test on the top piece of exhibit 6, Mr Singh readily conceded this. All of this of course, to say the least, puts a different slant on Mr Singh's explanation as to why he had to change from a one millimetre to a two millimetre spaced instrument when performing the cross-hatch tests on exhibit 6 and also to his explanation as to the so-called non-availability of another one millimetre instrument and the so-called order which had to be placed for this instrument.

[48] According to Mr Singh he also performed MEK rubs on both the bottom and top pieces of exhibit 6. He testified as follows in this regard: *"Now one of the tests we do to test for cure of UV lacquer, because we are producers of UV lacquer as well, is to check for MEK rubs, and MEK rubs would determine whether the product has fully cured or not".* He then concluded, as a result of the failures of the MEK rubs, that the plaintiff's mercury lamps which assist in

the curing process of the UV anti-scratch lacquer layer which the plaintiff applied, may have needed to be replaced, or even that the lacquer itself may have been too old, *"because it normally has a three months shelf live from date of manufacture"*.

[49] The problem I have with such evidence is that the scenario of old mercury lamps or old lacquer had never been put to Mr Meuwese in cross-examinations with any force of conviction, or at all. In the end no substance was added to the suggestion that either old mercury lamps or old lacquer was the cause of all the problems and in my view this suggestion, in the end, translated to nothing more than sheer speculation.

[50] Dealing further with Mr Singh's evidence on the MEK rubs he performed, Mr Draper testified that for the MEK rub to have any validity, it had to be relevant to the product being tested. He testified in this regard that nothing had been disclosed in evidence which gave him reason to believe that the MEK rub performed by Mr Singh was somehow relevant or linked to the final anti-scratch coat applied by the plaintiff. Mr Draper pointed out, by way of illustration, that the glossy lacquer layer applied by the defendant to the product was for instance not MEK rub resistant. Indeed if one goes ahead and examines Mr Singh's evidence it appears that he did not carry out any investigations to determine whether the anti-scratch layer was MEK rub resistant or not. Significantly also, Mr Singh failed to explain how it came about that the top piece of exhibit 6 failed the MEK rub test, but not the cross

hatch tests he performed thereon. To me this seems like contradictory results.

[51] Mr Singh conducted a further test on a panel which was not converted by defendant and which was handed up in court as exhibit 5. It was a cross-hatch test performed with a cutter with a 2 millimetre blade setting. According to Mr Singh the result of the test was total failure. Mr Singh testified that he specifically called for an uncoated (by the defendant) panel because both pieces of exhibit 6 had been coated by defendant and he wished to test a panel that was not so coated. The problem was that neither he nor the legal representatives of the defendant told anyone about the panel or of the test to be carried out thereon. Apart from the lack of professional etiquette in this regard it also deprived the plaintiff of the opportunity of testing the panel itself in preparation for trial. Hence, when the panel was introduced and Mr Singh sought to give evidence thereon the plaintiff's legal representatives were obviously surprised by the development and objected to it's introduction. Those representing the defendant countered the objection by alleging that the plaintiff had been forewarned of this development, albeit by implication, by the contents of the report compiled by Mr Singh pursuant to the tests he performed subsequent to the last adjournment. The allegation being that the contents of the report should be read as not only referring to the tests done on exhibit 6 but also to those performed on exhibit 5. Mr Singh confirmed this contention in his evidence. The situation called for an immediate ruling and I ruled in favour of the defendant. This was subject to the qualification that the plaintiff would be allowed, should the need arise, to present further evidence

on specifically exhibit 5. As it were, this ruling was wrong. Having now had the opportunity to contemplate the contents of exhibit I it is patently obvious that it refers only to exhibit 6 and not to exhibit 5, as well. The wording of exhibit I makes mention of the fact that Mr Singh was requested to do tests *"on a panel supplied to Chem Spek which was signed by both attorneys …"* It is common cause that exhibit 5 was not signed at all. The report then mentions that cross-hatch tests and full cure tests *"were conducted on the panel provided"*. It is it then mentioned that the adhesion test and the MEK rubs failed on both the coated and uncoated sections. The point being made by Mr Singh and those representing him that exhibit 6 was coated all over and did not have an uncoated section, therefore the reference having been made of tests being conducted on the uncoated section had to be, and was in fact, a reference to exhibit 5. However, the fact is that no MEK rubs were performed on exhibit 5. It is accordingly clear that Mr Singh in his report was only dealing with exhibit 6 and when he refers to MEK rubs he refers to those performed on exhibit 6. He obviously, mistakenly, thought at the time of compiling the report (exhibit I) that one of the MEK rubs was performed on an uncoated section of exhibit 6.

[52] In any event, exhibit 5 came before court and Mr Singh's evidence was that the uncoated section thereof failed a cross-hatch test performed with a cutter with a 2 millimetre blade setting. Asked why a 2 millimetre blade setting was used Mr Singh advised that the instrument with the blunt 1 millimetre blade setting had not yet been replaced at the time. When it was pointed out to him that the test result rather indicated a failure of the substrate, the

implication being that the instrument was used with too much force, Mr Singh responded that the test was carried out by a person of small stature and that it was unlikely that, this being so, too much force could have been used. I pause to mention at this stage that it was the uncontested evidence of both Mr Draper and Mr Chauhan that the result of cross-hatch tests could be manipulated by using excessive force. Be that as it may, to me it seems improbable that a person trusted by Mr Singh to conduct a cross-hatch test would be too small in stature and therefor physically too weak to exert sufficient force to cause the blades of the cutter to penetrate to the substrate. In any event, just by looking at the result of the test performed on exhibit 5 it is abundantly clear that the substrate was penetrated.

[53] Due regard being had to the evidence given by Mr Singh I have no hesitation in rejecting everything he said which came into conflict with other evidence presented in court. I say so because of, inter alia, the following reasons:

(a) He was untruthfull about having performed cross-hatch tests with a 2 millimetre spaced cutter head on exhibit 6.

(b) He was untruthfull when motivating the reason why he used a cutter with such spacing on exhibit 6.

(c) He was less than candid when he said that exhibit I should be read as if to refer to exhibit 5, as well.

(d) He attempted, in a dishonest manner, to mislead the court into believing that the test on exhibit 5 produced a valid result when clearly excessive pressure was used to cut into the substrate in

clear contradiction of the procedures he, himself, under his own signature, laid down in paragraph 4.2 of an internal chemspec document attached to annexure I.

(e) He was untruthfull when he attempted to mislead this court into believing that it is of no consequence whether a 1 millimetre or 2 millimetre spaced cutter head is used. And when he attempted to justify his evidence, when confronted in this regard, he rambled on in an incoherent fashion.

(f) He lied when he attempted to mislead the court into believing that it is of no consequence if the recommended dry film thickness of ±40 microns is exceeded in respect of the wood line lacquers in question (as recommended in exhibit K) and when taxed on this, he likewise was unable to make sense.

[54] Mr Singh's evidence not only failed to contribute, at all, to the defendant's case but indeed cast a shadow over the integrity of the whole of the defendant's case.

[55] In the final analysis, in so far as the experts are concerned, I cannot but prefer the evidence of Mr Draper, by a wide margin, to the expert evidence presented by the defendant. Mr Draper's evidence was presented in a simple and cogent manner; it was well motivated and substantiated and had the ring of truth about it. Directly the opposite must be said of Mr Singh. Mr Chauhan tried his best. He is no doubt a man of integrity and adminarably qualified but not in the appropriate field. It also did not help the defendant's

case by having given Mr Chauhan limited instructions i.e. not requiring him to determine the cause of the flaking.

[56] The defendant called two further witnesses. Firstly a Mr Stewart Strachan who had been employed by the plaintiff at the time the subject matter of this trial was conceived, but whose employment was terminated shortly thereafter, under suspicious circumstances. Their allegations were that he had been less than truthful about certain matters concerning the perks he enjoyed in terms of his employment, the details of which are irrelevant for present purposes. In any event one of the high water marks of Mr Strachan's evidence was that flaking had taken place on boards yet to be coated by the defendant; that Mr Ebrahim had complained to him about the problem and that he had personally observed such flaking boards pursuant to such complaints. However, such evidence is at right angles with the evidence of Mr Ebrahim in this regard. The latter testified that the first time he became aware of the flaking problem was when his customers started complaining about manufactured furniture, already sold and delivered to them. It is further common cause that at the meeting on 11 May 2005 Mr Ebrahim was unable to produce any board not yet converted by the defendant, that exhibited signs of flaking. Indeed no such uncoated flaking piece found its way into court as an exhibit. I think it is safe to assume that had there existed such a piece it would no doubt have been an exhibit in this court. I must therefore conclude that Mr Strachan's evidence in this regard is not entirely accurate. The other high water mark in his evidence was that other customers of the plaintiff, more notably AVBOB and RIP, also experienced flaking problems with the plaintiff's

products. I have a number of problems with this contention, as well. Firstly, it was Mr Ebrahim's evidence that the flaking problems he experienced with the product supplied to him by the plaintiff was confined exclusively to the last batch of boards. Then, again, it was the unchallenged evidence of Mr Meuwese that the batch of boards in question was produced specifically for the defendant and that those boards of the batch not yet delivered to the defendant were being kept in stock for it. So, I think it is reasonable to assume that if AVBOB and RIP had also been experiencing flaking problems then that must have occurred in respect of another batch or batches of boards. If that was so, then it follows that Mr Ebrahim would also have experienced such problems, the plaintiff being his sole supplier of wood grain boards on a consistent basis. But that was not the evidence of Mr Ebrahim. Then, also, the allegation having being made by a witness called by the defendant that AVBOD and RIP experienced flaking problems, it was necessary for the defendant to substantiate such an allegation by calling a representative of these entities to confirm this. But it wasn't done. In the end I am constrained to find on the probabilities that there simply is no merit in Mr Strachan's evidence in respect of the above mentioned matters.

[57] The defendant's last witness was a Mr Allen Ferreira who is employed by Chemspec as its technical sales manager, in Gauteng. He testified that he *"looked after"* the wood finish division of the company. Mr Ferreira was not qualified as an expert in terms of the rules and Mr Combrink, who appeared for the plaintiff, quite correctly objected to any opinion sought to be ventured by Mr Ferreira. Nevertheless an opinion or two from Mr Ferreira did find its

way into his evidence, but I will disregard same for the purposes of this judgment. The so called factual evidence given by Mr Ferreira was that customers of theirs in Gauteng, in order to achieve a high gloss finish, applied lacquer to chip board *"much like the ones seen in this court"* (referring to the exhibits) well in excess of what he referred to as only a guideline laid down by Chemspec. He indicated that such customers often went on applying coat after coat of lacquer until they reached a dry film thickness of up to 250 microns. Mr Ferreira, however, did not explain the obvious, namely why Chemspec would determine a 40 micron film thickness guideline in respect of its wood line lacquer product if it could be applied at up to six times that thickness, without any apparent negative results. To me it would appear that such a meaningless guideline would be counter productive in a business where Chemspec would naturally want to sell as much of their product as possible. Mr Ferreira, in an attempt to justify or substantiate his aforesaid evidence, made mention of the procedures the customers to whom Chemspec sells their product follow in order to determine how much paint (lacquer) had been applied to a board by means of an automated spray paint machine. The procedure he attempted to explain is recorded on page 580 of the record . However, the procedure so explained is virtually impossible to understand and this difficulty is further compounded by the fact that one is left uncertain whether Mr Ferreira in his explanation refers to wet or dry film thickness and as to how the conversion from grams paint to microns is calculated. He further made mention of the fact that the volume of paint used by such customers is normally logged and charted, implying that what he was saying could be substantiated by such logs and charts. However, such

documents were not produced to confirm the accuracy of Mr Ferreira's evidence in this regard. I have already alluded above to the shadow Mr Singh has cast over the integrity of the defendant's case. Mr Ferreira works for the same company as Mr Singh. Against that background and in the light of the unsubstantiated nature of Mr Ferreira's evidence I simply cannot accept his evidence in preference to the well reasoned warnings given by Mr Draper against the use of lacquer in excess of its recommended dry film thickness.

[58] The defendant had yet another string to its bow. Mr Kahn, who appeared for the defendant, argued that the defendant had all along, also through the crucial period, been doing nothing different than it had been doing for many years, when applying the final coat of lacquer to the product supplied to it by the plaintiff. It was contended that its spray painter had been employed by the defendant for many years and it was he who manually spray painted the final lacquer layer onto the boards received from the plaintiff. It was contended that he was experienced in his job and there existed no reason why he would have wanted to experiment with something new that resulted in the flaking problem. On the contrary, photographs had been handed up in court as exhibits to illustrate the impeccable finish to some of the furniture the defendant manufactured. Why, was the rhetorical question, would the spray painter now suddenly have done something different which caused the boards to flake just as a new batch thereof had been put into production by the defendant. Mr Kahn argued that whatever went wrong must have been caused by the plaintiff in processing the raw boards and he reasoned that the urgency to timeously supply boards to the defendant who

needed same for the festive season deadlines must have created the opportunity for one or other mistake to find its way into the plaintiff's production line, resulting in the problem at hand. In this regard, so it was suggested on the advice of Mr Sing, old mercury lamps or old lacquer, past its sell-by date, could have been the culprit that eventually caused the flaking problem.

[59] At first glance the aforesaid contentions appeared attractive. However, on closer scrutiny such contentions, on the probabilities, rather show the contrary. The urgency of the situation, as Mr Kahn contended, could hardly have caused the plaintiff to have altered or accelerated the processing of its raw boards to the finished product. As I understood Mr Meuwese, such processing of the raw boards was a finely tuned mechanised process that was not programmed to accelerate production to provide for increased or urgent demand. In any event, it was never suggested to Mr Meuwese, in cross-examination, that this may have been the position and, over and above that, that such acceleration might have compromised the quality of the plaintiff's finished product. To me it would appear as more probable that the spray painter was the one who would have had to bear the brunt of whatever urgent demand there may have been at the time. And if one has regard to the contents of exhibit K, that is the document that contains the data pertaining to wood liner 2000 AC lacquer used by the defendant to finally coat the board, then one notices a number of apparently crucial time periods that needed to be adhered to for the lacquer, once applied, to dry properly. It also stipulates time periods within which recoating should not take place. The above

mentioned data sheet further contains apparently important information about the preparation of the surface to which the lacquer was to be applied, the mixing ratios of the lacquer to be applied (Mr Draper testified that in concerns like the defendant these mixing ratios are often left to the spray painter), the pot life of a correctly mixed product etc. To me it would appear that all of these factors come into play when the product is manually applied and leaves considerably more scope for mistakes to occur, especially where time is of the essence. Having regard to these circumstances one would have expected the defendant to have called the spray painter as a witness and for him to have testified about his alleged experience and whether he applied the correct mixing ratios, whether the proper time periods were adhered to in times of urgent demand, and so on. He was after all the person who played a vital and final role in getting the boards ready for production. Yet, he wasn't called upon and with that a lot of questions went unanswered. For the defendant, in this regard, it apparently sufficed to simply lead the evidence of Mr Ebrahim to the effect that he supervised the spray painter and that he was satisfied that the spray painter did nothing different to what he had always been doing. Yet, one heard evidence of how Mr Ebrahim, notwithstanding his alleged supervision, failed to notice that a large number of pitted boards went into production, against his instructions to the contrary. Conduct like that cannot but cause one to question the degree of care exercised by Mr Ebrahim in supervising the defendant's employees. The evidence also reveals that a large number of the last batch of boards, according to Mr Ebrahim, went into production after he had identified the problem and after he had resolved not to put those boards into production. This, again, reflects on the quality of Mr

Ebrahim's supervision. It would accordingly appear to me that the spray painter's evidence may very well have been of value and no reason was advanced why he wasn't called upon to give evidence. After all, an expert notice was filed in anticipation of his expected appearance as a witness. The result was that a primary source of evidence was withheld and it certainly did the defendant's case no good.

[60] In the end, then, the probabilities in my view comfortably favour the version that the defendant applied the final lacquer coat in excess of the recommend dry film thickness determined for such lacquer, in those boards which eventually exhibited flaking problems. This overcoating did not take place on a consistent basis, as is to be expected in a manually applied procedure, but it happened from time to time probably during periods of time constraints and pressure. This fact is illustrated by the differences in the dry film thickness of the final coats in exhibits 2 and 6. It is also illustrated in the photographs in exhibit B where some parts of the furniture, like for instance a cupboard door, show signs of failure while the rest of the cupboard does not. I have already found, earlier in this judgment, that the product supplied by the plaintiff to the defendant had to be capable of accommodating a final layer of lacquer applied thereto by the defendant, but within reason. In this regard I find that by applying the final layer in excess of the recommended dry film thickness the defendant did not act reasonably.

[61] Having found that the plaintiff has succeeded in it's claim on a balance of probabilities it is not necessary for me to decide on whom the onus of proof

rested. In this regard I simply mention it, without deciding it, that in my view it was the defendant who alleged the existence of a latent defect in the last batch of boards supplied to it and it was the defendant on whom the onus rested to proof the existence of such a defect.

[62] In the result, then, the defendant's counter claim must fail. I understand that it is common cause that should the plaintiff succeed with its claim the amount outstanding and payable to it is the sum of R139 735. 76. Invoices were payable within 30 days from the date thereof. The invoices were all rendered on different dates in November 2003. In order not to make this judgement unnecessary complex I propose to order that interest should run from 1 January 2004.

I make the following order:

1. The defendant is ordered to pay to the plaintiff the sum R139 735.76.
2. The defendant is ordered to pay interest on the sum of R139 735.76 at the rate of 15.5% per annum from 1 January 2004 to date of payment.
3. The defendant's counter claim is dismissed.
4. The defendant is ordered to pay the costs of suit.

VAN HERDEN AJ

Date of Judgment	:	20 July 2010
Counsel for Plaintiff	:	**Advocate P J Combrinck**
Instructed by	:	Morris Fuller Walden Williams Plaintiff's Attorneys 2nd Floor, Merthyr House Cnr Kings Road & Crompton Street Pinetown Ref : Mr M Williams/njh/F 162
Counsel for Defendant	:	**Advocate Mahomed Saleem Khan**
Instructed by	:	I C Meer, Motala and Company Defendant's Attorneys 81 Wick Street Verulam Ref : Mrs Archary/mr/E 20