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IN THE HIGH COURT OF JUSTICE IN NORTHERN IRELAND

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QUEEN'S BENCH DIVISION

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2015 No. 22837

BETWEEN:

RADIUS HOUSING ASSOCIATION LIMITED (FORMERLY HELM HOUSING ASSOCIATION LIMITED) (FORMERLY BIH HOUSING ASSOCIATION LIMITED)

Plaintiff;

-and-

(1) JNP ARCHITECTS
(2) MICHAEL JENNINGS AND BRIAN MURPHY OF BDO NORTHERN IRELAND AS JOINT ADMINISTRATORS OVER T & A KERNOGHAN (GROUP) LIMITED
(3) ALBERT FRY ASSOCIATES LIMITED
(4) DAVID REA T/A A G CRAWFORD AND CO

Defendants.

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HORNER J

A. INTRODUCTION

[1] Radius Housing Association Limited ("Radius") is the plaintiff. It was formerly known as Helm Housing Association Limited and before that BIH Housing Association Limited. Radius has asked this court to try the issue of liability only arising out of the construction of two apartment blocks at Newtownards. Both these apartment blocks suffer from serious damp penetration.

[2] Originally proceedings were issued against JNP Architects ("the Architects"), T & A Kernoghan (Group) Limited ("the Builder"), Albert Fry Associates Limited ("the Engineers") and David Rea t/a A G Crawford and Co ("the QS").

However the claims against both the QS and the Engineers were not pursued. The Builder is in administration. Its solicitors have come off record. I understand that it has no assets. This has left Radius to pursue its claims against the Architects alone in respect of the water ingress and its effects on the two blocks of apartments. The Architects in their defence have relied, inter alia, upon a Net Contribution Clause ("NCC") contained in their contract with Radius. Such a clause, if effective, converts what would normally be a joint and several liability into a several liability only. Thus instead of the Architects being liable 100% if they were jointly to blame with the Builder, under the NCC they become responsible only for their share of the blame. In a contract with an NCC the employer "cannot recover more than the percentage contribution which would be found against the Architect if the Contractor and other consultants contributed in proportion to their fault:" see 2-033 of Hudson's Building and Engineering Contracts (13th Edition). Both the Architects and Radius agree that there is a NCC clause which is binding upon them in this dispute. Where they differ is as to its effect.

[3] Therefore in these proceedings the court has been concerned with determining two issues. Firstly, whether the Architects were guilty of a breach of contract and/or negligence. Secondly, if so what was the Architects' share of responsibility, if any, for any of the defects and their effects on the two blocks of apartments?

[4] I did agree that this trial would be confined to the issue of liability alone and that I would hear the issue of quantum later. My provisional view was that should I find that there should be a sharing of responsibility between the Architects and the Builder in respect of the defects which affected two apartment blocks, it would be necessary for me to hear the quantum evidence before I made any apportionment on the basis of what was "just and equitable" in respect of the entire claim. Having reviewed the evidence in detail, I am satisfied that this provisional view is the correct one. To take one example, it is accepted that there has been a problem with the balconies of some of the apartments. However I am in no position to reach any conclusion as to how this problem contributed to the additional costs that are or will be incurred. Therefore I cannot make a final apportionment on the basis of what is just and equitable in respect of all the claims which are proven.

[5] Finally, I should congratulate both sides and their legal representatives on the quality and extent of their submissions which have been made both orally and in writing. They ranged far and wide. I have tried to set out as concisely as possible the arguments made to me and the points which have been taken by each side. But for the sake of brevity I have not obviously included everything. I have dealt with

the central arguments and I can confirm to both sides that I have taken all their submissions into account when reaching my conclusion.

B. BACKGROUND FACTS

[6] The modus operandi of Radius is that it identifies a site and then contacts the Northern Ireland Housing Executive ("NIHE") to see if housing is needed for that area. If there is a need then Radius will give an outline of the site and state how many units that site can accommodate to the NIHE and the Department of Social Development ("DSD"). The NIHE and DSD can agree to the proposal which has been made for the site or refuse it or make an alternative proposal re the mix of the different types of units proposed. The type of the development is dictated by the housing waiting list which will comprise, for example, houses that require wheelchair access, units for large families etc. The DSD provides grant funding which is administered by the NIHE and this funding can be up to 60% of the total cost of construction. The balance is then made up by Radius who borrows the necessary capital from a bank or other lending institution and pays off such a loan using the future rents from the units it intends to construct. Radius, like other housing associations, is necessarily restricted to a rent formula and the levels of rent are dictated by the NIHE. The aim of any housing association is to break even and to achieve this within a period of 40 years. Radius aimed to break even within 30 years on this development. This gave it some leeway, when it came to contingency planning.

[7] Radius appointed the Architects at the end of 2007 to design and oversee the procurement and construction of these two blocks of apartments to be used for social housing at the junction of Regent Street and Mill Street. These blocks had obtained the prior approval of the NIHE and DSD. Block "A" is known as Miller's House and comprises of 27 apartments over four floors. It is to the north of the site and has access on to Regent Street. Block "B" is known as Mill House. It has 16 apartments over three floors and it has access on to Mill Street, Newtownards.

[8] These two blocks were arranged around external courtyards partially built over an underground carpark, which was to provide off-street car parking for the future residents. The apartments were constructed "off" a transfer slab also known as a concrete deck or podium. A damp proof membrane ("DPM") was required to cover the transfer slab in order to prevent water penetration into the apartments adjacent to the courtyards as well as preventing water seeping through the slab into the basement. The Architects also had the responsibility of designing a suitable drainage system to enable the rainwater to be channelled from the upper parts of Blocks A and B through rainwater pipes and/or conduits. This was to eliminate ponding and/or to prevent water creeping over the DPM and then draining down through the wall cavity or the transfer slab.

[9] The terms of the appointment and engagement of the Architects on 3 November 2007 were governed by the RIBA Standard Conditions of Engagement. The QS was appointed on 9 November 2007. The Engineers were appointed on 1 July 2008. The Builder signed and accepted JCT Standard Building Contract with Quantities 2005 (Edition Revision 2, with JCT Adaption Schedule) ("the JCT Contract") on 16 December 2009. There were other consultants and sub-contractors engaged to carry out special works such as mechanical and electrical services, but fortunately it is not necessary to consider their roles.

[10] After various discussions a final scheme was produced by the Architects in and around May/June 2008. An application was made for planning permission by the Architects on 3 June 2008. In or about August 2008 Radius authorised the Design Team to prepare detailed production drawings in order to obtain tenders from possible building contractors.

[11] Radius and the Architects had worked together before and the Architects knew that their appointment was subject to full compliance with the Housing Association Guide. Further, the Architects knew that this was a social housing project which was in part funded by the DSD through the NIHE. This meant that the potential costs had to be approved by the NIHE before any work commenced on site. The funding from NIHE covered part of the cost of the project with the balance, as I have already observed, being met by social housing rents, which are fixed, over a number of years. Mr Foster of Radius explained to the court that the Architects had to have a clear paper trail as the DSD/NIHE could carry out an audit on the project at any time. Radius at all times, given the use of public money, had to justify and prove that all payments were made for the purpose of the construction work and that the professional fees and other costs were legitimately incurred in bringing this project to completion. There were necessary tight controls on expenditure once the construction costs had been agreed with the DSD/NIHE. After that Radius might then be obliged to find any additional funds itself if there was an increase in the costs of the project, as it was very difficult to obtain additional funding from the DSD once a budget had been agreed.

[12] The contract required waterproofing of part of the development to ensure, inter alia, that the apartments being constructed were dry, free from damp penetration and fit for habitation. The transfer slab in the courtyard provided for the use of Hydroguard, a "monolithic membrane 6125 waterproofing system incorporating Flexflash "F" polyester reinforcements", Floradrain F660 2000 x 1000 x 600 mm drainage sheets, but jointed and stapled together in order to form a continuous drainage layer, manufactured by Alumasc, together with a Hydroguard protection sheet, brush rolled to the final coat with 75 mm laps". The "laps" and "barriers" were to be fully sealed "to form a continuous barrier throughout". There was also a "concrete upstand", 150 x 250 mm high as designed by a structural engineer which was shown on a "white" block, adjoining the "external wall/slab junction detail". The Floradrain was to sit above the DPM.

[13] Unfortunately the QS measured the Hydroguard at 64 square metres. This was a serious error. The Hydroguard actually required exceeded 300 square metres. This meant that the Hydroguard as specified was unable to cover all the transfer slab. Regrettably this error was not picked up at the tender stage and the Builder tendered successfully on the basis that only 64 square metres of the Hydroguard was required.

[14] There is a dispute about how much Radius and its employees knew about this error and about how this was to be resolved. I will discuss this issue in much greater detail later on in this judgment. But it is common case that because of the funding arrangements with the NIHE/DSD it can be very difficult for a housing association to find extra money which has not been budgeted for in the original scheme.

[15] The Architects eventually devised an alternative to the original "full tanking solution". This involved the substitution of Hydroguard with Famguard GS100 ("Famguard"), not as a full tanking system but as a partial tanking solution. In fact Famguard was to be installed as a skirting of some one metre in width around the apartment blocks.

[16] Hydrotech, which is part of the Hydroguard system, is a "hot-applied polymer modified rubberized bitumen-based membrane used with a range of reinforcement membranes and protection sheets to form a waterproof sandwich membrane". There is no possibility of lap failure because it is monolithic. It is only supplied to registered contractors. Famguard is manufactured by Fosroc. It is a hot applied pour and roll sheet membrane consisting of a 3 mm thick fully bonded water impermeable layer and fully bonded into a 30 mm chase and sealed with a sealing compound. It incorporates a high tensile polyester fabric, impregnated and coated with blended oxidised bitumen. It is also more reliant on the expertise of the person carrying out the application in order to achieve a satisfactory bonding between the Famguard "skirt" and the underlying concrete. Mr McCaw and Mr Hutcheson, the expert witnesses for Radius and the Architects respectively agreed the following:

> ""In being melted and applied as liquid the Hydroguard is less susceptible to workmanship in achieving a consistent and total bond with the substrata than the Famguard which is a hot applied pour and roll sheet membrane."

[17] The court was told that Hydroguard is never fully cured and is self-healing. This means that any rips or tears will fill themselves in. The Hydroguard system unlike Famguard also carries a BBA certificate and comes with an insurance based warranty.

[18] I will discuss the relevant terms and conditions of the various key appointments and their contractual obligations which arose as a consequence later on in this judgment.

[19] It would appear that the problem about the QS's specification surfaced in November 2009 when the Architect e-mailed Michael Kane of the Engineers in respect of the tanking and concluded "… the QS (should be) advised and the client made aware of any potential risk in costs implication.."

[20] On 19 January 2010 the Builder sent a request for information ("RFI") to the Architects. This included a request for various details in relation to the "upstand and the external wall of the building". The minutes of a Technical Site Meeting of 26 January 2010 record:

> "'Possible variations on what priced: No. 1'.
>
> A request for 'upstand detail off Transfer Slab around perimeter of Apt block – not in BoQ. Pour T Slab and upstand as a separate Kicker with Hydrophillic Strip?': No. 10."

This is described as a variation in the margin.

There is also a request for details and in particular of "any services penetrations to be pinpointed in drawings by M+E Engineer. Penetrations to be cast into transfer slab (Gas, Water, electric, foul wastes etc)."

[21] On 20 April 2010 the Builder voiced a concern about the "proposed external wall junction" and the risk of water penetration.

[22] On 22 April 2010 Helen Duffy responded indicating that she had reviewed the detail and was happy with it in principle. She said that even if water did penetrate "it should still not get into the inner leaf as this is effectively linked where DMP is dressed up the outside of the inner leaf and is lapped with the DPC ..." The suggestion of the builder for a block solution was rejected.

[23] On 26 May 2010 Helen Duffy sought approval for an amendment "to the details of the basement car park" in respect of the use of "waterproofing reinforced Caltite concrete" to be used there. It was said to be cost neutral. There is information given about a 12 year waterproofing guarantee and a reassurance that it will be independently insurance backed for the first 10 years. Mr David Erskine of Radius e-mailed her back on 26 May 2010 agreeing to the recommendation and noting that the concrete which was now to be used included "a waterproof guarantee for 10 years …".

[24] It is therefore clear that Helen Duffy was prepared to discuss the ramifications of proposed changes to the original plans in a detailed way before asking Radius for consent. Radius claims that this accords with the Architects' obligation under their contract with it and this is what should have happened but did not happen with the change from Hydroguard to Famguard.

[25] The minutes of 16 February 2011 record that the Architects, QS and the Builder were liaising about an alternative drainage system to be used instead of Floradrain (which was part of the Hydroguard system) over the transfer slab. On 23 March 2011, on 24 April 2011 and again on 18 May 2011 the Builder, the Architects and the Engineers were still looking at alternatives to the Floradrain system over the transfer slab according to the site minutes.

[26] On 2 June 2011 Helen Duffy provided details of the skirt to be provided "round all external walls which bound the transfer slab as discussed (including the perimeters at Mill Street) in order to prevent damp spreading up the wall or through the apartment floor construction". She goes on to give what is a non-standard detail:

> "Material must be cut into the slab as per the details on the wall."

For the record the standard design is that of overlapping layers of the Famguard membrane on the horizontal surface which are used to ensure that there can be no water penetration. It is not standard detail to cut a chase into the horizontal transfer slab.

[27] Various revised and updated documents were sent to Mr Erskine of Radius although it is not clear what documents were actually sent. There were further details of the revised skirting provided and on 14 November 2011 the Builder e-mailed the Architects as follows:

> "Helen – have you made any decision on the use of Famguard or any alternative for sealing the transfer slab."

[28] By 29 November 2011 Helen Duffy e-mailed the Builder and told him to:

> "Proceed with the agreed Famguard GS100 skirting detail to waterproof around the footprint the buildings above the transfer slab.
>
> Consult with the sub-contractor to ascertain whether the Famguard is suitable to withstand light pedestrian traffic on the section of the first floor walkway outside apartments 9 and 10."

[29] On 1 December 2011 Willart Contractors provided a quote to the Builder for the application of Famguard. By 8 December 2011 it is recorded in the site minutes that:

> "2.03 The details of the external finishes/drainage/Famguard detail to the transfer slab had been instructed. Cost to be agreed."

It is also recorded at 2.09:

> "COW noted that the water ingress on the ground floor of Block B must be remedied and the area dried out prior to insulation and screed being laid. It was noted that there is a detail agreed for waterproofing this area and works may proceed prior to Christmas."

In an e-mail of 16 December 2011 the QS e-mailed as follows:

> "Please see attached further revised costs for damp proofing to ext perimeter walls at GF level and 1st Floor Walkway.
>
> 1st Floor walkway will be carried out in Protech as Famguard could not accept foot traffic on surface or provide a non-slip surface which will be required. I have run this by Helen and she is okay with the Protech."

[30] By April 2012 the apartments were being handed over (with humidifiers). A Completion Certificate from Ards Borough Council in respect of the apartments at blocks A and B was dated 27 April 2012. However there were on-going problems with water ingress at both blocks. Holes were drilled in the gullies to allow water to flow into the pipes and off the transfer slab. By 10 July 2012 Ards Borough Council was concerned that the apartments might not be fit for habitation. On 20 July 2012 DENI's representatives complained that downpipes were not connected to the drains and rainwater was simply falling on to the carpark. On 24 July 2012 the Architects suggested that "small breaches in the Famguard tanking and again the DPC/DPM ..." were to blame for the water ingress during wet conditions. On 31 July 2012 Anderson Williamson Limited who were commissioned by the Builder to look into the causes of the water ingress produced a report which stated that:

(a) The Famguard skirting "only extends a nominal distance from the junction of the transfer slab/external walls and does not waterproof or tank the complete surface of the transfer slab".

(b) The "perimeter skirting is chased into the transfer slab and external leaf of the cavity walls" but "it does not extend as high as the height of the damp-proof course".

(c) That there was evidence in both courtyards of rainwater pipes discharging directly on to the hard standing surfaces which "in turn are laid to fall into yard gullies and a concrete channel across the full width of the Block A courtyard." It would appear that the builder had retrospectively installed two further yard gullies.

(d) There was also evidence of rising damp in the apartments which had been inspected as well as in the basement lift areas and the carpark.

Anderson Williamson Limited concluded as follows:

> "… the design and detailing does not adequately address rainwater drainage from both the rainwater goods serving the roof structures and surface water drainage from the courtyards and external areas. All damp related defects presently effectively stem from the lack of measures provided to deal with the rainwater."

The report also observed that the Hydroguard sub-surface stone water drain management system had not been installed and that if it had been it would have reduced if not eliminated "the ingress of moisture and subsequent damp". This is a reference to the Floradrain system which was omitted at the direction of the Architects.

[31] On 16 August 2012 Ulster Damp Proofing Group sent a report to the Builder which it passed on to the Architect. It commented, inter alia:

(i) There are too few gulleys throughout the courtyard areas.

(ii) Downpipes were draining directly on to the courtyard and not into the gulleys.

(iii) There are insufficient "falls" to take water away from the surface of the transfer slab.

It also attributed the water ingress problem to the failure to extend a tanking detail over the slab so "as to create a fully tanked area …".

[32] On 17 August 2012 it is recorded that the existing gulleys were removed, perforated and refitted to allow water to escape through the transfer slab. New gulleys were also cored through the transfer slab and connected to the existing drainage system. The Famguard skirting at apartment one was examined and no faults were found.

[33] On 21 August 2012 Helen Duffy e-mailed Michael Foster suggesting that the cause of the dampness could be either small breaches in the Famguard skirting membrane, over the top of the membrane or via cracks in the structural slab. Her response was to try and reduce the build-up of water pressure on the slab in external areas by removing some of the rainwater. (The experts on both sides agree that any horizontal "cracks" in the transfer slab cannot explain why water penetrated under the Famguard skirt.)

[34] On 22 August 2012 remedial work was carried out which involved, inter alia, the rainwater pipes being taken through the slab. The Builder was also looking at the option of tanking the entirety of the external slab: see e-mail of Helen Duffy of 28 August to Mr Erskine.

[35] On 7 September 2012 at the site meeting it was recorded that the rainwater pipes had been taken through the slab and connected into the surface water drainage system in the basement. Some ten days later on 18 September 2012 there was a letter from the Builder seeking to be recompensed for any investigative or remedial works carried out in relation to the water penetration and damp issues.

[36] On 16 April 2013 David Erskine of Radius e-mailed the Architects to ask for "written confirmation of your findings into the building defect and cause of the defect". In April 2013 the Architects proposed that a hose test should be carried out. The Builder excavated an area within the courtyard outside apartment 5 Miller's House. The level of water on the slab outside was opened up and found to be equal to the levels in the opened up area inside and there was standing water in the opened up cavity. When the hose was turned on "the water levels increased quickly in the opened up area inside". It was suggested that this test demonstrated that there were breaches within the Famguard skirt which were allowing water ingress. This conclusion has not been challenged.

[37] A conciliation from MD Insurance Services Limited ("MDIS") in June 2013 concluded that:

> "… the Famguard detail has effectively created a holding tank with no apparent provision for drainage running off from the podium deck. Water will collect in these areas and hydrostatic pressure will be put on the interface between the Famguard and the wall/deck damp proof provisions. As a result the

> DPC/DMP arrangement around the Famguard detail would appear to be the cause of water ingress inside the housing unit which has been exacerbated by a lack of drainage provision to the deck and the site. Whether this is a design or workmanship issue will require further investigation …"

[38] There was further e-mail traffic and correspondence between the Architects and the Builder with the Architects seeking to place the blame for the water ingress on the Builder and the Builder resisting any responsibility in claiming it was a design issue. There was also correspondence with Fosroc, the manufacturer of Famguard, both in Northern Ireland and in Tamworth, England. The local representatives of Fosroc suggested that the design was not a standard Fosroc Famguard detail and that Fosroc did not have a product which would provide "… the waterproofing cover you require in this present application": see e-mail of 26 February 2013. There was also an e-mail from Alan Clayton of Fosroc's headquarters who, unlike the Northern Ireland representative, had not visited the location, confirming that Famguard was suitable and its use "in keeping with the purpose of the product".

[39] I visited the site to see the courtyards, Miller's House and Mill House and the effects of the water ingress on a selection of the apartments.

THE WITNESSES

[40] I found Mr Foster and Mr Erskine of Radius to be honest and straightforward. I felt I could rely upon what they told the court under oath. When each of them denied having any knowledge of the proposed change from the Hydroguard design to the Famguard skirting detail, I accept what they told the court. Mr Erwin, the Clerk of Works, appeared to me a credible and reliable witness. I have no doubt that he did not consent to any change in the Hydroguard design because it was not for him to give his consent and in any event he knew that he had no authority to consent to any change in the approved design. If a request had been made to him to consent to the change of design, he would have passed it up to his line manager. No such request was ever made.

[41] Mr McCaw is an architect. He gave expert evidence for Radius. He is an experienced expert witness who often gives evidence in cases such as this where it is alleged an architect has failed to meet the standard expected of a member of his profession. However, his evidence was compromised by two matters. Firstly, it was agreed at the second meeting of experts on 24 April 2017 that:

> "3. All agreed that rainwater present on the top surface of the transfer slab transfers horizontally to the inside of the building underneath the cavity wall.

> 4. All agreed that it appeared that the application of the Famguard failed allowing water to transfer below the Famguard into the apartments."

In a subsequent addendum, which he made after he found out about the NCC and the financial fragility of the Builder, it is recorded by him that the main problem causing water penetration was the 75 mms of the courtyard upstand which was unprotected. I was singularly unimpressed by this change of position in circumstances when it was obviously to the advantage of his client. Secondly, this was compounded by Mr McCaw's attempt to explain at paragraph 4 of the minutes that he had used application "synonymously with use" that was simply not correct and such a blatant attempt to improve his client's commission called into question his understanding of his duty as an expert to the court.

The attempt by Mr McCaw late in the day to resile from an agreement with his fellow expert did not improve his client's position but instead served to undermine his credibility as an expert witness. This was compounded by an apparent willingness to incorrectly construe a note in such a way as to assist the case his client was making.

[42] Mr Hutcheson gave evidence on behalf of the Architects. He gave his evidence in a measured way but I gained the impression he was incautiously optimistic about the use of Famguard although this may have been an unconscious reaction to the evidence of his opposite number. The clear reservations of the Fosroc personnel who had visited the site and who had questioned both the use and application of Famguard at this location should have caused him at the very least to pause for thought. While undoubtedly he could point to what Alan Clayton from head office had said, his opinion was undermined by the fact that he had not visited the location. No satisfactory explanation was offered to the court as to why Mr Hutcheson felt able to disregard the evidence of those Fosroc employees who had visited the site. This also has to be seen in the context of the evidence given by Mr Flynn (see below) and his refusal to accept that the Famguard skirt could provide the necessary protection for the apartments.

[43] Mr Brian Flynn, the Area Technical Manager of Alumasc, a supplier of exterior roofing systems, appeared straightforward. He was an impressive witness. I found him to forthright and forceful. I concluded that his evidence, not all of which I was able to accept, was his honest view. His opinion that Famguard could only achieve 90/95% adhesion to this location even if the work was carried out in a competent workmanlike manner was rejected by both Mr McCaw and Mr Hutcheson. As a building surveyor he was quite entitled to his opinion and it is only with some considerable hesitation that I have finally concluded that Mr Flynn has not persuaded me on this issue to the necessary standard.

[44] I obviously had no opportunity to assess Helen Duffy, the architect, or any of the other employees of the Architects or architectural assistants who were involved in the work at this location. This meant that their evidence could not be tested, and I will have to take this into account for the reasons which I will set out in coming to my final conclusions.

NCC

[45] In *West v Ian Finlay and Associates (A Firm)* [2014] EWCA (Civ.) 316 the Court of Appeal in England found in favour of a NCC which had been rejected by the trial judge as being ambiguous. It determined that the NCC should be applied on the same basis as an apportionment which would be made under the Civil Liability (Contribution) Act 1978. This decision followed the Scottish Court of Sessions ruling in *Langstane Housing Association v Riverside Construction (Aberdeen) Ltd* [2009] 124 Con. L. R. 211.

[46] In truth both sides proceeded on the premise that the NCC was enforceable, although there had been some academic articles explaining why this is an unwelcome development with no "convincing, ethical or pragmatic basis for it": see Drifting Towards Proportionate Liability: Ethics and Pragmatics by Kit Barker and Jenny Steele 2015 CLJ 49.

[47] The level of contribution has to be "just and equitable" having regard to the extent of the person's responsibility for the damage in question. This requires consideration "not only the causative potency of a particular factor, but also of its blameworthiness": see Denning LJ in *Davies v Swan Motor Co* [1949] 2 KB 291.

[48] In *Downs v Chappell* [1997] 1 WLR 426 Hobhouse LJ made it clear that:

> "…It is just and equitable to take into account both the seriousness of the respective parties' faults and their causative relevance. A more serious fault which has less causative impact on the plaintiff's damage may represent an equivalent responsibility to a less serious fault which had a greater causative impact."

[49] The apportionment of damages is substantially a matter for the discretion of the trial judge.

[50] Mitchell in the Law of Contribution LC and Re-Imbursement (2003) at 10.22 states that:

> "The courts have adopted a rule of thumb in construction cases that an architect or engineer charged with supervising a contractor to be

> responsible for the contractor's poor workmanship to the extent which ranges from 20% to 33% except where the supervisor has been exceptionally slapdash in the discharge of his duties, or where the contractor has a duty to warn of unsafe works."

Keating on Construction Contracts (8th Edition) [8-103] discusses the Civil Liability (Contribution) Act 1978 and the issues which arise in respect of "the same damage". It says:

> "This Act … enables a just and equitable apportionment, including a complete indemnity, to be made. The Tribunal is therefore required to take into account not only the respect **causative potency** of the parties' acts and omissions towards causing the damage in question but also their relative **blameworthiness**, although the first factor will be the most important."

This is the approach that I intend to adopt in the present case. Such an approach requires me to assess both the causative potency of a particular factor and the blameworthiness.

FAILURE OF THE ARCHITECTS TO GIVE EVIDENCE

[51] The Architects had appointed Ms Helen Duffy to act in respect of the construction of these two apartment blocks. She has chosen not to give sworn testimony before this court. Nor has any witness from the Architects given sworn evidence. This means that it has not been possible for Ms Simpson QC on behalf of Radius to cross-examine Helen Duffy about her performance and the performance of her firm in respect of, inter alia, the change of design, the water ingress into the apartments and the inspections which they should have carried out of the work of the Builder. Instead the Architects have relied on the evidence of Mr Hutcheson, the expert witness, who had no involvement in the actual contract. This has caused considerable difficulties. For example, Helen Duffy had reported on a hose test and the results of that test which suggest that the builder failed to obtain a good bond between the Famguard skirt and the transfer slab. Neither expert had attempted to replicate that test. It related to a specific location. Clearly Helen Duffy had an interest both in trying to exculpate herself and her firm from any responsibility and also at the same time in placing the blame for any defect on the Builder. It is therefore highly unsatisfactory that both experts have taken her comments as gospel and that neither has attempted to independently test her observations. I have no idea of the circumstances in which the hose test was performed. I am wholly reliant on the record of Helen Duffy which may be wholly self-serving. The court has no way of knowing. To date no satisfactory explanation has been offered for

Helen Duffy's silence or for the fact that no witness actively involved in this project on behalf of the Architects has come forward to give evidence.

[52] In these unusual circumstances, I consider that the proper approach to take is that set out by Morgan LCJ in *Chivers v O'Loughlin* [2017] NIQB 26 where he said at para [8]:

> "[8] One of the issues which I had to consider was whether it was proper to draw an adverse inference from the fact that there was no direct evidence from Daly's as to what their walk-in rate was. All that one knows is that they had charged this particular account in this particular way. I invited the views of the parties in relation to the question of adverse inference and I am satisfied on the basis of the authority *R (on the Application of Stapleton) v Revenue and Customs Commissioners* [2008] EWHC 1968 QB and *Lynch v Ministry of Defence* [1983] NI 216 that it is proper in an appropriate case to draw an adverse inference. I consider that the matter is helpfully set out by Mann J in *Fulham Leisure Holdings v Nicholson, Graham and Jones* approved by Briggs J in *Polarpark Enterprises Ltd v Rupert Allason* [2007] EWHC 22 Ch that the following approach should be taken:
>
> > '**(1) In certain circumstances a court may be entitled to draw adverse inferences from the absence or silence of a witness who might be expected to have material evidence to give on an issue in an action.**
> >
> > **(2) If a court is willing to draw such inferences they may go to strengthen the evidence adduced on that issue by the other party or to weaken the evidence, if any, adduced by the party who might reasonably have been expected to call the witness.**
> >
> > **(3) There must, however, have been some evidence, however weak, adduced by the former on the matter in question before the court is entitled to draw the desired inference: in other**

> **words, there must be a case to answer on that issue.**
>
> **(4) If the reason for the witness's absence or silence satisfies the court then no such adverse inference may be drawn. If, on the other hand, there is some credible explanation given, even if it is not wholly satisfactory, the potentially detrimental effect of his/her absence or silence may be reduced or nullified'**."

CONSENT

[53] The terms of the engagement of the Architects included the following:

> "(c) Not to make any alteration to the specifications, ……. or services or approved design without consent, except in an emergency."

It is not suggested that the change from Hydroguard to Famguard was due to an emergency. It was something forced on the Architects because of the QS's mistake. However that error on the part of the QS in no way altered the Terms of Engagement or reduced the obligation of the Architects to obtain the consent of Radius.

[54] Ms Simpson QC for Radius argued that what was required was an "informed" consent so that Radius knew about any changes in the original design and that this necessarily meant understanding any advantages and disadvantages associated with the new design. Mr Simpson QC for the Architects argued that consent was given by Radius, whatever way one looked at what had happened, and if necessary, that consent could be implied. That consent could be implied from the circumstances including the fact that the site minutes were circulated to the employees of Radius.

[55] I have no doubt that what is required in such a situation is that there should be an informed consent. Any other construction of the term would allow the Architects to alter the design without the client being aware of why it was being changed, and what were the advantages and disadvantages, both from a cost point of view and the long term viability of the project. I do not consider that a construction which permits the Architect to change the design without the client understanding what he is consenting to accords with commercial common sense. The court is concerned as Lord Hoffmann said in *Chartbrook v Persimmon Homes Limited* [2009] AC 1101 at page 1114 to "… decide what a reasonable person would have understood the parties to have meant by using the language as they did".

If the consent is to have any meaning, and is not simply part of a "tick box exercise", then Radius and its senior employees would need to know, inter alia, why any change was being made and what were the advantages and disadvantages associated with that change.

[56] As Lord Steyn said in *Mannai Investment Co v Eagle Star Life Assurance* [1997] AC 749 at 771:

> "Words are … interpreted in the way in which a reasonable commercial person would construe them."

The Supreme Court held in *Rainy Sky SA v Kookmin Bank* [2011] UKSC 50:

> "If there are two possible constructions, the court is entitled to prefer the construction which is consistent with business common sense and to reject the other."

It is my view it is business common sense to interpret "consent" in the instant case as requiring Radius to understand what was involved in the alteration to the design of the waterproofing of the transfer slab so that it knew exactly to what change of design it was being asked to give its consent.

[57] This construction accords with the decision of His Honour David Wilcox in *Christopher Moran Holdings Limited and Others v Carden and Godfrey* [1999] WL 33231715. He said at paragraph [17]:

> "No lay client, even those as informed as the Claimant, can be expected to interpret changed technical measurements and levels on a drawing which show a significant alteration in the range of use from a general amenity terrace to a mere promenade terrace. Such a change is a material change and the lay client is entitled to know both the effect of the change and the reason for it together with any other options there may be."

[58] I also note that Coghlin LJ in *Blair and Others v AWG Residential and Others* [2005] NIQB 68 reached a similar view when considering whether engineers were entitled to rely on Clause 2.7 of the ACE conditions provided:

> "The Consulting Engineer may recommend to the Client that a detailed design of any part of the Works should be carried out by a Contractor or a Sub-Contractor. The client should not unreasonably withhold consent to such recommendation and the Consulting Engineer shall integrate that detailed

> design into this own design. The Consulting Engineer will not be responsible for the detailed designs of any Contractor or Sub-Contractor or liable for defects in or omissions from them."

[59] Further, Jackson and Powell on Professional Liability (8th Edition at 9-148) states that even where an employer has approved defective plans, this will not absolve the architect from liability "in circumstances in which the employer is relying on him to avoid defects, unless the employer has given his approval with **full** knowledge of the defects." (Emphasis added)

[60] I am satisfied having heard the evidence of Mr Foster, the Interim Director of Development and Mr Erskine, the Development Manager, and seen them give their evidence that they did not consent to any change in the design of the Hydroguard system. Nor were they in any position to consent to any changes in such a system. Of course, they did attend the monthly site meetings from time to time but on the evidence they had no understanding of the major change that the Architects in general, and Helen Duffy in particular, instigated and which changed a full tanking system to a partial tanking system. I would not expect them to have had such knowledge unless the main architect, Helen Duffy, or one of her colleagues, had taken the time to explain what was happening in some detail. Instead, the Architects kept them both in the dark. I reject the argument somewhat tentatively advanced that Mr Erskine and/or Mr Foster had given a blanket agreement to any change in the design as long as it was cost neutral. I am satisfied from all the evidence, including the letter of 20 May 2010 to which I have referred earlier[1], that Helen Duffy knew perfectly well how to obtain the informed consent of Radius and was quite content to obtain it, when it suited her purposes so to do.

[61] It was also suggested that the Clerk of Works, Mr Erwin, was aware of the nature of the alterations and that this knowledge should be imputed to Mr Erskine, his line manager. Mr Erwin made it clear when he gave his evidence that it was his job to report on the progress of the work and quality of that work. He had no authority to give any consent to any alteration in the agreed plans. Helen Duffy knew this. The fact that he was aware of the instructions to install Famguard as per the e-mail of 29 November 2011 did not mean that he was aware of the advantages and disadvantages of this new system. As I have said I found him to be an honest and truthful witness and I accepted his evidence about his lack of knowledge on this critical issue.

[62] It is difficult not to conclude that a deliberate decision was made to keep Radius in the dark. I draw an adverse inference from the failure of Helen Duffy or any of her fellow employees to give sworn testimony and explain why she did not discuss the advantages and disadvantages of the design with either Mr Foster or

[1]

Mr Erskine. Helen Duffy knew that Radius would not have given its consent to the change from a full tanking system to a partial tanking one in the absence of satisfactory safeguards. I reject in its entirety the submission that the change in design would have been approved by Radius if the advantages and disadvantages had been fully explained to Radius simply because the change of the design was cost neutral. Insofar as is necessary to do so, I draw an adverse inference from Helen Duffy's failure to give evidence on this highly pertinent issue.

[63] I find that if a fair representation of the pros and cons of the change in the design to the transfer slab had been explained, Radius would not have agreed to the substitution of Famguard for Hydroguard unless they were given specific assurances and safeguards that Famguard would be equally efficacious. Such assurances in the absence of a warranty and a BBA certification would have required an assurance that a 100% bond had been achieved between the Famguard and the transfer slab. The new design left absolutely no margin for error. If necessary, money would have been found whether out of the contingency fund or elsewhere if a categorical assurance could not be given by the Architects that Famguard would prevent water ingress into the apartments.

THE EFFECT OF NO CONSENT ON THE NCC

[64] Radius made the case that should the court conclude that the Architects acted without authorisation, namely that they had not obtained the consent of Radius to the change of the design of the waterproofing to the transfer slab then the Architects would be "wholly at fault for any problems/defects which arose with regards to the application of Famguard irrespective of whether or not (the Builder) fitted this correctly". I consider that this submission is wrong for the following reasons.

[65] Firstly, it is akin to an attempt by an injured party to escape the limitation of liability in a contract by claiming that the contract breaker had been guilty of some fundamental breach and that in those circumstances, the contract breaker could not rely upon the contract, and in particular the limitation of liability clause. This argument was emphatically rejected by Pearson LJ in *UGS Finance Limited v National Mortgage Bank of Greece* [1964] 1 Lloyd's Rep 446 at 450 where he said:

> "As to the question of **fundamental breach**, I think there is a rule of construction that normally in exception or exclusion clause or similar provision in a contract should be construed as not applying to a situation created by a fundamental breach of the contract. This is not an independent rule of law imposed by the court on the parties willy-nilly in disregard of the contractual intention. On the contrary it is a rule of construction based on the presumed intention of the contracting parties … This

> rule of construction is not new in principle but it has been prominent in recent years in consequence of the tendency to have …….. forms of contract containing exceptions clauses drawn in extravagantly wide terms, which would produce absurd results if applied literally."

This statement was unanimously approved by the House of Lords in *Suisse Atlantique Societe d'Armement Maritime SA v NV Rotterdamsche Kolen Centrale* [1967] 1 AC 361. The presumed intention of the parties is that such a clause limiting or restricting liability is to apply even when one side is in obvious breach of the terms of a contract.

[66] Secondly, the parties would not have reasonably contemplated at the time of making the agreement that the Architects could not rely on the NCC if they were in breach of contract by failing to obtain Radius's informed consent to make changes in the design. It does not make commercial sense for the parties to have agreed that the NCC will apply to their relationship, but not if the Architects are in breach of paragraph (c) of the Terms of Engagement which required no material alteration without the consent of Radius. The NCC was to limit the Architects' liability making them responsible for their share of the blame when they were in breach of contract and/or negligent. The construction contended for by Radius would produce the absurd result that the Architects would be precluded from relying on the NCC when they were in breach of a term of the contract requiring them to obtain the approval of Radius to a design change. That cannot have been the intention of the parties. Clearly when Radius and the Architects entered into the agreement, it was not intended that the Architects would be responsible for **any fault** on the part of the Builder. The Architects were to be held only responsible for their share of the responsibility for any defects.

[67] But the claim Radius is now making against the Architect is not just in contract but is also in negligence. There is a concurrent liability in tort and contract and Radius will want to take advantage of the more generous tortious test for remoteness of damage, namely that the damage had only to be reasonably foreseeable. In the present case, it could be argued that it was reasonably foreseeable that the Builder might be negligent and thus the Architect, if it produced a negligent design would also be liable if the effects of the design were made worse by the Builder's negligence. In *Wellesley Partners LLP v Withers LLP* [2015] EWCA Civ. 1146 the Court of Appeal in England held that:

> "Where contractual and tortious duties to take care in carrying out instructions exist side by side, the test for recoverability of damage for economic loss ought to be the contractual one; that the basis for the remoteness test in contract was that the parties had

> the opportunity to draw special circumstances to each other's attention at the time of formation of the contract and reach consensus as to the type of damage for which each would be able to hold the other responsible; that the existence of the concurrent duty in tort could not upset that consensus, particularly given that the tortious duty arose out of the same assumption of responsibility as existed under the contract …"

Floyd LJ said at paragraph [80]:

> "Nevertheless, I am persuaded that where, as in the present case, contractual and tortious duties to take care in carrying out instructions exist side by side, the test for recoverability of damage for economic loss should be the same, and should be the contractual one. The basis for the formulation of the remoteness test adopted in contract is that the parties have the opportunity to draw special circumstances to each other's attention at the time of formation of the contract. Whether or not one calls it an implied term of the contract, there exists the opportunity for consensus between the parties, as to the type of damage (both in terms of its likelihood and type) for which it will be able to hold the other responsible. The parties are assumed to be contracting on the basis that liability will be confined to damage of the kind which is in their reasonable contemplation. It makes no sense at all for the existence of the concurrent duty in tort to upset this consensus, particularly given that the tortious duty arises out of the same assumption of responsibility as exists under the contract."

In those circumstances the fact that Radius can also frame its case in negligence does not assist it in arguing that it should be entitled to ignore the NCC. I find that the Architects are entitled to rely on the NCC despite their failure to obtain the consent of Radius to the change from Hydroguard to Famguard.

FINDINGS AND DISCUSSION

[68] There are a number of matters that are not controversial. Both experts agree that the waterproof layer should have been linked to the DPC and should have been 150 mm above the external ground level. In the amended design the membrane is not linked to the DPC and further the concrete upstand has been replaced by bricks

which are much more porous than concrete. As a consequence the bricks do not provide an effective barrier for water ingress whether in the form of rain striking either the unprotected gap or the podium surface and then bouncing up and hitting the gap. Further, there will be water entering into the cavity where there is ponding on the podium directly adjacent to the unprotected upstand. According to Mr McCaw this design defect is a contravention of the Building Regulations which stipulate under Technical Book etc. C, page 17 that the damp proof course "should be at 150 mm above the level of the adjoining ground …": see 5.11 of Mr McCaw's report. I consider that this failure to conform to Building Regulations and to good building practice has resulted in an unprotected upstand which when exposed to water by whatever means will permit ingress into the cavity. I consider that this defect in design was significant but only a modest cause of the damp penetration into the apartment blocks for the following reasons:

(i) It is clear that in heavy rain this gap is going to be exposed to rain striking it or rain bouncing off the adjacent surface.

(ii) The use of bricks means it is a real risk to the cavity wall will become sodden and water will enter cavity.

(iii) Mr Bradshaw examined the work that had been carried out in June 2013 for MDIS as part of the conciliation report. He concluded that the "DPC/DMP arrangement around the Famguard detail would appear to be the cause of the water ingress inside the housing unit."

(iv) Mr Flynn, the Area Technical Manager of Alumasc, the supplier of Hydrotech inspected the site. He noted damp staining on the brickwork and on the plasterwork above the DPC level showing signs of water ingress.

(v) Mr Hutcheson was dismissive of this defect as making any significant contribution to the damp ingress in the apartments. Mr McCaw considered it to the major cause, but this was a volte face after he learnt of the NCC. I consider on all the evidence that the correct answer lies somewhere in between these two opinions.

The problem caused by a defective upstand design would be an intermittent but regular one which would particularly affect those apartments which faced the prevailing winds that carry rain. The consequences would affect all of the apartments given the nature of the Northern Ireland climate. Consequently all of the ground floor apartments were likely to experience intermittent ingress of damp, to a lesser or greater degree depending on their orientation, as a consequence of this defective design.

[69] Regardless of the issue of the upstand, it was a defective design to have made no provision for drainage of a zero fall platform when the full tanking design was altered and the Floradrain omitted. There is no doubt that the build-up of water on the transfer platform exacerbated the dampness problem until the Architects produced new designs ensuring that there was adequate run off/drainage off the platform so that ponding was eliminated.

[70] It was not disputed that there was a problem with the balconies as some of the apartments in the upper floors of the blocks because no provision had been made for adequate drainage. The result was water ponding and some consequent modest damp ingress to these apartments.

[71] I find that the Architects were in breach of contract because they did not obtain the consent of Radius to the change from a full tanking system with Hydroguard to a partial tanking system with a Famguard skirt. If the Architects had explained the advantages and disadvantages fairly to Radius they would have pointed out, inter alia:

(i) The change was cost neutral and effective but only **if** 100% seal on the concrete surface was achieved with the Famguard. (Emphasis added)

(ii) Hydroguard is guaranteed for 25 years with an insurance based warranty. It enjoys BBA approval. Famguard has neither a guarantee nor BBA approval.

(iii) Hydroguard is advertised as being suitable for use on a zero fall surface. Famguard is not so recommended.

(iv) There is no margin for error in the proposed Famguard design. Accordingly, the fact that 100% bonding could be difficult to achieve with Famguard meant that water ingress could occur by finding its way past the skirt.

(v) Employees of the manufacturers of Famguard in Northern Ireland had come and inspected and locus and had made it clear that the detailed proposed by the Architects was not a standard "Fosroc Famguard GS100 detail". They said:

> "We do not have a product which will provide the waterproofing cover you require in this particular application."

The waterproofing had to be continuous and it was not. The Architects had been informed together with the Builder in early 2012 that the "skirt application was unlikely to yield the desired result."

As I have already observed Helen Duffy did check with Fosroc on 19 February 2013 but she went to the Technical Services Manager in Tamworth in England and his comments as to the suitability of Famguard GS100 as a tanking membrane reflect the information he was given at the time and not on the basis of a site visit. He was at a material disadvantage to the Fosroc employees who knew the location.

(vi) The detailed design of the Famguard skirt involved cutting chases into the slab. This is standard for any upstand but for horizontal surfaces the standard method is to have overlapping layers of Famguard. This, of course, may be more expensive. But in any event the design of having chases cut into the slab was not standard and this change in design gave rise to a further risk that such a type of termination might not be able to keep out casual water. It was certainly a design which left no margin for error and was more difficult to carry out than the recommended overlapping of membrane sheets.

[72] If Radius had been properly advised as to the advantages and disadvantages of the Famguard skirt it would, I find on the evidence, have refused to agree to the changes unless, at the bare minimum, it could be assured that a 100% seal between the skirt and the concrete platform was achieved. There was no margin for error in the new partial tanking solution. Radius would have insisted that the Architects were satisfied that there was a complete seal between the Famguard and the platform. If necessary, this would have required each section to be hose tested to the complete satisfaction of the Architects so as to ensure that Famguard had been completely bonded to the concrete surface and the chases had been successfully sealed. Radius would also have insisted that there was adequate drainage so as to ensure that no water was able to pond on the platform (which, of course, was subsequently achieved). Without such assurances, Radius would not have consented to the proposed alteration, even though the design change was cost neutral. For the sake of completeness, I consider that the Architect was in breach of its duty as architects, both in contract and in tort in amending the original failsafe design without taking adequate steps to ensure that the new high risk design would be effectively implemented.

[73] There was no evidence before the court that the Architects failed to carry out their inspection obligations under the contract. I would have drawn an adverse inference if there had been any evidence adduced on this issue by Radius. No criticism was made of Helen Duffy or her colleagues by Mr Erwin either at the time or in the witness box of failing to inspect the Builder's work. In truth the inspection obligation under the contract was not an onerous one, but it would have been adequate for the full tanking system which had built in safeguards. However, such an inspection system was hopelessly inadequate for the Famguard skirt design for the reasons which I have given.

[74] Finally, I note that the amended Statement of Claim pleads at paragraph 35(nn):

> "With knowledge that the design had been changed from the Hydrotech (which had been deemed appropriate) to Famguard (which was not), failing or omitting to ensure (1) additional supervision was provided in relation to the second defendant's workmanship and/or (2) that additional supervision was supplied at the time when the Famguard was installed and/or (3) that there was sufficient and unambiguous design detail."

As I have said it seems to me that this was the bare minimum that would have had to be done to ensure that the change of design from the full tanking system to the Famguard skirt did not end in tears.

[75] I consider that the Architects were in breach of contract in failing to obtain the consent of Helm for the reasons which I have set out. I am also satisfied that the Architects were both in breach of contract and/or negligent in respect of the change of design for the reasons which I have set out. However it is important not just to look exclusively at the performance of the Architects when apportioning blame for the water ingress at the two apartment blocks. It is tempting to concentrate on the errors of the Architects because they are before the court and to ignore the negligence and/or breach of contract of the Builder because the Builder has played no part in these proceedings. But it is clear that the Builder failed to apply the Famguard skirt in a competent and workmanlike manner and so failed to achieve a 100% bond with the platform. But it will be my task to apportion responsibility and to determine how the blame for the defects in the two apartment blocks can be just and equitably shared. As I have stated, I will make that apportionment when I have heard all the quantum evidence.

CONCLUSION

[76] The Architects were negligent and in breach of contract in respect of the change to the new design which was inferior to the old design and came without adequate safeguards and also in failing to obtain the consent of Radius. The Builder was negligent and in breach of contract in respect of implementing the change of design. There were a number of defects in the two blocks. The main problem is because the Famguard skirt has failed. There has been water ingress into the apartments. I have set out the respective responsibilities of the Architects and the Builder for the water ingress into these apartments. Apportionment will have to await the quantum evidence.

[77] After the parties have had an opportunity to digest this judgment I will hear them on the issue of costs. My provisional view is that costs should be reserved until I have heard the quantum evidence.